
Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?
Posted by [Kim W](#) on Sat, 07 Apr 2007 12:56:34 GMT

[View Forum Message](#) <> [Reply to Message](#)

It's a rectifier bridge.

(Or as I call 'em... "rectumfriers").

<http://www.chipdocs.com/datasheets/datasheet-pdf/RECTR/RS201.html>

It's actually not one diode, but four, prewired to convert AC into

DC. (Usually followed by some hefty electrolytic capacitors.

(Oh yeah..... yanks call those "condensers".

My guess is that there was something else that caused this to blow.

If I were to replace this, I would put a larger capacity equivalent in it's place. (just get the + & - right, the ~ refers to the AC input, so it don't matter.)

Stick a 4 amp, 100V unit in it's place, and you'll be right.

THEN, find out what caused it to blow.

Kim

"Rich Lamanna" <richard.lamanna@verizon.net> wrote:

>

>

>Hello, Easter greetings by the way. Hey the other day I smelled smoke =

>and heard a crinkling sound in the back of my preamp rack and later =

>discovered the cause was my Presonus M80's power supply which is now =

>deep fried. Well I took the supply apart and found that this dark grey =

>thing on the cuircuit board, I think it's a diode ->I, melted right off =

>of the board. Any one know what this is? I can't get a picture just yet

=

>up on the net but I'll try and describe it.

>

>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the bottom which =

>solder to the cuircuit board, dark grey colored and is coded:

>

>-->| RS*202L

>RU A 90=20

>+ AC -

>

>Anyone of you electronics wizards know where the heck I can find one of

=

>these?

>

>You guys are great,

>Thanks

>Rich

>

>PS. By the way I broke down and got a Myspace site now. Check it out.
> http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=
>id=3D172230696
>
>
>
>
><!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
><HTML><HEAD>
><META http-equiv=3DContent-Type content=3D"text/html; =
>charset=3Diso-8859-1">
><META content=3D"MSHTML 6.00.2800.1555" name=3DGENERATOR>
><STYLE></STYLE>
></HEAD>
><BODY>
><DIV>Hello, Easter greetings by the way. Hey the =
>other day I=20
>smelled smoke and heard a crinkling sound in the back of my =
>preamp=20
>rack and later discovered the cause was my Presonus M80's power supply =
>which is=20
>now deep fried. Well I took the supply apart and found that this dark =
>grey thing=20
>on the cuircuit board, I think it's a diode ->I, melted right off of =
>the=20
>board. Any one know what this is? I can't get a picture just yet up on =
>the net=20
>but I'll try and describe it.</DIV>
><DIV> </DIV>
><DIV>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on
=
>the=20
>bottom which solder to the cuircuit board, dark grey colored and is=20
>coded:</DIV>
><DIV> </DIV>
><DIV>-->| RS*202L</DIV>
><DIV>RU A 90 </DIV>
><DIV>+ AC -</DIV>
><DIV> </DIV>
><DIV>Anyone of you electronics wizards know where =
>the heck I=20
>can find one of these?</DIV>
><DIV> </DIV>
><DIV>You guys are great,</DIV>
><DIV>Thanks</DIV>
><DIV>Rich</DIV>
><DIV> </DIV>
><DIV>PS. By the way I broke down and got a Myspace site =

```
>now. Check=20
>it out.</FONT></DIV>
><DIV><FONT size=3D2><A=20
>href=3D" http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofil=
>e&friendid=3D172230696">http://profile.myspace.com/index.cfm?fuseacti=
>on=3Duser.viewprofile&friendid=3D172230696</A></FONT> </DIV>
><DIV><BR><FONT size=3D2><BR></DIV></FONT></BODY></HTML>
>
>
```

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?
Posted by [Kim W](#) on Sat, 07 Apr 2007 13:05:45 GMT
[View Forum Message](#) <> [Reply to Message](#)

Oops,
Better rethink those specs.
Hell, you can buy a 5 amp, 200 volt rectifier for a couple of dollars from any electronics supplier, so just get one that's rated higher than the one that blew, and can still be readily soldered into its' place.
Just get +,-,~ right.

"Kim W." <no@way.com> wrote:

```
>
>It's a rectifier bridge.
>(Or as I call 'em... "rectumfriers").
> http://www.chipdocs.com/datasheets/datasheet-pdf/RECTR/RS201 .html
>It's actually not one diode, but four, prewired to convert AC into
>DC. (Usually followed by some hefty electrolytic capacitors.
>(Oh yeah..... yanks call those "condensers".
>My guess is that there was something else that caused this to blow.
>If I were to replace this, I would put a larger capacity
>equivalent in it's place. (just get the + & - right, the ~ refers
>to the AC input, so it don't matter.)
>Stick a 4 amp, 100V unit in it's place, and you'll be right.
>THEN, find out what caused it to blow.
```

>Kim

```
>
>
>
>
```

>"Rich Lamanna" <richard.lamanna@verizon.net> wrote:

```
>>
>>
```

```
>>Hello, Easter greetings by the way. Hey the other day I smelled smoke =
>>and heard a crinkling sound in the back of my preamp rack and later =
```

>>discovered the cause was my Presonus M80's power supply which is now =
>>deep fried. Well I took the supply apart and found that this dark grey
=
>>thing on the cuircuit board, I think it's a diode ->l, melted right off
=
>>of the board. Any one know what this is? I can't get a picture just yet
>=
>>up on the net but I'll try and describe it.
>>
>>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the bottom which =
>>solder to the cuicut board, dark grey colored and is coded:
>>
>>-->| RS*202L
>>RU A 90=20
>>+ AC -
>>
>>Anyone of you electronics wizards know where the heck I can find one of
>=
>>these?
>>
>>You guys are great,
>>Thanks
>>Rich
>>
>>PS. By the way I broke down and got a Myspace site now. Check it out.
>> [http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=
>>id=3D172230696](http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=id=3D172230696)
>>
>>
>>
>>
>><!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
>><HTML><HEAD>
>><META http-equiv=3DContent-Type content=3D"text/html; =
>>charset=3Diso-8859-1">
>><META content=3D"MSHTML 6.00.2800.1555" name=3DGENERATOR>
>><STYLE></STYLE>
>></HEAD>
>><BODY>
>><DIV>Hello, Easter greetings by the way. Hey the =
>>other day I=20
>>smelled smoke and heard a crinkling sound in the back of my =
>>preamp=20
>>rack and later discovered the cause was my Presonus M80's power supply
=
>>which is=20
>>now deep fried. Well I took the supply apart and found that this dark =
>>grey thing=20

>>on the cuircuit board, I think it's a diode ->l, melted right off of =
>>the=20
>>board. Any one know what this is? I can't get a picture just yet up on
=
>>the net=20
>>but I'll try and describe it.</DIV>
>><DIV> </DIV>
>><DIV>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on
>=
>>the=20
>>bottom which solder to the cuircuit board, dark grey colored and is=20
>>coded:</DIV>
>><DIV> </DIV>
>><DIV>-->| RS*202L</DIV>
>><DIV>RU A 90 </DIV>
>><DIV>+ AC -</DIV>
>><DIV> </DIV>
>><DIV>Anyone of you electronics wizards know where =
>>the heck l=20
>>can find one of these?</DIV>
>><DIV> </DIV>
>><DIV>You guys are great,</DIV>
>><DIV>Thanks</DIV>
>><DIV>Rich</DIV>
>><DIV> </DIV>
>><DIV>PS. By the way I broke down and got a Myspace site
=
>>now. Check=20
>>it out.</DIV>
>><DIV><A=20
>>href=3D" http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofil=
>>e&friendid=3D172230696">http://profile.myspace.com/index.cfm?fuseacti=
>>on=3Duser.viewprofile&friendid=3D172230696</DIV>
>><DIV>

</DIV></BODY></HTML>
>>
>>
>

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?
Posted by [Kim W](#) on Sat, 07 Apr 2007 13:11:33 GMT
[View Forum Message](#) <> [Reply to Message](#)

Found this:
<http://www.datasheet4u.com/download.php?id=344102>

"Kim W." <no@way.com> wrote:

>

>Oops,

>Better rethink those specs.

>Hell, you can buy a 5 amp, 200 volt rectifier for a couple of

>dollars from

>any electronics supplier, so just get one that's rated higher than the one

>that blew, and can still be readily soldered into its' place.

>Just get +,-,~ right.

>

>

>"Kim W." <no@way.com> wrote:

>>

>>It's a rectifier bridge.

>>(Or as I call 'em... "rectumfriers").

>> <http://www.chipdocs.com/datasheets/datasheet-pdf/RECTR/RS201.html>

>>It's actually not one diode, but four, prewired to convert AC into

>>DC. (Usually followed by some hefty electrolytic capacitors.

>>(Oh yeah..... yanks call those "condensers".

>>My guess is that there was something else that caused this to blow.

>>If I were to replace this, I would put a larger capacity

>>equivalent in it's place. (just get the + & - right, the ~ refers

>>to the AC input, so it don't matter.)

>>Stick a 4 amp, 100V unit in it's place, and you'll be right.

>>THEN, find out what caused it to blow.

>>Kim

>>

>>

>>

>>

>>"Rich Lamanna" <richard.lamanna@verizon.net> wrote:

>>>

>>>

>>>Hello, Easter greetings by the way. Hey the other day I smelled smoke

=

>>>and heard a crinkling sound in the back of my preamp rack and later =

>>>discovered the cause was my Presonus M80's power supply which is now =

>>>deep fried. Well I took the supply apart and found that this dark grey

>=

>>>thing on the cuircuit board, I think it's a diode ->I, melted right off

>=

>>>of the board. Any one know what this is? I can't get a picture just yet

>>=

>>>up on the net but I'll try and describe it.

>>>

>>>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the bottom which

=

>>>solder to the cuicut board, dark grey colored and is coded:

>>>
>>>-->| RS*202L
>>>RU A 90=20
>>>+ AC -
>>>
>>>Anyone of you electronics wizards know where the heck I can find one of
>>=
>>>these?
>>>
>>>You guys are great,
>>>Thanks
>>>Rich
>>>
>>>PS. By the way I broke down and got a Myspace site now. Check it out.
>>> <http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friendid=3D172230696>
>>>
>>>
>>>
>>>
>>><!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
>>><HTML><HEAD>
>>><META http-equiv=3DContent-Type content=3D"text/html; =
>>>charset=3Diso-8859-1">
>>><META content=3D"MSHTML 6.00.2800.1555" name=3DGENERATOR>
>>><STYLE></STYLE>
>>></HEAD>
>>><BODY>
>>><DIV>Hello, Easter greetings by the way. Hey the =
>>>other day I=20
>>>smelled smoke and heard a crinkling sound in the back of my =
>>>preamp=20
>>>rack and later discovered the cause was my Presonus M80's power supply
>=
>>>which is=20
>>>now deep fried. Well I took the supply apart and found that this dark
=
>>>grey thing=20
>>>on the cuircuit board, I think it's a diode ->I, melted right off of =
>>>the=20
>>>board. Any one know what this is? I can't get a picture just yet up on
>=
>>>the net=20
>>>but I'll try and describe it.</DIV>
>>><DIV> </DIV>
>>><DIV>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins
on
>>=

>>>the=20
>>>bottom which solder to the cuicut board, dark grey colored and is=20
>>>coded:</DIV>
>>><DIV> </DIV>
>>><DIV>-->| RS*202L</DIV>
>>><DIV>RU A 90 </DIV>
>>><DIV>+ AC -</DIV>
>>><DIV> </DIV>
>>><DIV>Anyone of you electronics wizards know where =
>>>the heck I=20
>>>can find one of these?</DIV>
>>><DIV> </DIV>
>>><DIV>You guys are great,</DIV>
>>><DIV>Thanks</DIV>
>>><DIV>Rich</DIV>
>>><DIV> </DIV>
>>><DIV>PS. By the way I broke down and got a Myspace site
>=
>>>now. Check=20
>>>it out.</DIV>
>>><DIV><A=20
>>>href=3D" http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofil=
>>>e&friendid=3D172230696">http://profile.myspace.com/index.cfm?fuseacti=
>>>on=3Duser.viewprofile&friendid=3D172230696</DIV>
>>><DIV>

</DIV></BODY></HTML>
>>>
>>>
>>
>

Subject: What's this thing that smoldered in my Presonus M80 power supply?
Posted by [Rich Lamanna](#) on Sat, 07 Apr 2007 13:15:41 GMT
[View Forum Message](#) <> [Reply to Message](#)

This is a multi-part message in MIME format.

-----=_NextPart_000_004D_01C778EC.EE85A760
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

Hello, Easter greetings by the way. Hey the other day I smelled smoke =
and heard a crinkling sound in the back of my preamp rack and later =
discovered the cause was my Presonus M80's power supply which is now =
deep fried. Well I took the supply apart and found that this dark grey =
thing on the cuircuit board, I think it's a diode ->I, melted right off =
of the board. Any one know what this is? I can't get a picture just yet =

up on the net but I'll try and describe it.

It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the bottom which = solder to the cuicut board, dark grey colored and is coded:

-->| RS*202L
RU A 90=20
+ AC -

Anyone of you electronics wizards know where the heck I can find one of = these?

You guys are great,
Thanks
Rich

PS. By the way I broke down and got a Myspace site now. Check it out.
<http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=id=3D172230696>

-----=_NextPart_000_004D_01C778EC.EE85A760

Content-Type: text/html;
charset="iso-8859-1"

Content-Transfer-Encoding: quoted-printable

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<HTML><HEAD>

<META http-equiv=3DContent-Type content=3D"text/html"; =
charset=3Diso-8859-1">

<META content=3D"MSHTML 6.00.2800.1555" name=3DGENERATOR>

<STYLE></STYLE>

</HEAD>

<BODY>

<DIV>Hello, Easter greetings by the way. Hey the =
other day l=20

smelled smoke and heard a crinkling sound in the back of my =
preamp=20

rack and later discovered the cause was my Presonus M80's power supply =
which is=20

now deep fried. Well I took the supply apart and found that this dark =
grey thing=20

on the cuircut board, I think it's a diode ->l, melted right off of =
the=20

board. Any one know what this is? I can't get a picture just yet up on =
the net=20

but I'll try and describe it.</DIV>

<DIV> </DIV>
<DIV>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on =
the=20
bottom which </DIV>
<DIV> </DIV>
<DIV>-->| RS*202L</DIV>
<DIV>RU </DIV>
<DIV>+ AC -</DIV>
<DIV> </DIV>
<DIV>Anyone of you electronics wizards </DIV>
the heck I=20
can find one of these?</DIV>
<DIV> </DIV>
<DIV>You guys are great,</DIV>
<DIV>Thanks</DIV>
<DIV>Rich</DIV>
<DIV> </DIV>
<DIV>PS. By the way I broke down and got a Myspace site =
now. Check=20
it out.</DIV>
<DIV><A=20
href=3D" http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofil=
e&friendid=3D172230696">http://profile.myspace.com/index.cfm?fuseacti=
on=3Duser.viewprofile&friendid=3D172230696</DIV>
<DIV>

</DIV></BODY></HTML>

-----=_NextPart_000_004D_01C778EC.EE85A760--

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?
Posted by [Rich Lamanna](#) on Sat, 07 Apr 2007 14:55:17 GMT

[View Forum Message](#) <> [Reply to Message](#)

Kim, I like your name for them much better. There are actually 2 of these RS202L's side by side, so do you still think it a good idea to ramp up the capacity? You say that something else caused it to blow, what could that be? I wasn't using it at the time. Something I left out is that the power is always on when my rack is switched on, which probably isn't a good idea and I believe my phantom power was on for most of the channels, again probably not a good idea. Thanks for the help. I assume pos and neg are in the same direction as the other rectumfrier beside it?

Thanks,
Rich

"Kim W." <no@way.com> wrote in message news:46179502\$1@linux...

>
> It's a rectifier bridge.
> (Or as I call 'em... "rectumfriers").
> <http://www.chipdocs.com/datasheets/datasheet-pdf/RECTR/RS201.html>
> It's actually not one diode, but four, prewired to convert AC into
> DC. (Usually followed by some hefty electrolytic capacitors.
> (Oh yeah..... yanks call those "condensers".
> My guess is that there was something else that caused this to blow.
> If I were to replace this, I would put a larger capacity
> equivalent in it's place. (just get the + & - right, the ~ refers
> to the AC input, so it don't matter.)
> Stick a 4 amp, 100V unit in it's place, and you'll be right.
> THEN, find out what caused it to blow.
> Kim
>
>
>
>
> "Rich Lamanna" <richard.lamanna@verizon.net> wrote:
> >
> >
> >Hello, Easter greetings by the way. Hey the other day I smelled smoke =
> >and heard a crinkling sound in the back of my preamp rack and later =
> >discovered the cause was my Presonus M80's power supply which is now =
> >deep fried. Well I took the supply apart and found that this dark grey =
> >thing on the cuircuit board, I think it's a diode ->I, melted right off =
> >of the board. Any one know what this is? I can't get a picture just yet
> =
> >up on the net but I'll try and describe it.
> >
> >It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the bottom which =
> >solder to the cuicut board, dark grey colored and is coded:
> >
> >-->| RS*202L
> >RU A 90=20
> >+ AC -
> >
> >Anyone of you electronics wizards know where the heck I can find one of
> =
> >these?
> >
> >You guys are great,
> >Thanks
> >Rich
> >
> >PS. By the way I broke down and got a Myspace site now. Check it out.
>
> <http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=>

```
> >id=3D172230696
> >
> >
> >
> >
> ><!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
> ><HTML><HEAD>
> ><META http-equiv=3DContent-Type content=3D"text/html; =
> > charset=3Diso-8859-1">
> ><META content=3D"MSHTML 6.00.2800.1555" name=3DGENERATOR>
> ><STYLE></STYLE>
> ></HEAD>
> ><BODY>
> ><DIV><FONT size=3D2>Hello, Easter greetings by the way. Hey the =
> > other day I=20
> > smelled smoke and heard a crinkling sound in the back of my =
> > preamp=20
> > rack and later discovered the cause was my Presonus M80's power supply =
> > which is=20
> > now deep fried. Well I took the supply apart and found that this dark =
> > grey thing=20
> > on the cuircuit board, I think it's a diode ->I, melted right off of =
> > the=20
> > board. Any one know what this is? I can't get a picture just yet up on =
> > the net=20
> > but I'll try and describe it.</FONT></DIV>
> ><DIV><FONT size=3D2></FONT> </DIV>
> ><DIV><FONT size=3D2>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on
> > =
> > the=20
> > bottom which solder to the cuircuit board, dark grey colored and is=20
> > coded:</FONT></DIV>
> ><DIV><FONT size=3D2></FONT> </DIV>
> ><DIV><FONT size=3D2>-->| RS*202L</FONT></DIV>
> ><DIV><FONT size=3D2>RU A 90 </FONT></DIV>
> ><DIV><FONT size=3D2>+ AC -</FONT></DIV>
> ><DIV><FONT size=3D2></FONT> </DIV>
> ><DIV><FONT size=3D2>Anyone of you electronics wizards know where =
> > the heck I=20
> > can find one of these?</FONT></DIV>
> ><DIV><FONT size=3D2></FONT> </DIV>
> ><DIV><FONT size=3D2>You guys are great,</FONT></DIV>
> ><DIV><FONT size=3D2>Thanks</FONT></DIV>
> ><DIV><FONT size=3D2>Rich</FONT></DIV>
> ><DIV><FONT size=3D2></FONT> </DIV>
> ><DIV><FONT size=3D2>PS. By the way I broke down and got a Myspace site =
> > now. Check=20
> > it out.</FONT></DIV>
```

```
> ><DIV><FONT size=3D2><A=20
>
> href=3D" http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofil=
> >e&friendid=3D172230696">http://profile.myspace.com/index.cfm?fuseacti=
> >on=3Duser.viewprofile&friendid=3D172230696</A></FONT> </DIV>
> ><DIV><BR><FONT size=3D2><BR></DIV></FONT></BODY></HTML>
> >
> >
>
```

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?
Posted by [Neil](#) on Sat, 07 Apr 2007 15:44:02 GMT
[View Forum Message](#) <> [Reply to Message](#)

Exactly - and if a bridge rectifier shorts, then that means it could have passed current with the wrong polarization on to components past it inline... Rich this is something you ought to just send off for proper repairs - even though it might look like there's only something wrong with one component, it could just as easily be more than that, and then yer fukt as soon as you power-on again with the new bridge recto in place.

If it were an Alesis somethingorother that cost a hundred bucks, then sure why not experiment, but this is a \$1,700 item.

Where'd you get it? New? any chance it's still under warranty or has perhaps barely run out of warranty where the dealer could step in & help you at least get a pro-rated price on the repairs?

Neil

"Edna" <edna@texomaonline.com> wrote:

>"Something else" causing it to blow is probably right. If you just replace

>the rectifier, it may do the same thing again. Maybe a blown semiconductor

>component causing a short to that circuit. Also maybe a shorted filter

>capacitor. Look for burned or dark resistors or burned circuit board to

>trace to a faulty component. Did it blow a fuse or circuit breaker?

>Edna

>"Rich Lamanna" <richard.lamanna@verizon.net> wrote in message

>news:4617a41b@linux...

>> Kim, I like your name for them much better. There are actually 2 of these
>> RS202L's side by side, so do you still think it a good idea to ramp up
the
>> capacity? You say that something else caused it to blow, what could that

>> be?
>> I wasn't using it at the time. Something I left out is that the power
is
>> always on when my rack is switched on, which probably isn't a good idea

>> and
>> I believe my phantom power was on for most of the channels, again probably
>> not a good idea. Thanks for the help. I assume pos and neg are in the
same
>> direction as the other rectumfrier beside it?

>>
>> Thanks,
>> Rich
>>
>>
>> "Kim W." <no@way.com> wrote in message news:46179502\$1@linux...

>>>
>>> It's a rectifier bridge.
>>> (Or as I call 'em... "rectumfriars").
>>> <http://www.chipdocs.com/datasheets/datasheet-pdf/RECTR/RS201.html>
>>> It's actually not one diode, but four, prewired to convert AC into
>>> DC. (Usually followed by some hefty electrolytic capacitors.
>>> (Oh yeah..... yanks call those "condensers".
>>> My guess is that there was something else that caused this to blow.
>>> If I were to replace this, I would put a larger capacity
>>> equivalent in it's place. (just get the + & - right, the ~ refers
>>> to the AC input, so it don't matter.)
>>> Stick a 4 amp, 100V unit in it's place, and you'll be right.
>>> THEN, find out what caused it to blow.
>>> Kim

>>>
>>>
>>>
>>>
>>> "Rich Lamanna" <richard.lamanna@verizon.net> wrote:
>>> >
>>> >
>>> >Hello, Easter greetings by the way. Hey the other day I smelled smoke
=
>>> >and heard a crinkling sound in the back of my preamp rack and later
=
>>> >discovered the cause was my Presonus M80's power supply which is now
=

>>> >deep fried. Well I took the supply apart and found that this dark grey
=
>>> >thing on the cuircuit board, I think it's a diode ->I, melted right off
=
>>> >of the board. Any one know what this is? I can't get a picture just
yet
>>> =
>>> >up on the net but I'll try and describe it.
>>> >
>>> >It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the bottom which
=
>>> >solder to the cuircuit board, dark grey colored and is coded:
>>> >
>>> >-->| RS*202L
>>> >RU A 90=20
>>> >+ AC -
>>> >
>>> >Anyone of you electronics wizards know where the heck I can find one
of
>>> =
>>> >these?
>>> >
>>> >You guys are great,
>>> >Thanks
>>> >Rich
>>> >
>>> >PS. By the way I broke down and got a Myspace site now. Check it out.
>>>
>>> [http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=
>>> >id=3D172230696](http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=id=3D172230696)
>>> >
>>> >
>>> >
>>> >
>>> ><!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
>>> ><HTML><HEAD>
>>> ><META http-equiv=3DContent-Type content=3D"text/html; =
>>> >charset=3Diso-8859-1">
>>> ><META content=3D"MSHTML 6.00.2800.1555" name=3DGENERATOR>
>>> ><STYLE></STYLE>
>>> ></HEAD>
>>> ><BODY>
>>> ><DIV>Hello, Easter greetings by the way. Hey the =
>>> >other day I=20
>>> >smelled smoke and heard a crinkling sound in the back of my =
>>> >preamp=20
>>> >rack and later discovered the cause was my Preonus M80's power supply
=
=

>>> >which is=20
>>> >now deep fried. Well I took the supply apart and found that this dark
=
>>> >grey thing=20
>>> >on the cuircuit board, I think it's a diode ->I, melted right off of
=
>>> >the=20
>>> >board. Any one know what this is? I can't get a picture just yet up
on =
>>> >the net=20
>>> >but I'll try and describe it.</DIV>
>>> ><DIV> </DIV>
>>> ><DIV>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins
on
>>> =
>>> >the=20
>>> >bottom which solder to the cuicut board, dark grey colored and is=20
>>> >coded:</DIV>
>>> ><DIV> </DIV>
>>> ><DIV>-->| RS*202L</DIV>
>>> ><DIV>RU A 90 </DIV>
>>> ><DIV>+ AC -</DIV>
>>> ><DIV> </DIV>
>>> ><DIV>Anyone of you electronics wizards know where =
>>> >the heck I=20
>>> >can find one of these?</DIV>
>>> ><DIV> </DIV>
>>> ><DIV>You guys are great,</DIV>
>>> ><DIV>Thanks</DIV>
>>> ><DIV>Rich</DIV>
>>> ><DIV> </DIV>
>>> ><DIV>PS. By the way I broke down and got a Myspace site
=
>>> >now. Check=20
>>> >it out.</DIV>
>>> ><DIV><A=20
>>>
>>> href=3D" http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofil=
>>> >e&friendid=3D172230696">http://profile.myspace.com/index.cfm?fuseacti=
>>> >on=3Duser.viewprofile&friendid=3D172230696 </DIV>
>>> ><DIV>

</DIV></BODY></HTML>
>>> >
>>> >
>>>
>>
>>
>
>

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?

Posted by [Edna Sloan](#) on Sat, 07 Apr 2007 16:09:42 GMT

[View Forum Message](#) <> [Reply to Message](#)

"Something else" causing it to blow is probably right. If you just replace the rectifier, it may do the same thing again. Maybe a blown semiconductor component causing a short to that circuit. Also maybe a shorted filter capacitor. Look for burned or dark resistors or burned circuit board to trace to a faulty component. Did it blow a fuse or circuit breaker?

Edna

"Rich Lamanna" <richard.lamanna@verizon.net> wrote in message news:4617a41b@linux...

> Kim, I like your name for them much better. There are actually 2 of these
> RS202L's side by side, so do you still think it a good idea to ramp up the
> capacity? You say that something else caused it to blow, what could that
> be?

> I wasn't using it at the time. Something I left out is that the power is
> always on when my rack is switched on, which probably isn't a good idea
> and

> I believe my phantom power was on for most of the channels, again probably
> not a good idea. Thanks for the help. I assume pos and neg are in the same
> direction as the other rectumfrier beside it?

>

> Thanks,

> Rich

>

>

> "Kim W." <no@way.com> wrote in message news:46179502\$1@linux...

>>

>> It's a rectifier bridge.

>> (Or as I call 'em... "rectumfriers").

>> <http://www.chipdocs.com/datasheets/datasheet-pdf/RECTR/RS201.html>

>> It's actually not one diode, but four, prewired to convert AC into

>> DC. (Usually followed by some hefty electrolytic capacitors.

>> (Oh yeah..... yanks call those "condensers".

>> My guess is that there was something else that caused this to blow.

>> If I were to replace this, I would put a larger capacity

>> equivalent in it's place. (just get the + & - right, the ~ refers

>> to the AC input, so it don't matter.)

>> Stick a 4 amp, 100V unit in it's place, and you'll be right.

>> THEN, find out what caused it to blow.

>> Kim

>>

>>

>>

>>

>> "Rich Lamanna" <richard.lamanna@verizon.net> wrote:

>> >

>> >

>> >Hello, Easter greetings by the way. Hey the other day I smelled smoke =
>> >and heard a crinkling sound in the back of my preamp rack and later =
>> >discovered the cause was my Presonus M80's power supply which is now =
>> >deep fried. Well I took the supply apart and found that this dark grey =
>> >thing on the cuircuit board, I think it's a diode ->I, melted right off =
>> >of the board. Any one know what this is? I can't get a picture just yet
>> =
>> >up on the net but I'll try and describe it.
>> >
>> >It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the bottom which =
>> >solder to the cuicut board, dark grey colored and is coded:
>> >
>> >-->| RS*202L
>> >RU A 90=20
>> >+ AC -
>> >
>> >Anyone of you electronics wizards know where the heck I can find one of
>> =
>> >these?
>> >
>> >You guys are great,
>> >Thanks
>> >Rich
>> >
>> >PS. By the way I broke down and got a Myspace site now. Check it out.
>>
>> [http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=
>> >id=3D172230696](http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=id=3D172230696)
>> >
>> >
>> >
>> >
>> ><!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
>> ><HTML><HEAD>
>> ><META http-equiv=3DContent-Type content=3D"text/html; =
>> >charset=3Diso-8859-1">
>> ><META content=3D"MSHTML 6.00.2800.1555" name=3DGENERATOR>
>> ><STYLE></STYLE>
>> ></HEAD>
>> ><BODY>
>> ><DIV>Hello, Easter greetings by the way. Hey the =
>> >other day I=20
>> >smelled smoke and heard a crinkling sound in the back of my =
>> >preamp=20
>> >rack and later discovered the cause was my Presonus M80's power supply =
>> >which is=20
>> >now deep fried. Well I took the supply apart and found that this dark =
>> >grey thing=20

>> >on the cuircuit board, I think it's a diode ->, melted right off of =
>> >the=20
>> >board. Any one know what this is? I can't get a picture just yet up on =
>> >the net=20
>> >but I'll try and describe it.</DIV>
>> ><DIV> </DIV>
>> ><DIV>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on
>> =
>> >the=20
>> >bottom which solder to the cuircuit board, dark grey colored and is=20
>> >coded:</DIV>
>> ><DIV> </DIV>
>> ><DIV>-->| RS*202L</DIV>
>> ><DIV>RU A 90 </DIV>
>> ><DIV>+ AC -</DIV>
>> ><DIV> </DIV>
>> ><DIV>Anyone of you electronics wizards know where =
>> >the heck I=20
>> >can find one of these?</DIV>
>> ><DIV> </DIV>
>> ><DIV>You guys are great,</DIV>
>> ><DIV>Thanks</DIV>
>> ><DIV>Rich</DIV>
>> ><DIV> </DIV>
>> ><DIV>PS. By the way I broke down and got a Myspace site =
>> >now. Check=20
>> >it out.</DIV>
>> ><DIV><A=20
>>
>>href=3D" http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofil=
>> >e&friendid=3D172230696">http://profile.myspace.com/index.cfm?fuseacti=
>> >on=3Duser.viewprofile&friendid=3D172230696 </DIV>
>> ><DIV>

</DIV></BODY></HTML>
>> >
>> >
>>
>
>

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?
Posted by [Edna Sloan](#) on Sat, 07 Apr 2007 18:05:49 GMT
[View Forum Message](#) <> [Reply to Message](#)

Good advice! I thought it was just a power supply unit.

"Neil" <OIUOIU@OIU.com> wrote in message news:4617bc42\$1@linux...
>

> Exactly - and if a bridge rectifier shorts, then that means it
> could have passed current with the wrong polarization on to
> components past it inline... Rich this is something you ought
> to just send off for proper repairs - even though it might look
> like there's only something wrong with one component, it could
> just as easily be more than that, and then yer fukt as soon as
> you power-on again with the new bridge recto in place.
>
> If it were an Alesis somethingorother that cost a hundred
> bucks, then sure why not experiment, but this is a \$1,700 item.
>
> Where'd you get it? New? any chance it's still under warranty
> or has perhaps barely run out of warranty where the dealer
> could step in & help you at least get a pro-rated price on the
> repairs?
>
> Neil
>
>
>
> "Edna" <edna@texomaonline.com> wrote:
>>"Something else" causing it to blow is probably right. If you just
>>replace
>
>>the rectifier, it may do the same thing again. Maybe a blown
>>semiconductor
>
>>component causing a short to that circuit. Also maybe a shorted filter
>
>>capacitor. Look for burned or dark resistors or burned circuit board to
>
>>trace to a faulty component. Did it blow a fuse or circuit breaker?
>>Edna
>>"Rich Lamanna" <richard.lamanna@verizon.net> wrote in message
>>news:4617a41b@linux...
>>> Kim, I like your name for them much better. There are actually 2 of
>>> these
>>> RS202L's side by side, so do you still think it a good idea to ramp up
> the
>>> capacity? You say that something else caused it to blow, what could that
>
>>> be?
>>> I wasn't using it at the time. Something I left out is that the power
> is
>>> always on when my rack is switched on, which probably isn't a good idea
>
>>> and
>>> I believe my phantom power was on for most of the channels, again

>>> probably
>>> not a good idea. Thanks for the help. I assume pos and neg are in the
> same
>>> direction as the other rectumfrier beside it?
>>>
>>> Thanks,
>>> Rich
>>>
>>>
>>> "Kim W." <no@way.com> wrote in message news:46179502\$1 @linux...
>>>>
>>>> It's a rectifier bridge.
>>>> (Or as I call 'em... "rectumfriers").
>>>> [http://www.chipdocs.com/datasheets/datasheet-pdf/RECTR/RS201 .html](http://www.chipdocs.com/datasheets/datasheet-pdf/RECTR/RS201.html)
>>>> It's actually not one diode, but four, prewired to convert AC into
>>>> DC. (Usually followed by some hefty electrolytic capacitors.
>>>> (Oh yeah..... yanks call those "condensers".
>>>> My guess is that there was something else that caused this to blow.
>>>> If I were to replace this, I would put a larger capacity
>>>> equivalent in it's place. (just get the + & - right, the ~ refers
>>>> to the AC input, so it don't matter.)
>>>> Stick a 4 amp, 100V unit in it's place, and you'll be right.
>>>> THEN, find out what caused it to blow.
>>>> Kim
>>>>
>>>>
>>>>
>>>>
>>>> "Rich Lamanna" <richard.lamanna@verizon.net> wrote:
>>>> >
>>>> >
>>>> >Hello, Easter greetings by the way. Hey the other day I smelled smoke
> =
>>>> >and heard a crinkling sound in the back of my preamp rack and later
> =
>>>> >discovered the cause was my Presonus M80's power supply which is now
> =
>>>> >deep fried. Well I took the supply apart and found that this dark grey
> =
>>>> >thing on the cuircut board, I think it's a diode ->I, melted right off
> =
>>>> >of the board. Any one know what this is? I can't get a picture just
> yet
>>>> =
>>>> >up on the net but I'll try and describe it.
>>>> >
>>>> >It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the bottom which
> =

>>>> >solder to the cuicut board, dark grey colored and is coded:
>>>> >
>>>> >-->| RS*202L
>>>> >RU A 90=20
>>>> >+ AC -
>>>> >
>>>> >Anyone of you electronics wizards know where the heck I can find one
> of
>>>> =
>>>> >these?
>>>> >
>>>> >You guys are great,
>>>> >Thanks
>>>> >Rich
>>>> >
>>>> >PS. By the way I broke down and got a Myspace site now. Check it out.
>>>>
>>>> [http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=
>>>> >id=3D172230696](http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=id=3D172230696)
>>>> >
>>>> >
>>>> >
>>>> >
>>>> ><!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
>>>> ><HTML><HEAD>
>>>> ><META http-equiv=3DContent-Type content=3D"text/html; =
>>>> >charset=3Diso-8859-1">
>>>> ><META content=3D"MSHTML 6.00.2800.1555" name=3DGENERATOR>
>>>> ><STYLE></STYLE>
>>>> ></HEAD>
>>>> ><BODY>
>>>> ><DIV>Hello, Easter greetings by the way. Hey the =
>>>> >other day I=20
>>>> >smelled smoke and heard a crinkling sound in the back of my =
>>>> >preamp=20
>>>> >rack and later discovered the cause was my Presonus M80's power supply
> =
>>>> >which is=20
>>>> >now deep fried. Well I took the supply apart and found that this dark
> =
>>>> >grey thing=20
>>>> >on the cuircut board, I think it's a diode ->I, melted right off of
> =
>>>> >the=20
>>>> >board. Any one know what this is? I can't get a picture just yet up
> on =
>>>> >the net=20
>>>> >but I'll try and describe it.</DIV>

```
>>>> ><DIV><FONT size=3D2></FONT> </DIV>
>>>> ><DIV><FONT size=3D2>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins
> on
>>>> =
>>>> >the=20
>>>> >bottom which solder to the cuicut board, dark grey colored and is=20
>>>> >coded:</FONT></DIV>
>>>> ><DIV><FONT size=3D2></FONT> </DIV>
>>>> ><DIV><FONT size=3D2>-->| RS*202L</FONT></DIV>
>>>> ><DIV><FONT size=3D2>RU A 90 </FONT></DIV>
>>>> ><DIV><FONT size=3D2>+ AC -</FONT></DIV>
>>>> ><DIV><FONT size=3D2></FONT> </DIV>
>>>> ><DIV><FONT size=3D2>Anyone of you electronics wizards know where =
>>>> >the heck l=20
>>>> >can find one of these?</FONT></DIV>
>>>> ><DIV><FONT size=3D2></FONT> </DIV>
>>>> ><DIV><FONT size=3D2>You guys are great,</FONT></DIV>
>>>> ><DIV><FONT size=3D2>Thanks</FONT></DIV>
>>>> ><DIV><FONT size=3D2>Rich</FONT></DIV>
>>>> ><DIV><FONT size=3D2></FONT> </DIV>
>>>> ><DIV><FONT size=3D2>PS. By the way I broke down and got a Myspace site
> =
>>>> >now. Check=20
>>>> >it out.</FONT></DIV>
>>>> ><DIV><FONT size=3D2><A=20
>>>>
>>>> href=3D" http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofil=
>>>> >e&friendid=3D172230696">http://profile.myspace.com/index.cfm?fuseacti=
>>>> >on=3Duser.viewprofile&friendid=3D172230696</A></FONT> </DIV>
>>>> ><DIV><BR><FONT size=3D2><BR></DIV></FONT></BODY></HTML>
>>>> >
>>>> >
>>>>
>>>
>>>
>>
>>
>>
>
```

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?
Posted by [chuck duffy](#) on Sat, 07 Apr 2007 18:44:31 GMT
[View Forum Message](#) <> [Reply to Message](#)

Kim,

Be assured that we yanks call electrolytic capacitors electrolytic capacitors.
We yanks have other terms for wanking, taking the piss, making a bird, and

sex with barnyard animals, but not for electrolytic capacitors.

Chuck

"Kim W." <no@way.com> wrote:

>
>It's a rectifier bridge.
>(Or as I call 'em... "rectumfriers").
> <http://www.chipdocs.com/datasheets/datasheet-pdf/RECTR/RS201.html>
>It's actually not one diode, but four, prewired to convert AC into
>DC. (Usually followed by some hefty electrolytic capacitors.
>(Oh yeah..... yanks call those "condensers".
>My guess is that there was something else that caused this to blow.
>If I were to replace this, I would put a larger capacity
>equivalent in it's place. (just get the + & - right, the ~ refers
>to the AC input, so it don't matter.)
>Stick a 4 amp, 100V unit in it's place, and you'll be right.
>THEN, find out what caused it to blow.

>Kim

>

>

>

>

>"Rich Lamanna" <richard.lamanna@verizon.net> wrote:

>>

>>

>>Hello, Easter greetings by the way. Hey the other day I smelled smoke =
>>and heard a crinkling sound in the back of my preamp rack and later =
>>discovered the cause was my Presonus M80's power supply which is now =
>>deep fried. Well I took the supply apart and found that this dark grey

=

>>thing on the cuircuit board, I think it's a diode ->I, melted right off

=

>>of the board. Any one know what this is? I can't get a picture just yet

>=

>>up on the net but I'll try and describe it.

>>

>>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the bottom which =
>>solder to the cuicut board, dark grey colored and is coded:

>>

>>-->| RS*202L

>>RU A 90=20

>>+ AC -

>>

>>Anyone of you electronics wizards know where the heck I can find one of

>=

>>these?

>>

>>You guys are great,
>>Thanks
>>Rich
>>
>>PS. By the way I broke down and got a Myspace site now. Check it out.
>> <http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friendid=3D172230696>
>>
>>
>>
>>
>><!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
>><HTML><HEAD>
>><META http-equiv=3DContent-Type content=3D"text/html; charset=3Diso-8859-1">
>><META content=3D"MSHTML 6.00.2800.1555" name=3DGENERATOR>
>><STYLE></STYLE>
>></HEAD>
>><BODY>
>><DIV>Hello, Easter greetings by the way. Hey the =
>>other day I=20
>>smelled smoke and heard a crinkling sound in the back of my =
>>preamp=20
>>rack and later discovered the cause was my Presonus M80's power supply
>>=
>>which is=20
>>now deep fried. Well I took the supply apart and found that this dark =
>>grey thing=20
>>on the cuircuit board, I think it's a diode ->I, melted right off of =
>>the=20
>>board. Any one know what this is? I can't get a picture just yet up on
>>=
>>the net=20
>>but I'll try and describe it.</DIV>
>><DIV> </DIV>
>><DIV>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on
>>=
>>the=20
>>bottom which solder to the cuircuit board, dark grey colored and is=20
>>coded:</DIV>
>><DIV> </DIV>
>><DIV>-->| RS*202L</DIV>
>><DIV>RU A 90 </DIV>
>><DIV>+ AC -</DIV>
>><DIV> </DIV>
>><DIV>Anyone of you electronics wizards know where =
>>the heck I=20
>>can find one of these?</DIV>

>><DIV> </DIV>
>><DIV>You guys are great,</DIV>
>><DIV>Thanks</DIV>
>><DIV>Rich</DIV>
>><DIV> </DIV>
>><DIV>PS. By the way I broke down and got a Myspace site
=
>>now. Check=20
>>it out.</DIV>
>><DIV><A=20
>>href=3D" http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofil=
>>e&friendid=3D172230696">http://profile.myspace.com/index.cfm?fuseacti=
>>on=3Duser.viewprofile&friendid=3D172230696</DIV>
>><DIV>

</DIV></BODY></HTML>
>>
>>
>

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?
Posted by Nil on Sat, 07 Apr 2007 19:05:12 GMT
[View Forum Message](#) <> [Reply to Message](#)

Yeah, we only call em "condensers" when it's a type of microphone.

Neil

"chuck " <c@c.com> wrote:

>
>Kim,
>
>Be assured that we yanks call electrolytic capacitors electrolytic capacitors.
> We yanks have other terms for wanking, taking the piss, making a bird,
>and
>sex with barnyard animals, but not for elecrolytic capacitors.
>
>Chuck
>
>"Kim W." <no@way.com> wrote:
>>
>>It's a rectifier bridge.
>>(Or as I call 'em... "rectumfriers").
>> http://www.chipdocs.com/datasheets/datasheet-pdf/RECTR/RS201 .html
>>It's actually not one diode, but four, prewired to convert AC into
>>DC. (Usually followed by some hefty electrolytic capacitors.
>>(Oh yeah..... yanks call those "condensers").

>>My guess is that there was something else that caused this to blow.
>>If I were to replace this, I would put a larger capacity
>>equivalent in it's place. (just get the + & - right, the ~ refers
>>to the AC input, so it don't matter.)
>>Stick a 4 amp, 100V unit in it's place, and you'll be right.
>>THEN, find out what caused it to blow.
>>Kim
>>
>>
>>
>>
>>"Rich Lamanna" <richard.lamanna@verizon.net> wrote:
>>>
>>>
>>>Hello, Easter greetings by the way. Hey the other day I smelled smoke
=
>>>and heard a crinkling sound in the back of my preamp rack and later =
>>>discovered the cause was my Presonus M80's power supply which is now =
>>>deep fried. Well I took the supply apart and found that this dark grey
>=
>>>thing on the cuircuit board, I think it's a diode ->I, melted right off
>=
>>>of the board. Any one know what this is? I can't get a picture just yet
>>=
>>>up on the net but I'll try and describe it.
>>>
>>>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the bottom which
=
>>>solder to the cuircuit board, dark grey colored and is coded:
>>>
>>>-->| RS*202L
>>>RU A 90=20
>>>+ AC -
>>>
>>>Anyone of you electronics wizards know where the heck I can find one of
>>=
>>>these?
>>>
>>>You guys are great,
>>>Thanks
>>>Rich
>>>
>>>PS. By the way I broke down and got a Myspace site now. Check it out.
>>> [http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=](http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=id=3D172230696)
>>>[id=3D172230696](http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=id=3D172230696)
>>>
>>>
>>>

```

>>>
>>><!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
>>><HTML><HEAD>
>>><META http-equiv=3DContent-Type content=3D"text/html; =
>>>charset=3Diso-8859-1">
>>><META content=3D"MSHTML 6.00.2800.1555" name=3DGENERATOR>
>>><STYLE></STYLE>
>>></HEAD>
>>><BODY>
>>><DIV><FONT size=3D2>Hello, Easter greetings by the way. Hey the =
>>>other day I=20
>>>smelled smoke and heard a crinkling sound in the back of my =
>>>preamp=20
>>>rack and later discovered the cause was my Presonus M80's power supply
>=
>>>which is=20
>>>now deep fried. Well I took the supply apart and found that this dark
=
>>>grey thing=20
>>>on the cuircut board, I think it's a diode ->|, melted right off of =
>>>the=20
>>>board. Any one know what this is? I can't get a picture just yet up on
>=
>>>the net=20
>>>but I'll try and describe it.</FONT></DIV>
>>><DIV><FONT size=3D2></FONT> </DIV>
>>><DIV><FONT size=3D2>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins
on
>>=
>>>the=20
>>>bottom which solder to the cuicut board, dark grey colored and is=20
>>>coded:</FONT></DIV>
>>><DIV><FONT size=3D2></FONT> </DIV>
>>><DIV><FONT size=3D2>-->| RS*202L</FONT></DIV>
>>><DIV><FONT size=3D2>RU A 90 </FONT></DIV>
>>><DIV><FONT size=3D2>+ AC -</FONT></DIV>
>>><DIV><FONT size=3D2></FONT> </DIV>
>>><DIV><FONT size=3D2>Anyone of you electronics wizards know where =
>>>the heck I=20
>>>can find one of these?</FONT></DIV>
>>><DIV><FONT size=3D2></FONT> </DIV>
>>><DIV><FONT size=3D2>You guys are great,</FONT></DIV>
>>><DIV><FONT size=3D2>Thanks</FONT></DIV>
>>><DIV><FONT size=3D2>Rich</FONT></DIV>
>>><DIV><FONT size=3D2></FONT> </DIV>
>>><DIV><FONT size=3D2>PS. By the way I broke down and got a Myspace site
>=
>>>now. Check=20

```

```
>>>it out.</FONT></DIV>
>>><DIV><FONT size=3D2><A=20
>>>href=3D" http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofil=
>>>e&friendid=3D172230696">http://profile.myspace.com/index.cfm?fuseacti=
>>>on=3Duser.viewprofile&friendid=3D172230696</A></FONT ></DIV>
>>><DIV><BR><FONT size=3D2><BR></DIV></FONT></BODY></HTML>
>>>
>>>
>>
>
```

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?
Posted by [Neil](#) on Sat, 07 Apr 2007 19:24:34 GMT
[View Forum Message](#) <> [Reply to Message](#)

Yes, it could've just gone kablooey, affecting no other components, but what a bridge rectifier does is to turn the various cycles of AC current into steady & polarized DC. If that thing went kablooey and created an open circuit in the process, than it's possible no other components were affected; if it kablooied into a short, then whatever components that are next in line after it got a nice dose of AC, which may have caused a subsequent kablooation of those parts as well.

Just 'cause they don't "look" bad, doesn't mean they ain't.

Neil

"Rich Lamanna" <richard.lamanna@verizon.net> wrote:

```
>
>
>Neil, Edna, couldn't the rectifier just have gone Kablooey? As you say =
>it could be symptomatic of another problem but if you read my last post,
=
>I may have been overloading the thing. Looking at the circuit board =
>carefully, I see no other browned or burned resistors, etc. Maybe I'll =
>send it in, but I might try to fix it myself as it will be only a couple
=
>of bucks if it doesn't work. The unit was bought used from another owner
=
>a few years ago, on ebay, and I'm not sure if it is still under =
>warrantee. I'll have to look into this. I probably know just enough to =
>get this wrong, but wish me luck. I know..... I'll soon be hearing, =
>"I told you so"! :-)
```

>
>Thanks,

>Rich
>
> "Rich Lamanna" <richard.lamanna@verizon.net> wrote in message =
>news:46178cc2\$1@linux...
> Hello, Easter greetings by the way. Hey the other day I smelled smoke
=
>and heard a crinkling sound in the back of my preamp rack and later =
>discovered the cause was my Presonus M80's power supply which is now =
>deep fried. Well I took the supply apart and found that this dark grey =
>thing on the cuircuit board, I think it's a diode ->I, melted right off =
>of the board. Any one know what this is? I can't get a picture just yet
=
>up on the net but I'll try and describe it.
>
> It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the bottom which
=
>solder to the cuircuit board, dark grey colored and is coded:
>
> -->| RS*202L
> RU A 90=20
> + AC -
>
> Anyone of you electronics wizards know where the heck I can find one =
>of these?
>
> You guys are great,
> Thanks
> Rich
>
> PS. By the way I broke down and got a Myspace site now. Check it out.
> =
> [http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=
>id=3D172230696](http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=id=3D172230696)
>
>
>
>
><!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
><HTML><HEAD>
><META http-equiv=3DContent-Type content=3D"text/html; =
>charset=3Diso-8859-1">
><META content=3D"MSHTML 6.00.2800.1555" name=3DGENERATOR>
><STYLE></STYLE>
></HEAD>
><BODY bgColor=3D#ffffff>
><DIV>
><DIV>Neil, Edna, couldn't the rectifier just have gone =
>Kablooey? As=20

>you say it could be symptomatic of another problem but if you read my =
>last post,=20
>I may have been overloading the thing. Looking at the circuit board=20

>I'll send=20

>of=20

>bucks if it doesn't work. The unit was bought used from another owner a
=

>few=20

>years ago, on ebay, and I'm not sure if it is still under warrantee. =

>I'll have=20

>to look into this. I probably know just enough to get this wrong, but =

>wish me=20

>luck. I know..... I'll soon be hearing, "I told you so"! =

>:-)/FONT></DIV>

><DIV>Thanks,</DIV>

><DIV>Rich
</DIV></DIV>

><BLOCKQUOTE dir=3Dltr=20

>style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: 5px; =

>BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">

> <DIV>"Rich Lamanna" <<A=20

> =

>href=3D"mailto:richard.lamanna@verizon.net">richard.lamanna@verizon.net</=

>A>>=20

> wrote in message <A=20

> href=3D"news:46178cc2\$1 @linux">news:46178cc2\$1 @linux...</DIV>

>other day l=20

>preamp=20

> rack and later discovered the cause was my Presonus M80's power supply

=

>which=20

> is now deep fried. Well I took the supply apart and found that this =

>dark grey=20

> thing on the cuircuit board, I think it's a diode ->l, melted right =

>off of=20

> the board. Any one know what this is? I can't get a picture just yet =

>up on the=20

> net but I'll try and describe it.</DIV>

> <DIV>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins

=

>on the=20

>

> coded:</DIV>

> <DIV>-->| RS*202L</DIV>

> <DIV>+ AC -</DIV>

>the heck l=20

> can find one of these?</DIV>

> <DIV>You guys are great,</DIV>

> <DIV>Thanks</DIV>

> <DIV>Rich</DIV>

> <DIV>PS. By the way I broke down and got a Myspace site
=
>now.=20
> Check it out.</DIV>

> <DIV><A=20
> =
>href=3D" http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofil=
>e&friendid=3D172230696">http://profile.myspace.com/index.cfm?fuseacti=
>on=3Duser.viewprofile&friendid=3D172230696 </DIV>

> <DIV>

</DIV></BLOCKQUOTE></BODY></HTML>

>

>

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?
Posted by [Rich Lamanna](#) on Sat, 07 Apr 2007 20:13:12 GMT
[View Forum Message](#) <> [Reply to Message](#)

This is a multi-part message in MIME format.

-----=_NextPart_000_0020_01C77927.4285D120
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

Neil, Edna, couldn't the rectifier just have gone Kablooeey? As you say =
it could be symptomatic of another problem but if you read my last post, =
I may have been overloading the thing. Looking at the circuit board =
carefully, I see no other browned or burned resistors, etc. Maybe I'll =
send it in, but I might try to fix it myself as it will be only a couple =
of bucks if it doesn't work. The unit was bought used from another owner =
a few years ago, on ebay, and I'm not sure if it is still under =
warrantee. I'll have to look into this. I probably know just enough to =
get this wrong, but wish me luck. I know..... I'll soon be hearing, =

"I told you so"! :-)

Thanks,
Rich

"Rich Lamanna" <richard.lamanna@verizon.net> wrote in message =
news:46178cc2\$1@linux...

Hello, Easter greetings by the way. Hey the other day I smelled smoke =
and heard a crinkling sound in the back of my preamp rack and later =
discovered the cause was my Presonus M80's power supply which is now =
deep fried. Well I took the supply apart and found that this dark grey =
thing on the cuircuit board, I think it's a diode ->I, melted right off =
of the board. Any one know what this is? I can't get a picture just yet =
up on the net but I'll try and describe it.

It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the bottom which =
solder to the cuircuit board, dark grey colored and is coded:

```
-->| RS*202L  
RU A 90=20  
+ AC -
```

Anyone of you electronics wizards know where the heck I can find one =
of these?

You guys are great,
Thanks
Rich

PS. By the way I broke down and got a Myspace site now. Check it out.
=
[http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=
id=3D172230696](http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=id=3D172230696)

```
-----=_NextPart_000_0020_01C77927.4285D120  
Content-Type: text/html;  
 charset="iso-8859-1"  
Content-Transfer-Encoding: quoted-printable
```

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">  
<HTML><HEAD>  
<META http-equiv=3DContent-Type content=3D"text/html; =  
 charset=3Diso-8859-1">  
<META content=3D"MSHTML 6.00.2800.1555" name=3DGENERATOR>  
<STYLE></STYLE>  
</HEAD>
```

<BODY bgColor=#ffffff>
<DIV>
<DIV>Neil, Edna, couldn't the rectifier just have gone =
Kablooey? As=20
you say it could be symptomatic of another problem but if you read my =
last post,=20
I may have been overloading the thing. Looking at the circuit board=20
carefully, I see no other browned or burned resistors, etc. Maybe =
I'll send=20
it in, but I might try to fix it myself as it will be only a couple =
of=20
bucks if it doesn't work. The unit was bought used from another owner a =
few=20
years ago, on ebay, and I'm not sure if it is still under warrantee. =
I'll have=20
to look into this. I probably know just enough to get this wrong, but =
wish me=20
luck. I know..... I'll soon be hearing, "I told you so"! =
:-)</DIV>
<DIV> </DIV>
<DIV>Thanks,</DIV>
<DIV>Rich
</DIV></DIV>
<BLOCKQUOTE dir=3Dltr=20
style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: 5px; =
BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
 <DIV>"Rich Lamanna" <<A=20
 =
 href=3D"mailto:richard.lamanna@verizon.net">richard.lamanna@verizon.net</=
 A>>=20
 wrote in message <A=20
 href=3D"news:46178cc2\$1@linux">news:46178cc2\$1@linux...</DIV>
 <DIV>Hello, Easter greetings by the way. Hey the =
 other day I=20
 smelled smoke and heard a crinkling sound in the back of my =
 preamp=20
 rack and later discovered the cause was my Presonus M80's power supply =
 which=20
 is now deep fried. Well I took the supply apart and found that this =
 dark grey=20
 thing on the cuircuit board, I think it's a diode ->l, melted right =
 off of=20
 the board. Any one know what this is? I can't get a picture just yet =
 up on the=20
 net but I'll try and describe it.</DIV>
 <DIV> </DIV>
 <DIV>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins =
 on the=20
 bottom which solder to the cuicut board, dark grey colored and is =

coded:</DIV>
<DIV> </DIV>
<DIV>-->| RS*202L</DIV>
<DIV>RU A 90 </DIV>
<DIV>+ AC -</DIV>
<DIV> </DIV>
<DIV>Anyone of you electronics wizards know where =
the heck I=20
can find one of these?</DIV>
<DIV> </DIV>
<DIV>You guys are great,</DIV>
<DIV>Thanks</DIV>
<DIV>Rich</DIV>
<DIV> </DIV>
<DIV>PS. By the way I broke down and got a Myspace site =
now.=20
Check it out.</DIV>
<DIV><A=20
=
href=3D" http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofil=
e&friendid=3D172230696">http://profile.myspace.com/index.cfm?fuseacti=
on=3Duser.viewprofile&friendid=3D172230696</DIV>
<DIV>

</DIV></BLOCKQUOTE></BODY></HTML>

-----=_NextPart_000_0020_01C77927.4285D120--

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?
Posted by [Rich Lamanna](#) on Sat, 07 Apr 2007 20:15:17 GMT
[View Forum Message](#) <> [Reply to Message](#)

Edna it is a separate power supply unit for the M80.

Rich

"Edna" <edna@texomaonline.com> wrote in message news:4617d077@linux...
> Good advice! I thought it was just a power supply unit.
>
> "Neil" <OIUOIU@OIU.com> wrote in message news:4617bc42\$1@linux...
>>
>> Exactly - and if a bridge rectifier shorts, then that means it
>> could have passed current with the wrong polarization on to
>> components past it inline... Rich this is something you ought
>> to just send off for proper repairs - even though it might look
>> like there's only something wrong with one component, it could
>> just as easily be more than that, and then yer fukt as soon as
>> you power-on again with the new bridge recto in place.

> >
> > If it were an Alesis something or other that cost a hundred
> > bucks, then sure why not experiment, but this is a \$1,700 item.
> >
> > Where'd you get it? New? any chance it's still under warranty
> > or has perhaps barely run out of warranty where the dealer
> > could step in & help you at least get a pro-rated price on the
> > repairs?
> >
> > Neil
> >
> >
> >
> > "Edna" <edna@texomaonline.com> wrote:
> >> "Something else" causing it to blow is probably right. If you just
> >> replace
> >
> >> the rectifier, it may do the same thing again. Maybe a blown
> >> semiconductor
> >
> >> component causing a short to that circuit. Also maybe a shorted filter
> >
> >> capacitor. Look for burned or dark resistors or burned circuit board to
> >
> >> trace to a faulty component. Did it blow a fuse or circuit breaker?
> >> Edna
> >> "Rich Lamanna" <richard.lamanna@verizon.net> wrote in message
> >> news:4617a41b@linux...
> >>> Kim, I like your name for them much better. There are actually 2 of
> >>> these
> >>> RS202L's side by side, so do you still think it a good idea to ramp up
> > the
> >>> capacity? You say that something else caused it to blow, what could
that
> >
> >>> be?
> >>> I wasn't using it at the time. Something I left out is that the power
> > is
> >>> always on when my rack is switched on, which probably isn't a good
idea
> >
> >>> and
> >>> I believe my phantom power was on for most of the channels, again
> >>> probably
> >>> not a good idea. Thanks for the help. I assume pos and neg are in the
> > same
> >>> direction as the other rectumfrier beside it?
> >>>

> >>> Thanks,
> >>> Rich
> >>>
> >>>
> >>> "Kim W." <no@way.com> wrote in message news:46179502\$1@linux...
> >>>>
> >>>> It's a rectifier bridge.
> >>>> (Or as I call 'em... "rectumfriers").
> >>>> <http://www.chipdocs.com/datasheets/datasheet-pdf/RECTR/RS201.html>
> >>>> It's actually not one diode, but four, prewired to convert AC into
> >>>> DC. (Usually followed by some hefty electrolytic capacitors.
> >>>> (Oh yeah..... yanks call those "condensers".
> >>>> My guess is that there was something else that caused this to blow.
> >>>> If I were to replace this, I would put a larger capacity
> >>>> equivalent in it's place. (just get the + & - right, the ~ refers
> >>>> to the AC input, so it don't matter.)
> >>>> Stick a 4 amp, 100V unit in it's place, and you'll be right.
> >>>> THEN, find out what caused it to blow.
> >>>> Kim
> >>>>
> >>>>
> >>>>
> >>>>
> >>>> "Rich Lamanna" <richard.lamanna@verizon.net> wrote:
> >>>> >
> >>>> >
> >>>> >Hello, Easter greetings by the way. Hey the other day I smelled
smoke
> > =
> >>>> >and heard a crinkling sound in the back of my preamp rack and later
> > =
> >>>> >discovered the cause was my Presonus M80's power supply which is now
> > =
> >>>> >deep fried. Well I took the supply apart and found that this dark
grey
> > =
> >>>> >thing on the cuircuit board, I think it's a diode ->I, melted right
off
> > =
> >>>> >of the board. Any one know what this is? I can't get a picture just
> > yet
> >>>> =
> >>>> >up on the net but I'll try and describe it.
> >>>> >
> >>>> >It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the bottom
which
> > =
> >>>> >solder to the cuicut board, dark grey colored and is coded:

> >>>> >
> >>>> >-->| RS*202L
> >>>> >RU A 90=20
> >>>> >+ AC -
> >>>> >
> >>>> >Anyone of you electronics wizards know where the heck I can find one
> > of
> >>>> =
> >>>> >these?
> >>>> >
> >>>> >You guys are great,
> >>>> >Thanks
> >>>> >Rich
> >>>> >
> >>>> >PS. By the way I broke down and got a Myspace site now. Check it
out.
> >>>>
>
>>>> [http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=id=](http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=id=3D172230696)
> >>>> >id=3D172230696
> >>>> >
> >>>> >
> >>>> >
> >>>> >
> >>>> >
> >>>> ><!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
> >>>> ><HTML><HEAD>
> >>>> ><META http-equiv=3DContent-Type content=3D"text/html; =
> >>>> >charset=3Diso-8859-1">
> >>>> ><META content=3D"MSHTML 6.00.2800.1555" name=3DGENERATOR>
> >>>> ><STYLE></STYLE>
> >>>> ></HEAD>
> >>>> ><BODY>
> >>>> ><DIV>Hello, Easter greetings by the way. Hey the =
> >>>> >other day I=20
> >>>> >smelled smoke and heard a crinkling sound in the back of my =
> >>>> >preamp=20
> >>>> >rack and later discovered the cause was my Presonus M80's power
supply
> > =
> >>>> >which is=20
> >>>> >now deep fried. Well I took the supply apart and found that this
dark
> > =
> >>>> >grey thing=20
> >>>> >on the circuit board, I think it's a diode ->I, melted right off of
> > =
> >>>> >the=20

```

> >>>> >board. Any one know what this is? I can't get a picture just yet up
> > on =
> >>>> >the net=20
> >>>> >but I'll try and describe it.</FONT></DIV>
> >>>> ><DIV><FONT size=3D2></FONT> </DIV>
> >>>> ><DIV><FONT size=3D2>It's appx. 3/4" by 1/2" by 1/4" thick, has 4
pins
> > on
> >>>> =
> >>>> >the=20
> >>>> >bottom which solder to the cuicut board, dark grey colored and is=20
> >>>> >coded:</FONT></DIV>
> >>>> ><DIV><FONT size=3D2></FONT> </DIV>
> >>>> ><DIV><FONT size=3D2>-->| RS*202L</FONT></DIV>
> >>>> ><DIV><FONT size=3D2>RU A 90 </FONT></DIV>
> >>>> ><DIV><FONT size=3D2>+ AC -</FONT></DIV>
> >>>> ><DIV><FONT size=3D2></FONT> </DIV>
> >>>> ><DIV><FONT size=3D2>Anyone of you electronics wizards know where =
> >>>> >the heck I=20
> >>>> >can find one of these?</FONT></DIV>
> >>>> ><DIV><FONT size=3D2></FONT> </DIV>
> >>>> ><DIV><FONT size=3D2>You guys are great,</FONT></DIV>
> >>>> ><DIV><FONT size=3D2>Thanks</FONT></DIV>
> >>>> ><DIV><FONT size=3D2>Rich</FONT></DIV>
> >>>> ><DIV><FONT size=3D2></FONT> </DIV>
> >>>> ><DIV><FONT size=3D2>PS. By the way I broke down and got a Myspace
site
> > =
> >>>> >now. Check=20
> >>>> >it out.</FONT></DIV>
> >>>> ><DIV><FONT size=3D2><A=20
> >>>>
>
>>>>href=3D" http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofi
I=
> >>>>
>e&friendid=3D172230696">http://profile.myspace.com/index.cfm?fuseacti=
> >>>> >on=3Duser.viewprofile&friendid=3D172230696</A></FONT> </DIV>
> >>>> ><DIV><BR><FONT size=3D2><BR></DIV></FONT></BODY></HTML>
> >>>> >
> >>>> >
> >>>>
> >>>
> >>>
> >>
> >>
> >
> >
>
>

```

>

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?
Posted by [Rich Lamanna](#) on Sat, 07 Apr 2007 20:25:07 GMT

[View Forum Message](#) <> [Reply to Message](#)

No Edna it didn't blow a fuse or circuit breaker, no burnt or brown marks either on the board.

Rich

"Edna" <edna@texomaonline.com> wrote in message news:4617b541@linux...

> "Something else" causing it to blow is probably right. If you just replace

> the rectifier, it may do the same thing again. Maybe a blown semiconductor

> component causing a short to that circuit. Also maybe a shorted filter

> capacitor. Look for burned or dark resistors or burned circuit board to

> trace to a faulty component. Did it blow a fuse or circuit breaker?

> Edna

> "Rich Lamanna" <richard.lamanna@verizon.net> wrote in message

> news:4617a41b@linux...

>> Kim, I like your name for them much better. There are actually 2 of these

>> RS202L's side by side, so do you still think it a good idea to ramp up the

>> capacity? You say that something else caused it to blow, what could that

>> be?

>> I wasn't using it at the time. Something I left out is that the power is

>> always on when my rack is switched on, which probably isn't a good idea

>> and

>> I believe my phantom power was on for most of the channels, again probably

>> not a good idea. Thanks for the help. I assume pos and neg are in the same

>> direction as the other rectumfrier beside it?

>>

>> Thanks,

>> Rich

>>

>>

>> "Kim W." <no@way.com> wrote in message news:46179502\$1@linux...

>>>

>>> It's a rectifier bridge.

>>> (Or as I call 'em... "rectumfriers").

>>> <http://www.chipdocs.com/datasheets/datasheet-pdf/RECTR/RS201.html>

>>> It's actually not one diode, but four, prewired to convert AC into

> >> DC. (Usually followed by some hefty electrolytic capacitors.
> >> (Oh yeah..... yanks call those "condensers".
> >> My guess is that there was something else that caused this to blow.
> >> If I were to replace this, I would put a larger capacity
> >> equivalent in it's place. (just get the + & - right, the ~ refers
> >> to the AC input, so it don't matter.)
> >> Stick a 4 amp, 100V unit in it's place, and you'll be right.
> >> THEN, find out what caused it to blow.
> >> Kim
> >>
> >>
> >>
> >>
> >> "Rich Lamanna" <richard.lamanna@verizon.net> wrote:
> >> >
> >> >
> >> >Hello, Easter greetings by the way. Hey the other day I smelled smoke
=
> >> >and heard a crinkling sound in the back of my preamp rack and later =
> >> >discovered the cause was my Presonus M80's power supply which is now =
> >> >deep fried. Well I took the supply apart and found that this dark grey
=
> >> >thing on the cuircuit board, I think it's a diode ->I, melted right off
=
> >> >of the board. Any one know what this is? I can't get a picture just
yet
> >> =
> >> >up on the net but I'll try and describe it.
> >> >
> >> >It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the bottom which
=
> >> >solder to the cuicut board, dark grey colored and is coded:
> >> >
> >> >-->| RS*202L
> >> >RU A 90=20
> >> >+ AC -
> >> >
> >> >Anyone of you electronics wizards know where the heck I can find one
of
> >> =
> >> >these?
> >> >
> >> >You guys are great,
> >> >Thanks
> >> >Rich
> >> >
> >> >PS. By the way I broke down and got a Myspace site now. Check it out.
> >>

```
>
>> http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofile&friend=
>>> >id=3D172230696
>>> >
>>> >
>>> >
>>> >
>>> ><!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
>>> ><HTML><HEAD>
>>> ><META http-equiv=3DContent-Type content=3D"text/html; =
>>> > charset=3Diso-8859-1">
>>> ><META content=3D"MSHTML 6.00.2800.1555" name=3DGENERATOR>
>>> ><STYLE></STYLE>
>>> ></HEAD>
>>> ><BODY>
>>> ><DIV><FONT size=3D2>Hello, Easter greetings by the way. Hey the =
>>> > other day I=20
>>> > smelled smoke and heard a crinkling sound in the back of my =
>>> > preamp=20
>>> > rack and later discovered the cause was my Presonus M80's power supply
=
>>> > which is=20
>>> > now deep fried. Well I took the supply apart and found that this dark
=
>>> > grey thing=20
>>> > on the cuircuit board, I think it's a diode ->I, melted right off of =
>>> > the=20
>>> > board. Any one know what this is? I can't get a picture just yet up on
=
>>> > the net=20
>>> > but I'll try and describe it.</FONT></DIV>
>>> ><DIV><FONT size=3D2></FONT> </DIV>
>>> ><DIV><FONT size=3D2>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins
on
>>> =
>>> > the=20
>>> > bottom which solder to the cuicut board, dark grey colored and is=20
>>> > coded:</FONT></DIV>
>>> ><DIV><FONT size=3D2></FONT> </DIV>
>>> ><DIV><FONT size=3D2>-->| RS*202L</FONT></DIV>
>>> ><DIV><FONT size=3D2>RU A 90 </FONT></DIV>
>>> ><DIV><FONT size=3D2>+ AC -</FONT></DIV>
>>> ><DIV><FONT size=3D2></FONT> </DIV>
>>> ><DIV><FONT size=3D2>Anyone of you electronics wizards know where =
>>> > the heck I=20
>>> > can find one of these?</FONT></DIV>
>>> ><DIV><FONT size=3D2></FONT> </DIV>
>>> ><DIV><FONT size=3D2>You guys are great,</FONT></DIV>
```

```
> >> ><DIV><FONT size=3D2>Thanks</FONT></DIV>
> >> ><DIV><FONT size=3D2>Rich</FONT></DIV>
> >> ><DIV><FONT size=3D2></FONT> </DIV>
> >> ><DIV><FONT size=3D2>PS. By the way I broke down and got a Myspace site
=
> >> >now. Check=20
> >> >it out.</FONT></DIV>
> >> ><DIV><FONT size=3D2><A=20
> >>
>
>>href=3D" http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofil=
> >> >e&friendid=3D172230696">http://profile.myspace.com/index.cfm?fuseacti=
> >> >on=3Duser.viewprofile&friendid=3D172230696</A></FONT> </DIV>
> >> ><DIV><BR><FONT size=3D2><BR></DIV></FONT></BODY></HTML>
> >> >
> >> >
> >>
> >
> >
>
>
```

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?
Posted by [Edna Sloan](#) on Sat, 07 Apr 2007 21:00:46 GMT
[View Forum Message](#) <> [Reply to Message](#)

This is a multi-part message in MIME format.

```
-----=_NextPart_000_00A8_01C7792D.E8534910
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable
```

Its possible, but not likely, especially if its not a new unit, which =
would be more likely to have a defective component. Something caused a =
current overload through it to burn it up. But apparently not a direct =
short which would have blown the fuse as well. I've seen many leaky =
filter caps do this - these are the large caps that filter the ripple =
voltage or small ac component off the DC. A blown voltage regulator is =
another likely suspect, as far as the PS itself. Can the PS run by =
itself w/o being connected to the M80? =20

ich Lamanna" <richard.lamanna@verizon.net> wrote in message =
news:4617ee9b\$1@linux...

Neil, Edna, couldn't the rectifier just have gone Kablooey? As you say =
it could be symptomatic of another problem but if you read my last post, =
I may have been overloading the thing. Looking at the circuit board =

carefully, I see no other browned or burned resistors, etc. Maybe I'll =
send it in, but I might try to fix it myself as it will be only a couple =
of bucks if it doesn't work. The unit was bought used from another owner =
a few years ago, on ebay, and I'm not sure if it is still under =
warranty. I'll have to look into this. I probably know just enough to =
get this wrong, but wish me luck. I know..... I'll soon be hearing, =
"I told you so"! :-)

Thanks,
Rich

"Rich Lamanna" <richard.lamanna@verizon.net> wrote in message =
news:46178cc2\$1@linux...

Hello, Easter greetings by the way. Hey the other day I smelled =
smoke and heard a crinkling sound in the back of my preamp rack and =
later discovered the cause was my Presonus M80's power supply which is =
now deep fried. Well I took the supply apart and found that this dark =
grey thing on the circuit board, I think it's a diode ->I, melted right =
off of the board. Any one know what this is? I can't get a picture just =
yet up on the net but I'll try and describe it.

It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the bottom =
which solder to the circuit board, dark grey colored and is coded:

-->| RS*202L
RU A 90=20
+ AC -

Anyone of you electronics wizards know where the heck I can find one =
of these?

You guys are great,
Thanks
Rich

PS. By the way I broke down and got a Myspace site now. Check it =
out.

=
<http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=id=3D172230696>

-----=_NextPart_000_00A8_01C7792D.E8534910
Content-Type: text/html;
charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
<HTML><HEAD>
<META http-equiv=3DContent-Type content=3D"text/html"; =
charset=3Diso-8859-1">
<META content=3D"MSHTML 6.00.2900.2180" name=3DGENERATOR>
<STYLE></STYLE>
</HEAD>
<BODY bgColor=3D#ffffff>
<DIV><FONT face=3DArial size=3D2>Its possible, but not likely, =
especially if its not=20
a new unit, which would be more likely to have a defective =
component.&nbsp;=20
Something caused a current overload through it to burn it up.&nbsp; But=20
apparently not a direct short which would have blown the fuse as =
well.&nbsp;=20
I've seen many leaky filter caps do this - these are the large caps that =
filter=20
the ripple voltage or small ac component off the DC.&nbsp; A blown =
voltage=20
regulator is another likely suspect, as far as the PS itself.&nbsp; Can =
the PS=20
run by itself w/o being connected to the M80?&nbsp;&nbsp;</FONT></DIV>
<DIV>&nbsp;</DIV>
<DIV>ich Lamanna" &lt;<A=20
href=3D"mailto:richard.lamanna@verizon.net">richard.lamanna@verizon.net</=
A>&gt;=20
wrote in message <A=20
href=3D"news:4617ee9b$1 @linux">news:4617ee9b$1 @linux</A>...</DIV>
<BLOCKQUOTE dir=3Dltr=20
style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: 5px; =
BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
  <DIV>
    <DIV><FONT size=3D2>Neil, Edna, couldn't the rectifier just have gone =
Kablooey?=20
    As you say it could be symptomatic of another problem but if you read =
my last=20
    post, I may have been overloading the thing. Looking at the circuit =
board=20
    carefully,&nbsp;I see no other browned or burned resistors, etc. Maybe =
I'll=20
    send it in, but I might try to fix it myself as it will be&nbsp;only a =
couple=20
    of bucks if it doesn't work. The unit was bought used from another =
owner a few=20
    years ago, on ebay, and I'm not sure if it is still under warrantee. =
I'll have=20
    to look into this. I probably know just enough to get this wrong, but =
wish me=20
```

luck. I know..... I'll soon be hearing, "I told you so"! =
:-)</DIV>
<DIV> </DIV>
<DIV>Thanks,</DIV>
<DIV>Rich
</DIV></DIV>
<BLOCKQUOTE dir=3Dltr=20
style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: 5px; =
BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
<DIV>"Rich Lamanna" <<A=20
=
href=3D"mailto:richard.lamanna@verizon.net">richard.lamanna@verizon.net</=
A>>=20
wrote in message <A=20
href=3D"news:46178cc2\$1 @linux">news:46178cc2\$1 @linux...</DIV>
<DIV>Hello, Easter greetings by the way. Hey the =
other day=20
I smelled smoke and heard a crinkling sound in the back of =
my=20
preamp rack and later discovered the cause was my Presonus M80's =
power=20
supply which is now deep fried. Well I took the supply apart and =
found that=20
this dark grey thing on the cuircuit board, I think it's a diode =
>l,=20
melted right off of the board. Any one know what this is? I can't =
get a=20
picture just yet up on the net but I'll try and describe =
it.</DIV>
<DIV> </DIV>
<DIV>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 =
pins on the=20
bottom which solder to the cuicut board, dark grey colored and =
is=20
coded:</DIV>
<DIV> </DIV>
<DIV>-->l RS*202L</DIV>
<DIV>RU A 90 </DIV>
<DIV>+ AC -</DIV>
<DIV> </DIV>
<DIV>Anyone of you electronics wizards know =
where the heck=20
I can find one of these?</DIV>
<DIV> </DIV>
<DIV>You guys are great,</DIV>
<DIV>Thanks</DIV>
<DIV>Rich</DIV>
<DIV> </DIV>
<DIV>PS. By the way I broke down and got a Myspace =

site now.=20

Check it out.</DIV>

<DIV><A=20

=

href=3D" http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofil=
e&friendid=3D172230696">http://profile.myspace.com/index.cfm?fuseacti=
on=3Duser.viewprofile&friendid=3D172230696</DIV>

<DIV>
<FONT =

size=3D2>
</DIV></BLOCKQUOTE></BLOCKQUOTE></BODY ></HTML>

-----=_NextPart_000_00A8_01C7792D.E8534910--

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?.....PICS

Posted by [Kim W](#) on Sun, 08 Apr 2007 04:24:44 GMT

[View Forum Message](#) <> [Reply to Message](#)

This is a multi-part message in MIME format.

---=_linux46186e8c

Content-Type: text/plain

Content-Transfer-Encoding: 7bit

Hi.

I second the capacitor/regulator idea.

They are cheap and easy to replace, so why not give it a shot.

If anyone's interested, I've attached a couple of pics that show problems that I've had in the past.

First pic shows a capacitor that's been anchored to the circuit board with some kind of contact cement. This is common practice.

With time and heat, this goop can become conductive.

If it was blobbed over exposed wire links or component leads during manufacture, the conductivity can cause the equipment to fail.

(Happened to my SPX90 some years ago). Just scraping it off or carefully cutting it with a scalpel blade fixes the problem.

The second pic shows examples of bad caps that were released, in billions, onto the market, when (allegedly), an unperfected formulation for higher density (smaller packages/higher capacitances) was the subject of industrial espionage, and stolen.

So a huge number of motherboards and other equipment has electros that dry up after only a couple of years, (depending on how hot they get).

In the pic, the cap on the left is actually bulging on the top of the can, and the one on the right has leaked a brown substance on the top.

These should be replaced immediately if you spot them, as they WILL cause failure.

(The pic is actually of a friends' Dell mobo which has become flakey....spontaneous rebooting/blue screens etc...)

Kim

"Edna" <edna@texomaonline.com> wrote:

>

>

>Its possible, but not likely, especially if its not a new unit, which =
>would be more likely to have a defective component. Something caused a

=

>current overload through it to burn it up. But apparently not a direct

=

>short which would have blown the fuse as well. I've seen many leaky =

>filter caps do this - these are the large caps that filter the ripple =

>voltage or small ac component off the DC. A blown voltage regulator is

=

>another likely suspect, as far as the PS itself. Can the PS run by =

>itself w/o being connected to the M80? =20

>

>ich Lamanna" <richard.lamanna@verizon.net> wrote in message =

>news:4617ee9b\$1@linux...

> Neil, Edna, couldn't the rectifier just have gone Kablooeey? As you say

=

>it could be symptomatic of another problem but if you read my last post,

=

>I may have been overloading the thing. Looking at the circuit board =

>carefully, I see no other browned or burned resistors, etc. Maybe I'll =

>send it in, but I might try to fix it myself as it will be only a couple

=

>of bucks if it doesn't work. The unit was bought used from another owner

=

>a few years ago, on ebay, and I'm not sure if it is still under =

>warrantee. I'll have to look into this. I probably know just enough to =

>get this wrong, but wish me luck. I know..... I'll soon be hearing, =

>"I told you so"! :-)

>

> Thanks,

> Rich

>

> "Rich Lamanna" <richard.lamanna@verizon.net> wrote in message =

>news:46178cc2\$1@linux...

> Hello, Easter greetings by the way. Hey the other day I smelled =

>smoke and heard a crinkling sound in the back of my preamp rack and =

>later discovered the cause was my Presonus M80's power supply which is =

>now deep fried. Well I took the supply apart and found that this dark =
>grey thing on the cuircuit board, I think it's a diode ->I, melted right
=
>off of the board. Any one know what this is? I can't get a picture just
=
>yet up on the net but I'll try and describe it.
>
> It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the bottom =
>which solder to the cuircuit board, dark grey colored and is coded:
>
> -->| RS*202L
> RU A 90=20
> + AC -
>
> Anyone of you electronics wizards know where the heck I can find one
=
>of these?
>
> You guys are great,
> Thanks
> Rich
>
> PS. By the way I broke down and got a Myspace site now. Check it =
>out.
> =
> [http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=
>id=3D172230696](http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=id=3D172230696)
>
>
>
>
><!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
><HTML><HEAD>
><META http-equiv=3DContent-Type content=3D"text/html; =
>charset=3Diso-8859-1">
><META content=3D"MSHTML 6.00.2900.2180" name=3DGENERATOR>
><STYLE></STYLE>
></HEAD>
><BODY bgColor=3D#ffffff>
><DIV>Its possible, but not likely, =
>especially if its not=20
>a new unit, which would be more likely to have a defective =
>component. =20
>Something caused a current overload through it to burn it up. But=20
>apparently not a direct short which would have blown the fuse as =
>well. =20
>I've seen many leaky filter caps do this - these are the large caps that
=

>filter=20
>the ripple voltage or small ac component off the DC. A blown =
>voltage=20
>regulator is another likely suspect, as far as the PS itself. Can =
>the PS=20
>run by itself w/o being connected to the M80? </DIV>
><DIV> </DIV>
><DIV>ich Lamanna" <<A=20
>href=3D"mailto:richard.lamanna@verizon.net">richard.lamanna@verizon.net</=
>A>>=20
>wrote in message <A=20
>href=3D"news:4617ee9b\$1@linux">news:4617ee9b\$1@linux...</DIV>
><BLOCKQUOTE dir=3Dltr=20
>style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: 5px; =
>BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
> <DIV>
> <DIV>Neil, Edna, couldn't the rectifier just have gone
=
>Kablooey?=20
> As you say it could be symptomatic of another problem but if you read
=
>my last=20
> post, I may have been overloading the thing. Looking at the circuit =
>board=20
> carefully, I see no other browned or burned resistors, etc. Maybe =
>I'll=20
> send it in, but I might try to fix it myself as it will be only a =
>couple=20
> of bucks if it doesn't work. The unit was bought used from another =
>owner a few=20
> years ago, on ebay, and I'm not sure if it is still under warrantee. =
>I'll have=20
> to look into this. I probably know just enough to get this wrong, but
=
>wish me=20
> luck. I know..... I'll soon be hearing, "I told you so"! =
>:-)</DIV>
> <DIV> </DIV>
> <DIV>Thanks,</DIV>
> <DIV>Rich
</DIV></DIV>
> <BLOCKQUOTE dir=3Dltr=20
> style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: 5px; =
>BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
> <DIV>"Rich Lamanna" <<A=20
> =
>href=3D"mailto:richard.lamanna@verizon.net">richard.lamanna@verizon.net</=
>A>>=20
> wrote in message <A=20

```

> href=3D"news:46178cc2$1@linux">news:46178cc2$1@linux</A>...</DIV>
> <DIV><FONT size=3D2>Hello, Easter greetings by the way. Hey the =
>other day=20
> I smelled smoke and heard a crinkling sound in the back of =
>my=20
> preamp rack and later discovered the cause was my Presonus M80's =
>power=20
> supply which is now deep fried. Well I took the supply apart and =
>found that=20
> this dark grey thing on the cuircut board, I think it's a diode =
>->|,=20
> melted right off of the board. Any one know what this is? I can't =
>get a=20
> picture just yet up on the net but I'll try and describe =
>it.</FONT></DIV>
> <DIV><FONT size=3D2></FONT> </DIV>
> <DIV><FONT size=3D2>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 =
>pins on the=20
> bottom which solder to the cuicut board, dark grey colored and =
>is=20
> coded:</FONT></DIV>
> <DIV><FONT size=3D2></FONT> </DIV>
> <DIV><FONT size=3D2>-->| RS*202L</FONT></DIV>
> <DIV><FONT size=3D2>RU A 90 </FONT></DIV>
> <DIV><FONT size=3D2>+ AC -</FONT></DIV>
> <DIV><FONT size=3D2></FONT> </DIV>
> <DIV><FONT size=3D2>Anyone of you electronics wizards know =
>where the heck=20
> I can find one of these?</FONT></DIV>
> <DIV><FONT size=3D2></FONT> </DIV>
> <DIV><FONT size=3D2>You guys are great,</FONT></DIV>
> <DIV><FONT size=3D2>Thanks</FONT></DIV>
> <DIV><FONT size=3D2>Rich</FONT></DIV>
> <DIV><FONT size=3D2></FONT> </DIV>
> <DIV><FONT size=3D2>PS. By the way I broke down and got a Myspace =
>site now.=20
> Check it out.</FONT></DIV>
> <DIV><FONT size=3D2><A=20
> =
>href=3D" http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofil=
>e&friendid=3D172230696">http://profile.myspace.com/index.cfm?fuseacti=
>on=3Duser.viewprofile&friendid=3D172230696</A></FONT> </DIV>
> <DIV><BR><FONT =
>size=3D2><BR></DIV></BLOCKQUOTE></BLOCKQUOTE></FONT></BODY ></HTML>
>
>

```

---=_linux46186e8c

Content-Type: image/jpeg; name="cap 2.jpg"
Content-Transfer-Encoding: base64
Content-Disposition: attachment; filename="cap 2.jpg"

/9j/4AAQSkZJRgABAQEAAtAC0AAD/4SQURXhpZgAASUkqAAgAAAKAA8BAgAG
AAAAhgAAABABAgAVAAAAjAAAABIBAwABAAAAQAAABoBBQBABAAAoQAAABsB
BQABAAAAqQAAACgBAwABAAAAAgAAADEBAgAcAAAAsQAAADIBAgAUAAAAzQAA
ABMCAwABAAAAAQAAGmHBAABAAAA5AAAABQEABDYW5vbgBDYW5vbiBQb3dl
cINob3QgQTQzMABAdxsAECcAAEB3GwAQJwAAQWRvYmUgUGhvdG9zaG9wIENT
MiBxZW5kb3dzADlwMDc6MDQ6MDggMTM6MTQ6MTcAAAAAHgCaggUAAQAAAFIC
AACdggUAAQAAAFoCAAAAKAcABAAAADayMjADkAIIFAAGICAAAEkAIAFAAA
AHYCAAABkQcABAAAAAECawACKQUAAQAAAlOCAAABkgoAAQAAAJICAAACkgUA
AQAAAJOCAAAEkgoAAQAAAKICAAAFkgUAAQAAAKoCAAHkgMAAQAAAAUAAAAJ
kgMAAQAAABKAAAKkgUAAQAAALICAACGkgcACAEALoCAAAAOAcABAAAADax
MDABoAMAAQAAAAEAAAACoAQAAQAAAIACAAADoAQAAQAAAQOABAAAFoAQAAQAA
ANwDAAAOogUAAQAAAMIDAAAPogUAAQAAAMoDAAAQogMAAQAAAAIAAAAXogMA
AQAAAAIAAAAAowcAAQAAAAAMAAAABpAMAAQAAAAAACpAMAAQAAAAAADA
pAMAAQAAAAAEEpAUAAQAAANIDAAAGpAMAAQAAAAAQAADwA
AABQAAACgAAADlwMDg6MDQ6MDcgMTM6MDQ6NTQAMjAwODowNDowNyAxMzow
ND01NAADAAAAAQAALL0AAAAgAAAAwAAAACAAAAAAGAAAAwAAAAIAAAAgAAAA
Pi4AAOgDAA
AA
AA
AA
AA
AA
AAAaqyIAvAAAEAAAGgCNAAAA4AgAAOAIAAAAAAAAQAAQACAAQAAABSOTgAAgAH
AAQAAAAwMTAwARADAAEAAADgCAAAAhADAEEAAACoBgAAAAAAAAABgADAQMA
AQAAAYAAAAaAQUAAQAAAGIEAAAbAQUAAQAAAGoEAAAOAQMAAQAAAIAAAB
AgQAAQAAAHIEAAACAgQAAQAAAJofAAAAAAAAASAAAAEAAABIAAAAQAAAP/Y
/+AAEEpGSUYAAQIAAEgASAAA/+0ADEFkb2JIX0NNAAH/7gAOQWRvYmUUAZIAA
AAAB/9sAhAAMCAgICQgMCQkMEQsKcxEVDwwMDxUYExMVEExMYEQwMDAwMDBEM
DAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMAQ0LCw0ODRAODhAUDg4OFBQO

Dg4OFBEMDAwMDBERDAwMDAwMEQwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAw
M

DAz/wAARCAB4AKADASIAAhEBaxEB/90ABAk/8QBPwAAAQUBAQEBAQEAAAAA
AAAAAwABAQFBgclCQoLAQABBQEBAQEBAQAAAAAAAAABAAIDBAUGBwgJCgsQ
AAEEAQMCBAIFBwYIBQMMMwEAAhEDBCESMQVBUWETInGBMgYUkaGxQiMkFVLB
YjM0coLRQwcklPw4fFjczUWorKDJkSTVGRFwqN0NhfSVEjI8rOEw9N14/NG
J5SkhbSVxNTk9KW1xdXl9VZmdoaWprbG1ub2N0dXZ3eHl6e3x9fn9xEAAgIB
AgQEAWQFBgcHBgu1AQACEQMHMRIEQVfhcSITBTKBkRShsUljwVLR8DMkYuFy
gpJDUxVjczTxJQYWorKDBY1wtJEk1SjF2RFVTZ0ZeLys4TD03Xj80aUpIW0
lcTU5PSltcXV5fVWZnaGlqa2xtbm9ic3R1dnd4eXp7fH/9oADAMBAAIRAxEA
PwDCys7Fy6rmfZZyMardUbfYla5ova+mp1f85U716/f9P1VRqyMxmJbk03V4
tO8VOrobsdY4D1AzdTX7tn0911//AE1bbcy/pbqbHze15FWri58fpf8ABVvf
bZr/ADIt3sZ/wdaJdYc3otoLy70mV3tB7Gr9UuiP+67PW/64iAwyyve7sfi5h
6nspDX47bLD6jTdcS4kWe76Ov6Vln6RlqGes536MC0N9JzHsLGgOaa2+ix3q

Eb/5tVchh2NfJ+IB10+7+sgFAmlQiJCyT20TuvOrgC4DknjXxhPS+29/pVQX
6kDQaDUpsO2qs2C2NrmhzZBI3slewb5f0Ed+eN9grJLQ9r8UwGhsH31Oal/
RuTTKWwDIMUB0ak/pAywmvUB511brqdv8ITvxrK77KY3+mfpRyOWuVyrMx62
bWtdR7y4jWwODuW+01f2G2/o1UvyLL7nWj2ilAED2N+ju2/uoAknZfQA0Qf6
IGpe5hD2/SrO5o+CEAiVmHDXnQp4OrHkFxl1V/VMdjBSxmyq4NycWrHqAJLg
19HrW79/6vkVvY+qqv8ASekg2fZrDTluy3VsfW4PyMhm9jXBvtqt2h7bK/d6
Wyv/AAqf6vZ2K3Bupzi5tGlZc8Od9C5zG+m+qr9LZW233+pv/R2f8apX10ZV
PpYLpw3vc5llzSw17fe9mO99gp9JlljKdn857/USI1WRNit7/YjxM7Ju6q2j
Joj+0UvfjuxjW6XNtaa/0/upqs3OZ/NZNn+G/m0UU/VkY15HT6PVaTX+nyLq
7haS7az7NQbaqGO9J21nrV/8Z6SXT22ZmDaGs3WNLaxkNc1khg3sZfHofaPT
eK/0l77fpqeQMjTPqWXXsz80OsvbfVP6Vu1npbdIVde+6xz/AORXZ/pK0NQD
XTvom7Ni9R01Vh51V9rsSnFqwcNhCksXGlafVbo19+VcW5OZkO9Znov9f+a/
mq1z/X6n02PxLHGRYbfe7WRP09Nr7Xsf/wBuLRo9Tdbm12/p6fT3PD2tMRtp
bd6uyzb6LLaa9jP9CytT69R9pwaOrVnN7PDraQ13trLnMHvh/wDNb/p2/wA7
/Of8Glfc7pjqlX6PluDMve5wLTGgPnwo8Uj+UZ+5HzW27nEkvgNI3MNgNrb
KC8e9rPCAUWRi/RrW+Un5pWaQ0dtE/0rZPA1TN91k+GqSn//0MTAZZTmW4mS
0sJlt9EkhgP0fC/e30X+3b79ibpRbS+6i1xY/wBY4tzNS01XNex+1v8AN1OZ
bRt/nN7/AFf+DRKh611WeGZDz7Rba5np1bHex3vdY/lv+k/0nv/AOKSyW3U
dRtpEMfk07nNeHTNcZG1jWC1zbHOxPTp/r/pnpo0n5sZ1gD+6a/xvU8/fS9u
+myfUZuY5o/faYdP/XGqnr4ra68wM6g66ufTyWsub57x7//AAdl6xogub2B
0+B1T5LcOhkFBFbS7dBgRoSTwUOOyM0mA5sAkCPiDymFmZeijUzP2E8GE7q
mNBO2eXS7uG/SUw8t+llaO0diPel0SbTbc9tde6xzuK62ue7X6MNZuQS1SAS
SBAnhNH4rdxfqb9ZMmDV0vJgkQbGioEfG41/RWpi/wCKz613n9M3HxWn/SW7
j/m0Ms/6pORTg9lybcXMruYQwWA1v0BEOMase236Fmx/0VvZjqX1UMyWI9Nd
oeTe/wBQl8uoyKfddX6FDa9j7Ps2P+n9Ov317Fs4n+KDIDSMvqbBPaqknyPu
ssb/ANSp/WT6s5eBfVXXkB9GTVFjq8aoXPsYGWOfk2Orax97f5f/bicdQwc
Mok9r0ebzaHDqu266zGblMAPogNLnt/RNqspreW7N/77kn41uF1WjDt3shrb
H/aHbXO3aS9jvUY9rnN+hs/S11od1fq4ZyGNDfs7ydWgcH/D2Od+nt+hZ+jZ
6fqllzQ/BZl4gAfQ/wBYtEOdv+lFYW/R2+o3ftezZ6XpJgFADfxXS1Mjt+nT
Ypsbj9YFNQGO14BZbjg2OJ1fuqrcbK6rbbPp11fQrpQsTHyHZGV028MIDI2y
zllcxhu/Rs3NY5tb8nJe7+X9BLJ/TdPqyqansOHttDG1gVhji0Pc+71dzt2z
1XVUV/q+/wDwdaLlsOpMpvY0W5FrnYIVbgamutc0bXusc/9J9mb+k9Ktn8/
k41PqPS06/X6K226axHeM3jbqLKH34oeXekYsiQHNaZr3NcG/RVMAh73PEEC
YOh1W/1Lppx6m5N812kvrsoLfcamONNlzv8A0IFlbP8ASejk/wDB+pjZL/Wf
Zba/a52usngbWM/BOXwYazNGOd46BJvtrLv3tEn+1rWd+T8Sns0hg7fISXP
/9HC6jPoGizbXbiPa2hkMYTVY3duNVNlzvZdV9H/AALP5zYrz/2fX9n6hcNj
G1uewklzi9wY6mzbUXv/AJzfX+kZsf8A4TYs/qVFTtmY26qtvphwqfZV6z2n
3VtqxMJU2j2v/SV2KdbX29MNUbW1B53ANa8WM91Ld1r/AH1u3O/4Wv6CabsE
d2lfpAjpp/gSOvVTg0FsD7G+zFJaWuG3+fx/dX7f5llq594/SDwcl+5b+Ex1
vSOpyzWNLaqzKD/zy2s7/T/ccxrPX/N377lh2NhhJ5rliPlwn9FsTUx46Mdi
nX6g9rRJOpSDXakcH8im+sgaltZjTe4Nnsdod7nf2UxnY+9rfcdoHnB4XrH+
KezFf9XLG1NaLq8h7b3tADnTD2b3fSdta7avE8kEWRu3eYmP+IC9J/xLZ+zJ
zenE6XMFzB/KY7Y//ovR2U+spJ0kVKWD9c8Z1nRnXsdtOI5tpdvsYAwe25zz
ih17msqc5+2tbj3sYJe4NHiTCrZdmPfiXV7mva5jhA906eDZ3JllsPkDGUO9
O11U0u3v9b0TW1tjqxSaPtWd9o9aqtvpv9n9l9Sxij0yW/acXc25g2hrCXAO
DjsdYxm39Jsr979+z1FK/qNFuZtrdfe9z2sry8u57w0ueNmSzF2M2en/ADrK
rUs3EOZkGrpzrMu7HluUSNrWjdtY51mQ6v6Nu+t7PSrQYbH2dGGH9oqDcP0G
3suseyq20AVxWHDlIteGn27a2+rdZdv8ASqr/AODVCsNz7aKXH08TGq95YZ2V

NO/Jubu+lKZnr/7eTdRUtG1gxWt6f12NooyS69/plhNbNrQ6HDIq3U1Yuax3
6VjKr3+jVVd/hPTVOyvJxRdg2MZXAxVvuEw4t2epjt/4tvq+rs/nPU/n/wCj
1paRs91srOm4iwuudkXutc0MaRsZUDlBwG+kyhn8iqn9Eudvq9J76HAOggNc
4T7fpNc3+ut2HNMcFUOqUucBePzPY494P0f816bE6pxEiW+hcgHfbPYa/ck3
3WT4ao2TY1z3PaxtYcAAG8aDX/OQmCKyf3z+RPbD/9Kh0y0ZHR/sTQXvcHVu
orFjnhxc39Bh01+p+ju278nN/MVHoWwusrtd6QLGku2jd7T6Vob9P3e791L
pWRQ1t1OU9gpEWNZdbeySuna9vo4X6S99n6N30q/5IDr/Q9RFjKzVXYZZsr9
Ju142H0ftO9/ptuY/wDSfpEBqOzDtKJ36JejObj9U9K33Msa+h4JEO2/mB2x
27e32bK/p/6RZt/TczGtaz0hYXXOX62Egl76nelY59bfe2nc33b1HqmXdVIC
7GMWtcHzvDod+b+k9u57trnP9iB0vPDM71c6wMrcSDO55G6B7NfY38+x6Rut
O+vkuhAXcunyvZ9N+r+TVgONeDj5VjwfUybA0Pb4/Z6TYxIP+bYqfUvq/caf
Vy8RmVSNS9hHqVgnb9Orb+cugwKWenWWe4taACPokfmuY789XcjFfSwuq9t9
VLLij6Qc8td7f5SfwgbAL+lI8l610gYOUKa3m2q2sXYz3RuLzf6bY9vqVwtn
/FrlvxPrFiWM13C6sjyLd3/fUfqt7eqdWZjYbWNqpd6Vjgfa61wsfb6TP9HU
36Sp/URj29axDwWutGun5jkw/tS+4m/lsra9jgwO/kyfxKTKy4/prrHeQO0f
dWGobHFtNY49vCbeCYP4cpJbba8WvVrWz4xJ+9yxPrTcK+mZLmktD2NrDmO2
uabHtp3Nd+a5u9aBs0g/euY/xgZlr6Fa1xhtr6qz8J9Qx/mJLZbF4ujqdGC6
1g6bhW2sdtY+0Pt2lpe1/wDSbLfU3u/kVqlkG/qGVda+s2XZT3WuZW1zpdYd
/sYPdct53sTOycDHGTiycxpG7GyK6g1zrBt2bvX/AEzcfdv3s+mpZd+b0plj
8bLfQL6sd9dIBLK7a7j6hqtbtfx6f6T8z/B2ob9GEwOg7p7MrCzLHWdRIw7
TAsza9atBsZ9owvpM9rPT/Un1/8AhRNj1P3tusvVdUYLBY520gH2WseC1zNv
5n/gISxcXLOWdz6GWNa/Wqxx2gQ42XW2S36DV1tOE3ljadtbxFNxaXtPt3sr
0P0Xbvf6aZMyGgbGHBA2Z6uJTFj32VYwc6i+0R6GXDGyB/gM4uax/qf8P6Kf
Kw3MLsbKY/Hc4Dcy0Ro76L63fQtb+45qbr+D9nxHV3t/Skh7bGEGolxa2t2P
BdZ/pfVrWphY+U3ozXua/Ma6vf8AZW1+tRLXNrsufTY1t1Nb/wBLW/Jw/wCb
vr/nEpUP7FmTGAbF9+0njLaq6/WrvaTY0FIZaYAcD9J37zXNVWYA4MH5oA+a
1+regcwXU1enXc2TXu3M9Rn021GGvZW9m32O/wC3FnWU0tuBrcXjbuffliHH8
z+ypAbCQbD//0+cwMp2DmsyA6xuzc1/ov9Owtc11b212lr/T3bv3ETqH2rlc
CcU0vZScpjrrH3vsr9r2e6zd+6+xjWtp/wAJ6irlptsZ6bS5121zGNBcSbAH
NY1rfc76S16/XpbQ/q2l+uumiynELn+gbHgD9Df6jbXO3Ms9Kr9GxRxJpjl1
16F4nqD7r8kudLj+ZDYEGD7P85QordY57HTvDS5s6mW8tK2vrN07JxLQx11V
VdTW0149T5403WV2NrJfb6djrKrLrX/APF/oPTWHj2Cq5pcCRPYwYP0t3Ke
vB0djpH1k630kNbiXF1LZ202t9Rjf6rT7mLcv+uVvVGXv6vk5NQfR6LKOnVM
q9Ug72tycvc99dW/wDnPTauZexrXHaDAOvjqlY1zWb4laXbmk9wDtdtRtTP
pF3o9Sx7YDQHiQOAJ81ufVao0fW2zDPFN98DkQ5rtpWBQyLDzrq0tG6P7K3a
b7MLreB1qtgcM2v31ngPpP2blbun+c2MfYmk1ukakDvo+vs9zGEdmwmJc13x
0OmhWNmfXHpOJ08mre/NfW447Hsds3wft9Ujb+ja7b6mx6xaf8ZnUW4NVZ6a
xvUNW5FxmUTJDLKGy+xzXM2/nlcce6ToakRE766PYxk2MLqyy8NJEggcfNcX
/jJuJ6ZhNmPWYJDPHZW7+9ZXR/rP1job877IKrKuo3nJe2yQ5lr/AOedRP6J
3qfuvQ+iGzq7H5lr7bLGVV+k65pazadSubTpt7/pK2f8Em+9HTxQDEi7+nV5
hzHNc0k7AfomCTu/NHt9zf8ANVDPa+t3pl2ncf8AS939VdwOh9lxGj7dIWl5
kOppYymCOQ59zrr/AO19mXOfWijprBW7p7TWJiwOe6yY+i97rK6v0nu/wfsR
GSJIQP8ABJQ1r7fV9jQxW+lhes6WuLt1ZInUfnLZ6b1nHx720ZGTb0sVje2
7Hb9or9Uj+dbjGyrZva7a/a/YsnLc1mNj0tbAY0AunnTc/8A6TIVrp9Vh7Dd
E+Sduq6bVmXk9TzqqrHnlfYK62kCtsuOxsMZ7WcrsOr3ZuHTX0xzqwwsqfT
fS54ccerczFq2v8A5qv1N2Uzb/OLlfqvgNz+vUUucGVNLnveXiva1gP6QWS3
3M+mxamZk+tdZkWWueHn22WRuLR7a9+0Mb/Nhv5iJAYcsztqkuY/q1F1GT6T
raan5DM1wi9pqE7dzHV/bfV/mdlzL7f0nq/4Nc3VVde2aq3PB8BMDuNy035N

+RVZT073vIHqkQCGg7vY5/5+5dBRXdiYFDXBI9jlbkWuBbstPvYxzGH9JW5n
+G/w1ibrTgJ/ANYvxD03Ox/3T//U5no59b9nne5hFjaXWMeK3N2PgOZe/wBl
Nnpbstf9BafU29MxvQspNd128GxxvdkvLCP5vKG30P5X6L89YHSXTJ31967
G2AeTwa3f9JfZze/06nEAnUAtdZ9sy52n7n0IGNJEeKzJ4dfzdo1Wlg9DGYO
n5Dg23JyKBJNd6gNTWU5W12T6Hpb77fsrfoVWWLjOp9N+xQ0WV2iXs9Stw2E
MdsZbX/hNlv0272LfDup5xc9z7rqKa3XNkucxtNcVOcx/wDMN2Rs21v9mz0l
oYXSa+p2WeoxmOKLzW61tla+L2ur3WVZTrafQx9jvZ6fq49lidda7ljxCVVZ
LzDQLKa3g7d7NzidPeJbwz+qiY1dl+JeGMBDGgNk8F3u9v8AW9N6I9kt6bIP
6dfW5rPXeMey0aabQ9rtn+E9N1T3tb+/WrOHQ5j727T+Isr2NEEFpJ9TX6D9
u9FkDj417nXVBxgDQnxC6gZGLZ9XHtY4fb8K71jUYMU5LG4+6thnf6dtddbP
+NXNYtPo9VOPewEUvey1rvEE1f1fpLoqw2ua2BrWuEQICRFoq250eOp4GPVk
WtobjvNbrHg7WtAl41d79rGsVuvouO/Kpx63jKssc+p302N9atou+zsqaKsh
vrNbY31bLPTWb0Eu+25nT73kscA+SRBrsbp/0tq6kUWsoqfbjht2Vdufc/dX
TXeWvpxbfs1dbPZt9L6HrenZ+IsUEALkB/eH+GycxG+CctbAjLzx+n/ouPf1
DpjMdowaW4lziQ+1+xziACfRfU5mVfX67f8AC+v9NAzesZ2aRXkZFR6wBW9r
ttRdXHvbY6H3etS9rf8ASVXlvVujOLcT7BRbZftNeVWGI1u5wsyGudsY6z0
7cfOZv2/zfpVrn2dUcLgxvuqAbtLY924B4jb/J/0ieYgC96WY4CVA9a/uuhX
i9RyAx2HQ/lyPabRS2x1jS0uD7GW+51fqs9rFW6pWLunv6eMZjcphc42WtL
bm11y/7O31Pbtrqa9+/0q3rpvqx9ZMim4MfZVvVjv0LYse1o77MfH2uyLP37L
9/8A1tY31mxMVmRZdji19TiQL7Meusn841NYGv/AO/qtDmpe4ISiBqfE/1d
f/QW3k5GAHEJkEAV+7Lv/LjeTz3myxjvote0Fh7QfgrDaXVNrG0AyAPAkRuf
/nOT49OXbktqx6HZvpkvFNbS50AifY3aHu/rOW07oWd1XMZV0boubTWNHjNJ
FTAfc/fkvDfZuO9XQbDUKcNOzldGxmNouufrY520N0Ldgl2797dvVPqmQ51m
yYHddjm9AuWMTbRWbsbFbtyeoBuyu26x/vdQ1/vfj0uNeJT/AMT6i43Kofd1
BmOwS6wgQP8Apf8ARSYI65JEs+nWfZX13eoaQxpL3Bu8uLvo1NY72btv5/5i
9G6d1X6n9Vx7L2vy+nW2tlyKCTkVgn8x2llzvd+krd+iXnnUW0NLmYr/AFKa
nEut+juB/P2n6Lf8HWxP0a/pLcmeo35WG30yGZOK1rnNtkfz1T3N9XG2fufp
UgNbZwdH/9XisMGjq+RiO5Pq1fNh9Rn/AJ7W30rMxsG1+XbS++5hAxw1+yts
h3qfaBss9au1ns9P/jFQ+s9Y6d9brbRArday8EcbXxv/AO/LQPSc9tVuS7Ht
ZiVD33EBoDQdvqsbZt9Xbu/MUZ0I5j8VswSBXdITXdnsbgWPNLMeu6yto3SW
uc299NIZc2nb/hGbkLodJtGKRVS914eHFjNpuDrl3N/RMn+cdWzeldi4/TbD
bgWsysc3Hftd6zWhpbo2i6it/07N53P2es/8A6a0KMy6yn0Hfan4+RU6lry4P
DrLBtqdiYeOBZ/P7v03p/wA0kCSDp5lqMTtcq9WvE5VvTcd3R82rrBfS6vJH
rkFpdRZtLW5VDRu9X376Mqr1v01Xp/4eupDwP8Wn1gy3n087HZS07RZvc5wA
19INP0fa/wDwnorX6v1OjFw6un+jdX1Oyumwj06x+IYw0UWtse6xZR3M/dr
3+p/No7m01dYpstaqddurYMXqFzrLLhsqY/8Am3bK/wBFs2Wemz1b/wDg/wDC
KNGxqPAJscVROhryeM6n9Xv2L1PqNGXkm++hzllaQ63fWL5G5z/pbtlm9ynW9
rmNeDuaQCD5EStH622ZRy6MizT1PUqD3udY9zf6Tj73u9uxjXX49Xu9T9F71
kYBaa/Sb/g9ADzHzTwuDYojG6jXc13p73Na9/IDXs0v093t3LrcMuys2vKxD
/k1tTm35jA+t1jSw+qb7/TyPTYx9DPp1/n+z+dXNY5c0uvAY51LHNG/US4Ru
/d3sbv8ApKj1DPzb2BuTa81VCKabbTtaG6itIDP0e1MMAZk+HD/3S8n0Af1u
L7PS9ZjVdWy8V11GN6uQ3ldaS6GNtpj+av2to9ZINtb2M3Oq/kMXnTG+nYaH
DY9m72u5kO4s2/RftXYdFsdmfVS6msvDsNznWgHQ7Xep+kLXepssxL9IFVrP
p4t36RcjkN+zZZbtDXtsFjDwC18Nc3+qlepFaseM1Kiej131M6BkdYpsvvtX
oY9VnpuY0Bz3PaN3vafa1n9ff/UXc5/RGZ+OyjgGbkWVMADW7m1t08WVMY1y
89+puJ17MzMvo/R85vT2N/TZTnn3GD6bdmxu/f8A1Hvr0LD+rWXi4VmPkdRp
ufclfa/G9V2v8vltt3/21VzYjfgPF9eBIIKZJ4uZGER+URjf+NJ4jqPS6fq
f9ZunZWG67lxswWVUyYw1uk+zYy+k7/pOqf7ldyOv9fzchlwX5Ljilp9Rj9r

rdgJDqHXVsZY7d/hPUZ+kr/4JUfrb9R7+k0U9R6XI3ZOR6wDmtqazYNr7fXH
o/RZW2v9lp25f2jJbnMaD9qZusYwe0Oj0bmNbud+ex2z/rSs4r4Brdb/AO+1
ckwaqfH0Mq4eLx4Wnc65xHqvdYWtAZucXDaB7Gt3H91YGXQ6vqL7HD27JZ2n
s7/yK6duHfYG+2ABEnwSzOk4eQMZ+Vb6RoodRY0QA/dbZkepJ93t9XZ/YT7W
YxRJO1PD5JdHgX6u15AKbHwszLdtxsey0+LWkj/OK64N+q2CS9ITb3M5e4b4
/wA72qwOv3Wfo8KkDT26f5oa1v7yXF2DL7nYW//Wwvr7Q22vpuezX1qTS8/y
mLSw6B1PpIN4wsvNntx2/rN+QKsap4b6BNDXfT9G1v8A3xeapJkt/qUS+U2+
hMsOfVte4MLH6Nx6zY+QwNbY5/5tf5qjm5eXZ0us1W+IVS8FIVYDA0tOlhf/
AEix+53q77bP6nprz9JHrosjuOJ69grfXtaZvLHmTJO5p3sc138pdbTGf0On
L9Nz24VzbHBpElmRtZ6Xv/wXqta+z3fmLyNJI7skvL6n9bcVx6aK2Md6mM0
2Ma17SD9nlva+ytv0WfZ7cprWexctgTbm+jRE2wA7yaN3tXKpJBaE06hZZjV
5NdYs2PNbXWAGQH/AEi3+t9Fqo1YwVwWWY2DTZY+qt11tlmQGD3u2O/TeyVz
KSKS+g/VPazcPFv6q5td2KCW3Y7gfVYa2es64fu+r0+/LZXu/nP9EsL6y9MZ
iZttTHPNmOXCWAFvpg+y3d+7bW5jv7a5tJR/pfypb+kP2PWfV6zrVfV/R+r5
9DOsqMh20A1wHkF929j2+Hk/W6rDvb1LFsyshwPp2jLqqbXA0d+iavHEIBz
Gwu+/df/ADV54+M8Hsbf5auN9Ot6xgCit2bnX5LyN4qdY5/uja79Gza3us2/
6wtZY2rGw3MJIDA6Ggk6N9gXBpKaFcl2/ta/Q3venDX8v8V74jr+Vc2o2MxP
UtdtllSTG1zfpoPS7MTp/1hdi/WVtlmPX6teU0lw3ED9Ft/m3/S9/01w6SI
8Vw4LFb/ANb/ANCFtoJ4nTMbpGd1e2ofZM1z68Wm4Au+x1TvudHt9W6wtpbY
ue6PVn9U3xkDB6fR7TYIDv5FbXfSe/auUSUkKZOmj//Z/+0lalBob3Rvc2hv
cCaZLjAAOEJJTQQIAAAAAAAAAQAAAAAAAAAAAAAAAAAAdhCSU0D7QAAAAAA
EAC0AAAAAQABALQAAAABAAE4QkINBCYAAAAAAAA4AAAAAAAAAAAAAAAAAP4AADhC
SU0EDQAAAAAABAAAAB44QkINBBkAAAAAAAAQAAAAeOEJJTQPzAAAAAAAAJAAAA
AAAAAAAAABADhCSU0ECgAAAAAAAAQAAOEJJTScQAAAAAAAAKAAEAAAAAAAAAAjhC
SU0D9QAAAAAASAAvZmYAAQBzZmYABgAAAAAAAAQAvZmYAAQChmZoABgAAAAAA
AQAYAAAAQBAAAAABgAAAAAAAAQA1AAAAQAAtAAAAABgAAAAAAAThCSU0D+AAA
AAAACAAA//////////wPoAAAAAP//////////
//////////8D6AAAAAD//////////A+gAAAAA
//////////wPoAAA4QkINBAgAAAAABAAAAABAAAC
QAAAAkAAAAAEOEJJTQQeAAAAAAEAAAAADhCSU0EGgAAAAADRQAAAAAYAAAA
AAAAAAAAAAeAAAAKAAAAACABJAE0ARwBfADAAMgA1ADIAAABAAAAAAAAAAAA
AAAAAAAAAAAAAAEAAAAAAAAAAAAAAoAAAAHgAAAAAAAAAAAAAAAAAAAAAAEA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAEAAAAEAAAAAABudWxsAAAAAgAAAAZib3Vu
ZHNPYmpjAAAAQAAAAAAAFJjdEAAAAEAAAAAFRvcCBsb25nAAAAAAABBM
ZWZ0bG9uZwAAAAAAQnRvbWxvbmCAAHGAFAAFJnaHRsb25nAAACgAAA
AAZzbGljZXNWbExzAAAAAU9iamMAAAABAAAAAAAFc2xpY2UAAAASAAAAB3Ns
aWNISURsb25nAAAAAAAdncm91cEIEbG9uZwAAAAAAAGb3JpZ2luZW51
bQAAAAxFU2xpY2VPcmInaW4AAAANYXV0b0dlbmVyYXRIZAAAABUeXBIZW51
bQAAAApFU2xpY2VUeXBIAAAAAEltZyAAAAAGYm91bmRzT2JqYwAAAAEAAAA
AABSY3QxAAAABAAAAABU3AgbG9uZwAAAAAAATGVmdGxvbmCAAIAAAAAA
AEJ0b21sb25nAAAB4AAAAABSZ2h0bG9uZwAAoAAAAADdXJsVEVYVAAAAEA
AAAAAABudWxsVEVYVAAAAEAAAAAABNc2dlVEVYVAAAAEAAAAAAAZhbHRU
YWdURVhUAAAAQAAAAAADmNlbGxUZXBhOj0SxNIVE1MYm9vbAEAAAAIY2VsbFRl
eHRURVhUAAAAQAAAAAACWhvcnpBbGlnbmVudW0AAAAPRVNsaWNISG9yekFs
aWduAAAAAB2RIZmF1bHQAAAAJdmVydEFsaWduZW51bQAAAA9FU2xpY2VWZXJ0
QWxpZ24AAAAHZGVmYXVsdAAAAAtiZ0NvbG9yVHlwZWVudW0AAAARRVNsaWNI
QkdDb2xvclR5cGUAAAAATm9uZQAAAAI0b3BPdXRzZXRs25nAAAAAAAPs
ZWZ0T3V0c2V0bG9uZwAAAAAAAMyM90dG9tT3V0c2V0bG9uZwAAAAAAAL

cmlnaHRPdXRzZXRs25nAAAAAA4QkINBCgAAAAAAwAAAABP/AAAAAA4
QkINBBQAAAAAAQAAAABOEJJTQQMAAAAAB+2AAAAQAAAKAAAAB4AAAB4AAA
4QAAAB+aABgAAf/Y/+AAEEpGSUYAAQIAAEgASAAA/+0ADEFkb2JIX0NNAAH/
7gAOQWRvYmUAZIAAAAAB/9sAhAAMCAgICQgMCQkMEQsKCxEVDwwMDxUYExMV

ExMYEQwMDAwMDBEMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMAQ0LCw00
DRAODhAUDg4OFBQODg4OFBEMDAwMDBERDAwMDAwMEQwMDAwMDAwMDAwMDAwM
DAwMDAwMDAwMDAwMDAz/wAARCAB4AKADASIAAhEBAxEB/90ABAAB/8QBPwAA
AQUBAQEBAQEAAAAAAAAAAwABAQFBgclCQoLAQABBQEBAQEBAQAAAAAAAAAAB
AAIDBAUGBwgJCgsQAAEEAQMCBAIFBwYIBQMMMwEAAhEDBCESMQVBUWETInGB
MgYUkaGxQiMkFVLBYjM0coLRQwclklPw4fFjczUWorKDJkSTVGRFwqN0NhfS
VeJl8rOEw9N14/NGJ5SkhbsVxNTk9KW1xdXl9VZmdoaWprbG1ub2N0dXZ3eH
l6e3x9fn9xEAAgIBAgQEAwQFBgcgHBgu1AQACEQMhMRIEQVFhcSITBTKBkRSh
sUljwVLR8DMkYufYypjDUxVjczTxJQYWorKDBYy1wtJEk1SjF2RFVtZ0ZeLy
s4TD03Xj80aUpIw0lcTU5PSltcXV5fVWZnaGlqa2xtbm9ic3R1dnd4eXp7fH
/9oADAMBAAIRAxEAPwDCys7Fy6rmfZZyMardUbfYla5ova+mp1f85U716/f9
P1VRqyMxmJbk03V4tO8VOrobsdY4D1AzdTX7tn0911//AE1bbcy/pbqbHze1
5FWri58f8ABVvfbZr/ADIt3sZ/wdaJdYc3otoLy70mV3tB7Gr9UuiP+67P
W/64iAwyve7sfi5h6nspDX47bLD6jTdcS4kWe76Ov6Vln6RlqGes536MC0N9
JzHsLGgOaa2+ix3qEb/5tVchh2NfJ+IB10+7+sgFAmlQiJCyT20TuvOrgC4D
knjXxhPS+29/pVQX6kDQaDUpsO2qs2C2NrmhzZBI3slewb5f0Ed+eN9grJL
Q9r8UwGhsH31Oal/RuTTKWwDIMUB0ak/pAywmvUB511brqdv8ITvxrK77KY3
+mfpRyOWuVyrMx62bWtdR7y4jWwODuW+01f2G2/o1UvyLL7nWj2iIAED2N+j
u2/uoAknZfQA0Qf6lGpe5hD2/SrO5o+CEAiVmHDXnQp4OrHkFxL1V/VMdjBS
xmyq4NycWrHqAJLg19HrW79/6vkVvY+qqv8ASekg2fZRdTIuy3VsfW4PyMhm
9jXBvtqt2h7bK/d6WYv/AAqf6vZ2K3Bupzi5tGIZc8Od9C5zG+m+qr9LZW23
3+pv/R2f8apX10ZVPpYLpw3vc5llzSw17fe9mO99gp9JlljKdn857/USI1WR
Nit7/YjxM7Ju6q2jJq+0UvfjuxjW6XNtaa/0/upqs3OZ/NZNn+G/m0UU/Vk
Y15HT6PVaTX+nyLq7haS7az7NqbaqGO9J21nrV/8Z6SXT22ZmDaGs3WNLaxk
Nc1khg3sZfHofaPTEk/0l77fpqeQMjTqWXXsz80OsvbfVP6Vu1npbdIVde+
6xz/AORXZ/pK0NQDXTvom7Ni9R01Vh51V9rsSnFqwcNhcKsXGlafVbo19+Vc
W5OZkO9Znov9f+a/mq1z/X6n02PxLHGRYbfe7WRP09Nr7Xsf/wBuLRO9Tdbm
12/p6fT3PD2tMRtpbd6uyzb6LLaa9jP9CytT69R9pwaOrVNn7PDraQ13trLn
MHvh/wDNb/p2/wA7/Of8Glfc7pjqlX6PluDMve5wLTGgPnwo8Uj+UZ+5HzW
27nEkvgNI3MNgNrbKC8e9rPCAUWRi/RrW+Un5pWaQ0dtE/0rZPA1TN91k+Gq
Sn//0MTAZZTmW4mS0sJlt9EkhgP0fC/e30X+3b79ibpRbS+6i1xY/wBY4tzN
S01XNex+1v8AN1OZbRt/nN7/AFf+DRKh611WeGZDz7Rba5np1bHex3vdY/lv
f+k/0nv/AOKSyW3UdRtpEMfk07nNeHTNcZG1jWC1zbHOxPTp/r/pnpo0n5sZ
1gD+6a/xvU8/fS9u+myfUZuY5o/faYdP/XGqnr4ra68wM6g66ufTyWsub57
x7//AAdl6xogub2B0+B1T5LcOhkFBFBs7dBgRoSTwUOOyM0mA5sAkCPiDymF
mZeiwjUzp2E8GE7qmNBO2eXS7uG/SUw8t+lla00diPel0SbTbc9tde6xzuK6
2ue7X6MNZuQS1SASSBAnhNH4rdxfqb9ZMmDV0vJgkQbGioEfG41/RWpi/wCK
z613n9M3HxWn/SW7j/m0Ms/6pORTg9lybcXMruYQwWA1v0BEOMase236Fmx/
0VvZjqX1UMyWi9NdoeTe/wBQl8uoyKfddX6FDa9j7Ps2P+n9Ov317Fs4n+KD
IDSMvqbBPaqknyPussb/ANSp/WT6s5eBfVXXkB9GTVFjq8aoXPsrYGGWOfk2O
rax97f5f/bicdQwcMok9r0ebzaHDqu266zGblMAPogNLnt/RNqspreW7N/77
kn41uF1WjDt3shrbH/aHbXO3aS9jvUY9rnN+hs/S11od1fq4ZyGNDfs7ydWg
cH/D2Od+nt+hZ+jZ6fqllzQ/BZI4gAfQ/wBYtEOdv+lFYW/R2+o3ftezZ6Xp

JgFADfxXS1Mjt+nTYpsbj9YFNQGO14BZbjg2OJ1fuqrcbK6rbbPp11fQrpQs
THyHZGV028MIDI2yziIcxhu/Rs3NY5tb8nJe7+X9BLJ/TdPqyqansOHttDG1
gVhjiOPc+71dzt2z1XVUV/q+/wDwdaLIsxOpMpvY0W5FrnYIVbgamutc0bXu
sc/9J9mb+k9Ktn8/k41PqPS06/X6K226axHeM3jbqLKH34oeXekYsiQHNaZr
3NcG/RVMAh73PEECYOh1W/1Lppx6m5N812kvrsoLfcamONNlZv8A0IFibP8A
Sejk/wDB+pjZL/WfZba/a52usngbWM/BOXwIYazNGOd46BjvtrLv3tEn+1rW
d+T8Sns0hg7fISXP/9HC6jPoGizbXbiPa2hkMYTVY3duNVNlZvZdV9H/AALP
5zYrz/2fX9n6hcNjG1uewklzi9wY6mzbUXv/AJzfX+kZsf8A4TYs/qVFTtmY
26qtvphwqfZV6z2n3VtqxMJU2j2v/SV2KdbX29MNUbW1B53ANa8WM91Ld1r/
AH1u3O/4Wv6CabsEd2lfpAjpp/gsoVVTg0FsD7G+zFJaWuG3+fx/dX7f5llq
594/SDwcl+5b+Ex1vSOpYzWNLaQzKD/zy2s7/T/ccxrPX/N377lh2NhhJ5rl
iPlwn9FsTUx46MdinX6g9rJOpSDXakcH8im+sgaltZjTe4Nnsdod7nf2Uxn
Y+9rfcdoHnB4XrH+KezFf9XLG1NaLq8h7b3tADnTD2b3fSdta7avE8kEWRu3
eYmP+IC9J/xLZ+zZenE6XMFzB/KY7Y//ovR2U+spJ0kVKWD9c8Z1nRnXsdt
OI5tpdvsYAwe25zzih17msqc5+2tbj3sYJe4NHiTCrZdmPfiXV7mva5jhA90
6eDZ3JllsPkDGUO9O11U0u3v9b0TW1tjxSaPtWd9o9aqtvpv9n9I9Sxij0y
W/acXc25g2hrCXAODjsdYxm39Jsr979+z1FK/qNFuZtrdfe9z2sry8u57w0u
eNmSzF2M2en/ADrKrUs3EOZkGrpZrMu7HluUSNrWjdtY51mQ6v6Nu+t7PSrQ
YbH2dGGH9oqDcP0G3suseyq20AVxWHDlTeGn27a2+rdZdv8ASqr/AODVCsNz
7aKXH08TGq95Y2ZVNO/Jubu+lKZnr/7eTdRUtG1gxWt6fl2NooyS69/plhNb
Nr6qHDIq3U1Yuax36VjKr3+jVVd/hPTVOyvJxRdg2MZXAxVvuEw4t2epjt/4
tvq+rs/nPU/n/wCj1paRs91srOm4iwuudkXutc0MaRsZUDlBwG+kyhn8iqn9
Eudvq9J76HAOggNc4T7fpNc3+ut2HNMcFUOqUucBePzPY494P0f816bE6pxE
iW+hcgHfbPYa/ck33WT4ao2TY1z3PaxtYcAAG8aDX/OQmCKyf3z+RPbD/9Kh
0y0ZHR/sTQXvcHVuorFjnvhxc39Bh01+p+ju278nN/MVHoWwusrtd6QLGku2
jd7T6Vob9P3e791LpWRQ1t1OU9gpEWNZdbeysuna9vo4X6S99n6N30q/5lDr
/Q9RFjKzVXYZZsr9Ju142H0ftO9/ptuY/wDSfPEBqOzDtKJ36JejObj9U9K3
3Msa+h4JEO2/mB2x27e32bK/p/6RZt/TczGtaz0hYXXOx62Egl76nelY59bf
e2nc33b1HqmXdVIC7GMWtcHzvDod+b+k9u57trnP9iB0vPDM71c6wMrcSDO5
5G6B7NfY38+x6RutO+vkuhAXcunyvZ9N+r+TVgONeDj5VjwfUybA0Pb4/Z6T
YxIP+bYqfUvq/cafVv8RmVSNS9hHqVgnb9Orb+cugwKwenWWe4taACPokfmu
Y789XcjFfSwuq9t9VLLij6Qc8td7f5SfwbAL+lI8l610gYOUKa3m2q2sXYz
3RuLzf6bY9vqVwtn/FrlvxPrFiWM13C6sjyLd3/fUfqt7eqdWZjYbWNqpd6V
jgfa61wsfb6TP9HU36Sp/URj29axDwWutGun5jkw/tS+4m/lsra9jgwO/kyf
xKTKy4/prrHeQO0fdWGobHFtNY49vCbeCYP4cpJbba8WvVrWz4xJ+9yxPrTc
K+mZLmktD2NrDmO2uabHtp3Nd+a5u9aBs0g/euY/xgZlr6Fa1xhtr6qz8J9Q
x/mJLZbF4ujqdGC61g6bhW2sdtY+0Pt2lpe1/wDSbLfU3u/kVqlkG/qGVda+
s2XZT3WuZW1zpdYd/sYPdct53sTOycDHGTiycxpG7GyK6g1zrBt2bvX/AEzc
fdv3s+mpZd+b0plj8bLfQL6sd9dlBLK7a7j6hqutbtfX6f6T8z/B2ob9GEwO
g7p7MrCzLHWdRlw7TAsza9atBsZ9owvpM9rPT/Un1/8AhRNj1P3tusbVdUYL
BY520gH2WseC1zNv5n/gISxcXLOWdz6GWNa/Wqxx2gQ42XW2S36DV1tOE3lj
adtbxFNxaXtPt3sr0P0Xbv6aZMyGgbGHBA2Z6uJTfj32VYwc6i+0R6GXDGY
B/gM4uax/qf8P6KfKw3MLsbKY/Hc4Dcy0Ro76L63fQtb+45qbr+D9nxHV3t/
Skh7bGEGolxa2t2PBdZ/pfVrWphY+U3ozXua/Ma6vf8AZW1+tRLXNrsufTY1
t1Nb/wBLW/Jw/wCbvr/nEpUP7FmTGAbF9+0njLaq6/WrvaTY0FIZaYAcD9J3
7zXNVWyA4MH5oA+a1+regcwXU1enXc2TXu3M9Rn021GGvZW9m32O/wC3FnWU
0tuBrcXjbuflHH8z+ypAbCQbD//0+cwMp2DmsyA6xuzc1/ov9Owtc11b212
lr/T3bv3ETqH2rlcCcU0vZScpjrrH3vsr9r2e6zd+6+xjWtp/wAJ6irlptsZ

6bS5121zGNBcSbAHNY1rfc76S16/XpbQ/q2l+uumiynELn+gbHgD9Df6jbXO
3Ms9Kr9GxRxJpjl116F4nqD7r8kudLj+ZDYEGD7P85QordY57HTvDS5s6mW8
tK2vrN07JxLQx1IVVdTW0149Tw5403WV2NrJfb6djrKrLrX/APF/oPTWHj2C
q5pcCRPYwYP0t3KevB0djpH1k630kNbiXF1LZ202t9Rjf6rT7mLcv+uVvVGX
v6vk5NQfR6LKOnVMq9Ug72tycvlc99dW/wDnPTauZexrXHaDAOvjqlY1zWb4
laXbmk9wDtdtRtTPpF3o9Sx7YDQHiQOAJ81ufVao0fW2zDPFN98DkQ5rtpWB
QyLDzrq0tG6P7K3ab7MLreB1qtgcM2v31ngPpP2blbun+c2MfYmk1ukakDvo
+vs9zGEEdmwmJc13x0OmHWNmfXHpOJ08mre/NfW447Hsds3wft9Ujb+ja7b6m
x6xaf8ZnUW4NVZ6axvUNW5FxmUTJDLKGy+xzXM2/nlcce6ToakRE766PYxk2
MLqqy8NJEggcfNcX/jJuJ6ZhNmPWYJDPHZW7+9ZXR/rP1job877IKrKuo3nJ
e2yQ5lr/AOedRP6J3qfuvQ+tGzq7H5lr7bLGWV+k65pazadsubTpt7/pK2f8
Em+9HTxQDEi7+nV5hzHNc0k7AfomCTu/NHt9zf8ANVDPa+t3pl2ncf8AS939
VdwOh9lxGj7dlWI5kOppYymCOQ59zrr/AO19mXOfWijprBW7p7TWJiwOe6yY
+i97rK6v0nu/wfsRGSJIQP8ABJq1r7fV9jQxW+lhes6WuLt1ZInUfnLZ6b1
nHx720ZGTb0sVje27Hb9or9Uj+dbjGyrZva7a/a/YsnLc1mNj0tbAY0AunnT
c/8A6TIVrp9Vh7DdE+Sduq6bVmXk9TzqqrHnlfYK62kCtsuOxsMZ7WcrsOr
3ZuHTX0xzqwwsqfTfS54ccerczFq2v8A5qv1N2Uzb/OLIfqvgNz+vUUucGVN
LnveXiva1gP6QWS33M+mxamZk+tdZkWWueHn22WRuLR7a9+0Mb/Nhv5iJAYc
sztqkuY/q1F1GT6Traan5DM1wi9pqE7dzHV/bfV/mdlzL7f0nq/4Nc3VVde2
aq3PB8BMDuNy035N+RVZT073vIHqkQCGg7vY5/5+5dBRXdiYFDXBI9jlbkWu
BbstPvYxzGH9JW5n+G/w1ibrGj/ANyvxD03Ox/3T//U5no59b9nne5hFjaX
WMeK3N2PgOZe/wBINnsubstf9BafU29MxvQspNd128GxxvdkvLCP5vKG30P5
X6L89YHSXTj31967G2AeTwa3f9JfZe/06nEAnUAtdZ9sy52n7n0IGNJEEkz
J4dfzdo1Wlg9DGYOn5Dg23JyKBjNd6gNTWU5W12T6Hpb77fsrfoVWWLjOp9N
+xQ0WV2iXs9Stw2EMdsZbX/hNlv0272LfDup5xc9z7rqKa3XNkucxtNcVOcx
/wDMN2Rs21v9mz0loYXSa+p2WeoxmOKLzW61tla+L2ur3WVZTrafQx9jvZ6f
q49lidda7ljxCVVZLzDQLKa3g7d7NzidPeJbwz+qiY1dl+JeGMBDGgNk8F3u
9v8AW9N6l9kt6blP6dfW5rPXeMey0aabQ9rtn+E9N1T3tb+/WrOHQ5j727T+
lsr2NEEFpJ9TX6D9u9FkDj417nXVBxgDQnxC6gZGLZ9XHtY4fb8K71jUYMU5
LG4+6thnf6dtdbrP+NXNYtPo9VOPewEUvey1rvEE1f1fpLoqw2ua2BrWuEQI
CRFoq250eOp4GPVkwTobjvNbrHg7WtAl41d79rGsVuvouO/Kpx63jKssc+p3
02N9atou+zsqaKshvrNbY31bLPTWb0Eu+25nT73kscA+SRBrspb/0tq6kUWs
oqfbjht2Vdufc/dXTXeWvpxbfs1dbPZt9L6HrenZ+lsUEALkB/eH+GycxG+C
ctbAjLzx+n/ouPf1DpjMdowaW4lziQ+1+xziACfRfU5mVfX67f8AC+v9NAze
sZ2aRxxkZFr6wBW9rttRdXHvbY6H3etS9rf8ASVXlvVujOLcT7BRbZftNeVWG
l1u5wsyGudsRy6z07cfOZv2/zfpVrn2dUcLgxvuqAbtLY924B4jb/J/0ieYg
C96WY4CVA9a/uuhXi9RyAx2HQ/lyPabRS2x1jS0uD7GW+51fqs9lrfW6pWLu
nv6eMZjcphe42WtLbm11y/7O31Pbtrqa9+/0q3rpvqx9ZMim4MfZVVjv0LYs
e1o77MfH2uyLP37L9/8A1tY31mxMVmRZdji19TiQL7Meusn841NYGv/AO/q
tDmpe4lSiBqfE/1df/QW3k5GAHEJkEAV+7Lv/LjeTz3myxjvote0Fh7QfgrD
aXVNrG0AyAPAkRuf/nOT49OXbktqx6HZvpkvFNbS50AjfY3aHu/rOW07oWd1
XMZV0boubTWNHjNJFTAfc/fkvDfZuO9XQbDUkCNOzldGxmNouufrY520N0Ld
gl2797dvVPqmQ51myYHddjm9AuwMTbRWbsbFbtyeoBuyu26x/vdQ1/vfj0uN
eJT/AMT6i43Kofd1BmOwS6wgQP8Apf8ARSYI65JEs+nWfZX13eoaQxpL3Bu8
uLvo1NY72btv5/5i9G6d1X6n9Vx7L2vy+nW2tlyKCTkVgn8x2llzvd+krd+i
XnnUW0NLmYr/AFKanEut+jvB/P2n6L8HWxP0a/pLcmeo35WG30yGZOK1rnN
tkfz1T3N9XG2fufpUgNbZwdH/9XisMGjq+RiO5Pq1fNh9Rn/AJ7W30rMxsG1
+XbS++5hAxw1+yth3qfaBss9au1ns9P/jfQ+s9Y6d9brbRArday8EcbXxv/

AO/LQPSc9tVuS7HtZiVD33EBoDQdvqsbZt9Xbu/MUZ0I5j8VswSBXdITXdns
bgWPNLMeu6yto3SWuc299NIZc2nb/hGbKlodJtGKRVS914eHFJNpuDrl3N/R
Mn+cdWzeldi4/TbDbgWsync3Hftd6zWhpbo2i6it/07N53P2es/8A6a0KMy6y
n0Hfan4+RU6lry4PDrLBTqdiYeOBZ/P7v03p/wA0kCSDp5lqMTtcq9WvE5Vv
Tcd3R82rrBfS6vJHrkFpdRZtLW5VDRu9X376Mqr1v01Xp/4eupDwP8Wn1gy3
n087HZS07RZvc5wA19INP0fa/wDwnorX6v1OjFw6un+jdX1Oyumwj06x+Yw
0UWtse6xzrG3M/dr3+p/No7m01dYpstaqddurYMXqFzrLLhsqY/8Am3bK/wBF
s2Wemz1b/wDg/wDCKNgXqPAJscVROhryeM6n9Xv2L1PqNGXkm++hzllaQ63f
WL5G5z/pbTm9ynW9rmNeDuaQCD5EStH622ZRY6MizT1PUqD3udY9zf6Tj73u
9uxjXX49Xu9T9F71kYBaa/Sb/g9ADzHzTwuDYojG6jXc13p73Na9/IDXS0v0
93t3LrcMuys2vKxD/k1tTm35jA+1jSw+qb7/TyPTYx9DPp1/n+z+dXNY5c0
uvAY51LHNG/US4Ru/d3sbv8ApKj1DPzb2BuTa81VCKabbTtaG6itIDP0e1MM
AZk+HD/3S8n0Af1uL7PS9ZjVdWy8V11GN6uQ3ldaS6GNtpj+av2to9ZINtb2
M3Oq/kMXnTG+nYaHDY9m72u5kO4s2/RftXYdFsdmfVS6msvDsNznWgHQ7Xep
+kLXepssxL9IFVrPp4t36RcjN+zZZbtDXtsFjDwC18Nc3+qlepFaseM1Kie
j131M6BkdYpsyvtXoY9VnpuY0Bz3PaN3vafa1n9ff/UXc5/RGZ+OyjqGbkWV
MADW7m1t08WVMY1y89+puJ17MzMvo/R85vT2N/TZTnn3GD6bdmxu/f8A1HVr
0LD+rWXi4VmPkdRpuflfa/G9V2v8vltt3/21VzYjfFGPF9eBlIKZJ4uZGER
+URjf+NJ4jqPS6fqf9ZunZWG67lxswWVuYyw1uk+zYy+k7/pOqf7ldyOv9fz
cHlwX5Ljilp9Rj9rrdgJDqHXVsZY7d/hPUZ+kr/4JUfrb9R7+k0U9R6XI3ZO
R6wDmtqazYNr7fXHo/RZW2v9Ip25f2jJbnMaD9qZusYwe0Oj0bmNbud+ex2z
/rSs4r4Brdb/AO+1ckwaqfH0Mq4eLx4Wnc65xHqvdYWtAZucXDaB7Gt3H91Y
GXQ6vqL7HD27JZ2ns7/yK6duHfYG+2ABEnwSzOk4eQMZ+Vb6RoodRY0QA/db
ZkepJ93t9XZ/YT7WYxRJO1PD5JdHgX6u15AKbHwszLdtxsey0+LWkj/OK64N
+q2CS9ITb3M5e4b4/wA72qwOv3Wfo8KkDT26f5oa1v7yXF2DL7nYW//Wwvr7
Q22vpuezX1qTS8/ymLSw6B1PplN4wsvNtt2/rN+QKsap4b6BNDXfT9G1v8A
3xeapJkt/qUS+U2+hMsOfVte4MLH6Nx6zY+QwNbY5/5tf5qjm5eXZ0us1W+I
VS8FIVYDA0tOlhf/AEix+53q77bP6nprz9JHrosjuOJ69grfXtaZvLHmTJO5
p3sc138pdbTGf0OnL9Nz24VzbHBpElmRtZ6Xv/wXqta+z3fmLyNJl7skvlL6
n9bcVx6aK2Md6mM02Ma17SD9nlva+ytv0WfZ7cprWexctgTbm+jRE2wA7yaN
3tXKpJBae06hZZjV5NdYs2PNbXWAGQH/AEi3+t9Fqo1YwVmWWY2DTZY+qt11
tlmQGD3u2O/TeyVzKSKS+g/VPAzcPFv6q5td2KCW3Y7gfVYa2es64fu+r0+/
LZXu/nP9EsL6y9MZiZttTHPNmOXCWAFvpg+y3d+7bW5jv7a5tJR/pfypb+kP
2PWfV6zrVfV/R+r59DOsqMh20A1wHkF929jl2+Hk/W6rDvb1LFsyshwPp2jL
qqbXA0d+iavHEIBzGwu+/df/ADV54+M8HsbF5auN9Ot6xgCit2bnX5LyN4qd
Y5/uja79Gza3us2/6wtZY2rGw3MJIDA6Ggk6N9gXBpKaFcl2/ta/Q3venDX8
v8V74jr+Vc2o2MxPUdtdIILSTG1zfpoPS7MTp/1hdi/WVtlmPX6teU0lw3ED
9Ft/m3/S9/01w6SI8Vw4LFb/ANb/ANCFtoJ4nTMbpGd1e2ofZM1z68Wm4Au+
x1TvudHt9W6wtpbYue6PVn9U3xkDB6fR7TYIDv5FbXfSe/auUSUKZOmj//Z
OEJTTQqHAAAAAABVAAAAAQEAAAAPEEAZABvAGIAZQAqAFAAAaABvAHQAAbwBz
AGgAbwBwAAAAEwBBAGQAbwBiAGUAIABQAGgAbwB0AG8AcwBoAG8AcAAgAEMA
UwAyAAAAQA4QkINBAYAAAAAAAf//gAAAAEBAP/hQetodHRwOi8vbNmuYWRv
YmUuY29tL3hhcC8xLjAvADw/eHBhY2tldCBiZWdpbj0i77u/liBpZD0iVzVN
ME1wQ2VoaUh6cmVTek5UY3prYzlkIj8+Cjx4OnhtcG1ldGEgeG1sbnM6eD0i
YWRvYmU6bnM6bWV0YS8ilHg6eG1wdGs9IjMuMS4xLTEXMSI+CiAgIDxyZGY6
UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1y
ZGYtc3ludGF4LW5zlyl+CiAgICAglDxyZGY6RGVzY3JpcHRpb24gcmRmOmFi
b3V0PSlicCAglCAglCAglCAglHhtbG5zOnRpZmY9Imh0dHA6Ly9ucy5hZG9i

ZS5jb20vdGlmZi8xLjAvlj4KICAgICAgICAgPHRpZmY6T3JpZW50YXRpb24+
MTwvdGlmZjPcmllbnRhdGlvbj4KICAgICAgICAgPHRpZmY6WUNiQ3JQb3Np
dGlvbmluZz4xPC90aWZmOlIDYkNyUG9zaXRpb25pbmc+CIAgICAgICAgIDx0
aWZmOlhSZXNvbHV0aW9uPjE4MDAwMDAvMTAwMDA8L3RpZmY6WFJlc29sdXRp
b24+CIAgICAgICAgIDx0aWZmOlhSZXNvbHV0aW9uPjE4MDAwMDAvMTAwMDA8
L3RpZmY6WVJlc29sdXRpb24+CIAgICAgICAgIDx0aWZmOlJlc29sdXRpb25V
bml0PjI8L3RpZmY6UmVzb2x1dGlvbVuaXQ+CIAgICAgICAgIDx0aWZmOk1h
a2U+Q2Fub248L3RpZmY6TWFrZT4KICAgICAgICAgPHRpZmY6TW9kZWw+Q2Fu
b24gUG93ZXJTaG90IEE0MzA8L3RpZmY6TW9kZWw+CIAgICAgICAgIDx0aWZm
Ok5hdGl2ZURpZ2VzdD4yNTYsMjU3LDI1OCwyNTksMjYyLDI3NCwyNzcsMjg0
LDUzMCw1MzEsMjgyLDI4MywyOTYsMzAxLDMxOCwzMTksNTI5LDUzMiwwMDYs
MjcwLDI3MSwyNzIsMzA1LDMxNSwzMzQzMjtzREMyMUUxNDAAwQTAzNjQ3QkI0
QzBDNTM5QTVEFRTQ0MDwvdGlmZjPvYXRpdmVEaWdlc3Q+CIAgICAgIDwvcmRm
OkRlc2NyaXB0aW9uPggogICAgICAgICA8cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91
dD0ilgogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
b20veGFwLzEuMC8iPggogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
NC0wOFQxMzoxNDoxNyswOTozMDwveGFwOk1vZGImeURhdGU+MjAwNy0w
IDx4YXA6Q3JlYXRIRGF0ZT4yMDA3LTA0LTA4VDEzOjE0OjE3KzA5OjMwPC94
YXA6Q3JlYXRIRGF0ZT4KICAgICAgICAgPHhhcDpNZXRhZGF0YURhdGU+MjAw
Ny0wNC0wOFQxMzoxNDoxNyswOTozMDwveGFwOk1ldGFkYXRhRGF0ZT4KICAg
ICAgICAgPHhhcDpDcmVhdG9yVG9vbD5BZG9iZSBQaG90b3Nob3AgQ1MyIFdp
bmRvd3M8L3hhcDpDcmVhdG9yVG9vbD4KICAgICAgPC9yZGY6RGVzY3JpcHRp
b24+CIAgICAgIDxyZGY6RGVzY3JpcHRpb24gcmRmOmFib3V0PSliCiAgICAg
ICAgICAgIHhtbG5zOmV4aWY9Imh0dHA6Ly9ucy5hZG9iZS5jb20vZXhpZi8x
LjAvlj4KICAgICAgICAgPGV4aWY6RXhpZiZlcnNpb24+MDIyMDwvZXhpZjP
eGlmVmVyc2lvbj4KICAgICAgICAgPGV4aWY6Rmxhc2hwaXhWZXJzaW9uPjAx
MDA8L2V4aWY6Rmxhc2hwaXhWZXJzaW9uPggogICAgICAgICAgICAgICAgICAgICAg
ciNwYWNIPIjE8L2V4aWY6Q29sb3JTcGFjZT4KICAgICAgICAgPGV4aWY6Q29t
cHJlc3NIZEJpdHNQZXJQaXhldD4zLzE8L2V4aWY6Q29tcHJlc3NIZEJpdHNQ
ZXJQaXhldD4KICAgICAgICAgPGV4aWY6UGI4ZWxYRGltZW5zaW9uPjY0MDwv
ZXhpZjPQaXhldFhEaW1lbnNpb24+CIAgICAgICAgIDxleGlmOlBpeGVsWURp
bWVuc2lvbj40ODA8L2V4aWY6UGI4ZWxYRGltZW5zaW9uPggogICAgICAgICAg
ZXhpZjPEYXRIVGltZU9yaWdpbmFsPjIwMDgtMDQtMDdUMTM6MDQ6NTQrMDk6
MzA8L2V4aWY6RGF0ZVRpbWVPcmllbnW5hbD4KICAgICAgICAgPGV4aWY6RGF0
ZVRpbWVEaWdpdGI6ZWQ+MjAwOC0wNC0wN1QxMzowND01NCswOTozMDwvZXhp
ZjPEYXRIVGltZURpZ2I0aXplZD4KICAgICAgICAgPGV4aWY6RXhwb3N1cmVU
aW1lPjE5NjA8L2V4aWY6RXhwb3N1cmVUaW1lPggogICAgICAgICAgICAgICAgICAg
TnVtYmVyc2lvbjEwPC9leGlmOkZOdW1iZXI+CIAgICAgICAgIDxleGlmOlNo
dXR0ZXJTaGVIZFZhbnVjE4OS8zMjwvZXhpZjPJaHV0dGVyU3BIZWRWYWx1
ZT4KICAgICAgICAgPGV4aWY6QXBicnR1cmVWYWx1ZT4xOTIvMzI8L2V4aWY6
QXBicnR1cmVWYWx1ZT4KICAgICAgICAgPGV4aWY6RXhwb3N1cmVCaWFzVmFs
dWU+MC8zPC9leGlmOkV4cG9zdXJlQmhc1ZhbHVIPggogICAgICAgICAgICAgICAg
ZjPjPjNYXhBcGVydHVyZVZhbnVjE4OS8zMjwvZXhpZjPjPjNYXhBcGVydHVyZVZh
bnVjPggogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
cmVlc291vZGU+CIAgICAgICAgIDxleGlmOkZsYXNoIHJkZjpwYXJzZVR5cGU9
IjI9cmNlIj4KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
ZjPjPjGaxlZD4KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
dXJUPggogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg

ICAgICAglCAgPGV4aWY6RnVuY3Rpb24+RmFsc2U8L2V4aWY6RnVuY3Rpb24+
CiAglCAglCAglCAglDxleGlmOIJIIZEV5ZU1vZGU+RmFsc2U8L2V4aWY6UmVk
RXIITW9kZT4KICAgICAglCAglCAglPC9leGlmOkZsYXNoPgogICAglCAglCA8ZXhp
ZjpGb2NhbExlbmd0aD4xMTgzOC8xMDAwPC9leGlmOkZvY2FsTGVSuZ3RoPgog
ICAgICAglCA8ZXhpZjpGb2NhbFBsYW5lWFJlc29sdXRpb24+MjI3MjAwMC8x
ODg8L2V4aWY6Rm9jYWxQbGFuZVhSZXNvbHV0aW9uPgogICAglCAglCA8ZXhp
ZjpGb2NhbFBsYW5lWVJlc29sdXRpb24+MTcwNDAwMC8xNDE8L2V4aWY6Rm9j
YWxQbGFuZVISZSNvbHV0aW9uPgogICAglCAglCA8ZXhpZjpGb2NhbFBsYW5l
UmVzb2x1dGlvbVuaXQ+MjwvZXhpZjpGb2NhbFBsYW5lUmVzb2x1dGlvbVua
aXQ+CiAglCAglCAglDxleGlmOINbnNpbmdNZXRpb2Q+MjwvZXhpZjpTZW5z
aW5nTWV0aG9kPgogICAglCAglCA8ZXhpZjpGaWxlU291cmNIPjM8L2V4aWY6
RmlsZVNvdXJjZT4KICAgICAglCAglCAglPGV4aWY6Q3VzdG9tUmVuzGVyZWQ+MDwv
ZXhpZjpDdXN0b21SZW5kZXJlZD4KICAgICAglCAglCAglPGV4aWY6RXhwb3N1cmVN
b2RlPjA8L2V4aWY6RXhwb3N1cmVNB2RlPgogICAglCAglCA8ZXhpZjpXaGI0
ZUJhbGFuY2U+MDwvZXhpZjpXaGI0ZUJhbGFuY2U+CiAglCAglCAglDxleGlm
OkRpZ2I0YWxab29tUmF0aW8+MjI3Mi8yMjcyPC9leGlmOkRpZ2I0YWxab29t
UmF0aW8+CiAglCAglCAglDxleGlmOINjZW5lQ2FwdHVyZVR5cGU+MDwvZXhp
ZjpTY2VuZUNhchHR1cmVUeXBIPgogICAglCAglCA8ZXhpZjpOYXRpdmVEaWdl
c3Q+MzY4NjQsNDA5NjAsNDA5NjEsMzcwMjEsMzcwMjlsNDA5NjlsNDA5NjMs
Mzc1MTAsNDA5NjQsMzY4NjcsMzY4NjgsMzM0MzQsMzM0MzcsMzQ4NTAsMzQ4
NTIsMzQ4NTUsMzQ4NTYsMzczNzcsMzczNzgsMzczNzksMzczODAsMzczODEs
MzczODIsMzczODMsMzczODQsMzczODUsMzczODYsMzczOTYsNDE0ODMsNDE0
ODQsNDE0ODYsNDE0ODcsNDE0ODgsNDE0OTIsNDE0OTMsNDE0OTUsNDE3Mjgs
NDE3MjksNDE3MzAsNDE5ODUsNDE5ODYsNDE5ODcsNDE5ODgsNDE5ODksNDE5
OTAsNDE5OTEsNDE5OTIsNDE5OTMsNDE5OTQsNDE5OTUsNDE5OTYsNDlwMTYs
MCwyLDQsNSw2LDcsOCw5LDEwLDEwLDEyLDEzLDE0LDE1LDE2LDE3LDE4LDlw
LDIyLDIzLDI0LDI1LDI2LDI3LDI4LDMwOzE5MzIeRjc5QTcyRjI0Nzg1NTg3
MDk1NDVEMjYyN0FBPC9leGlmOk5hdGI2ZURpZ2VzdD4KICAgICAglCAglCAglPC9yZGY6
RGVzY3JpcHRpb24+CiAglCAglDxyZGY6RGVzY3JpcHRpb24gcmRmOmFib3V0
PSliCiAglCAglCAglCAglHhthG5zOnhhcE1NPSJodHRwOi8vbnMuYWVvYmUu
Y29tL3hhcC8xLjAvbW0vlgogICAglCAglCAglCAglCB4bWxuczpdFJlZj0iaHR0
cDovL25zLmFkb2JlLmNvbS94YXAvMS4wL3N1eXBIL1Jlc291cmNlUmVmllyl+
CiAglCAglCAglDx4YXBNTTpEb2N1bWVudEIEPnV1aWQ6MENDRkVCM0M4M0U1
REIxMTk5QzIBRERGGjEwREU0QzM8L3hhcE1NOKRvY3VtZW50SUQ+CiAglCAgl
CAglDx4YXBNTTpJbnN0YW5jZUIEPnV1aWQ6MERDRkVCM0M4M0U1REIxMTk5
QzIBRERGGjEwREU0QzM8L3hhcE1NOKluc3RhbmNISUQ+CiAglCAglCAglDx4
YXBNTTpEZXJpdmVkrnJvbSB5ZGY6cGFyc2VUeXBIPSJSZSNvdXJjZSI+CiAgl
CAglCAglCAglDxzdFJlZjppbnN0YW5jZUIEPnV1aWQ6MEJDRkVCM0M4M0U1
REIxMTk5QzIBRERGGjEwREU0QzM8L3N0UmVmOmIuc3RhbmNISUQ+CiAglCAgl
CAglCAglDxzdFJlZjpkb2N1bWVudEIEPnV1aWQ6MEJDRkVCM0M4M0U1REIx
MTk5QzIBRERGGjEwREU0QzM8L3N0UmVmOmRvY3VtZW50SUQ+CiAglCAglCAgl
IDwveGFwTU06RGVyaXZlZlZyb20+CiAglCAglDwvcmRmOkRlc2NyaXB0aW9u
PgogICAglCA8cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0ilgogICAglCAgl
CAglCAglCB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEu
MS8iPgogICAglCAglCA8ZGM6Zm9ybWF0PmltYWdlL2pwZWc8L2RjOmZvcmlh
dD4KICAgICAglCAglCAglCAglPC9yZGY6RGVzY3JpcHRpb24+CiAglCAglDxyZGY6RGVzY3Jp
cHRpb24gcmRmOmFib3V0PSliCiAglCAglCAglCAglHhthG5zOnBob3Rvc2hv
cD0iaHR0cDovL25zLmFkb2JlLmNvbS9waG90b3Nob3AvMS4wL3N1eXBIL1Jlc291cmNlUmVmllyl+CiAglCAgl

AAAZGVzYwAAAAAA
AAAU SUVDIDYxOTY2LTlU MSBEZWZhdWx0IFJHQiBjb2xvdXlgc3BhY2UgLSBz
UkdCAAAAAAAAAAAAAAAAAAAU SUVDIDYxOTY2LTlU MSBEZWZhdWx0IFJHQiBjb2xv
dXlgc3BhY2UgLSBzUkdCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAGRlc2MAAAAA
AAAALFJIZmVvZW5jZSBWwV3aW5nIENvbmRpdGlubiBpbiBJRUM2MTk2Ni0y
LjEAAAAAAAAAAAAAAAAACxSZWZlcmVuY2UgVmllid2luZyBDd25kaXRpb24gaW4g
SUVDNjE5NjYtMi4xAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAB2aWV3AAAA
AAATpP4AFF8uABDPFAAD7cwABBMLAANcngAAAAFYVWogAAAAABMCVYAUA
AFcf521IYXMAAAAAAAAAAAAAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAKPAAAAAnNpZyAA
AAAAQ1JUIGN1cnYAAAAAAAAAAEAAAAAAAAUACgAPABQAGQAeACMAKAAtADIANwA7
AEAARQBKAE8AVABZAF4AYwBoAG0AcgB3AHwAgQCGAIsAkACVAJoAnwCkAKkA
rgCyALcAvADBAMYAywDQANUA2wDgAOUA6wDwAPYA+wEBAQcBDQETARkBHWEl
ASsBMgE4AT4BRQFMAVIBWQFgAWcBbgF1AXwBgwGLAZIBmgGhAakBsQG5AcEB
yQHRAdkB4QHPAfIB+glDAGwCFAIdAiYCLwI4AkECSwJUAI0CZwJxAnoChAKO
ApgCogKsArYCwQLLAtUC4ALrAvUDAAMLaxYDIQMtAzgDQwNPA1oDZgNyA34D
igOWA6IDrgO6A8cD0wPgA+wD+QQGBBMEIAQtBDsESARVBGMEcQR+BlwEmgSo
BLyExATTBOEE8AT+BQ0FHauRBTofSQVYBwCfDwWGBZYFpgW1BcUF1QXIBfYG
BgYWBicGNwZIBIkGagZ7BowGnQavBsAG0QbjBvUHBwCZBysHPQdPB2EHdAeG
B5kHrAe/B9IH5Qf4CAslHwgyCEYIwGhuCIIllgiqCL4I0gjnCPsJEAKICToJ
TwlkCXkJjwmkCboJzwnlCfsKEQonCj0KVApqCoEKmAquCsUK3ArzCwsLlgs5
C1ELaQuAC5gLSAvIC+EL+QwSDCoMQwxcDHUMjgynDMAM2QzzDQ0Njg1ADVoN
dA2ODakNww3eDfgOEw4uDkkOZA5/DpsOtg7SDu4PCQ8ID0EPXg96D5YPsw/P
D+wQCRAM EEMQYRB+EJsQuRDXEPURExExEU8RbRGMEaoRyRHoEgcSjHJFEmQS
hBKjEsMS4xMDEyMTQxNjE4MTpBPFE+UUBhQnFEkUahSLFK0UzhTwFRIVNBVW
FXgVmxW9FeAWAxYmFkkWbBaPFrIW1hb6F0XQRdIF4kXrhfSF/cYgXhAGGUY
ihivGNUY+hkgGUUZaxmRGbcZ3RoEGioaURp3Gp4axRrsGxQbOxtjG4obshva
HAICkxSHHscoxzMHPUdHh1HHXAdmR3DHeweFh5AHmoelB6+HukfEx8+H2kf
IB+/H+ogFSBBIGwgmCDEIPAhHCFIIXUhoSHOlfsiJyJVloliyLdlwojOCNm
I5QjwiPwJB8kTSR8JKsk2iUJJTglaCWXJccI9yYnJlcmhya3JugnGCdJJ3on
qyfcKA0oPyhxKKlo1CkGKTgpaymdKdAqAio1KmgqmyrPKwlrNitpK50r0SwF
LDksbiyiLNctDC1BLXYtqy3hLhYuTC6CLrcu7i8kL1ovkS/HL/4wNTBsMKQw
2zESMUoxgjG6MflyKjJjMpsy1DMNM0Yzfo4M/E0KzRINJ402DUTNU01hzXC
Nf02NzZyNq426TckN2A3nDfXOBQ4UDI MOMg5BTICOX85vDn5OjY6dDqyOu87
LTtrO6o76DwnPGU8pDzjPSI9YT2hPeA+ID5gPqA+4D8hP2E/oj/iQCNAZECm
QOdBKUFqQaxB7klwQnJCtUL3QzP DfUPARANER0SKRM5FEkVVRZpF3kYiRmdG
q0bwRzVHe0fASAVIS0iRSNdJHUljSalJ8Eo3Sn1KxESMS1NLmkviTCpMcky6
TQJNSk2TTdxOJU5uTrdPAE9JT5NP3VAnUHFQu1EGUVBRm1HmUjFSfFLHUxNT
X1OqU/ZUQISPvntVKFV1VcJWD1ZcVqIW91dEV5JX4FgvWH1Yy1kaWWIZuFoH
WIZaplr1W0VblVvIXDVchlzWXSddeF3JXhpebF69Xw9fYV+zYAVgV2CqYPxh
T2GiYfViSWKcYvBjQ2OXY+tkQGSUZOlPWWSZedmPWaSZuhnPWETZ+loP2iW
aOxpQ2maafFqSGqfavdrT2una/9sv2yvbQhtYG25bhJua27Ebx5veG/RcCtw
hnDgcTpxIXHwcktypnMBc11zuHQUDHB0zHUodYV14XY+dpt2+HdWd7N4EXhu
eMx5KNmJeed6Rnqler7Y3vCfCF8gXzhfUF9oX4BfmJ+wn8jf4R/5YBHgKiB
CoFrgc2CMIKSgvSDV4O6hB2EgITjhUeFq4YOhnKG14c7h5+IBlhipiM6JM4mZ
if6KZlrKizCLlov8jGOMyo0xjZiN/45mjs6PN0+ekAaQbpDWkT+RqJIRknqS
45NNk7aUIJSKIPSVX5XJlJSWn5cKI3WX4JhMmLiZJmQmfyaaJrVm0Kbr5wc
nlmc951kndKeQJ6unx2fi5/6oGmg2KFHobaiJqKWowajdqPmpFakx6U4pamm
GqaLpv2nbqfgqFKoxKk3qamqHKqPqwkrdavprFys0K1ErbiuLa6hrxavi7AA

zuLFpFyNBg4oJPih0OGYFkOSNBtUKgUAToGpY5AbiNFxCW646kPeY7o0e7G4
Kkeajl3yYdgu7LiGkA9XSy5i820ns6Y5GEgSx6FOnqYbo34PC+oRujXi+aY1
fs0ZVhkqXWOMd+fBMoxHOluplYqmQo0hADVI7rwgFMdEKiM0RdcJGtILs5Hu
dDL9owZOn5kR62P/AMZj/u4//MmJwwZo9NKGalluB832Y/8Ainn/AA/qT0+S
MwPhO7/T/vXf8RxDfNkl/DLz4z/5TyfzGBP/AL0s/iMwDGAEYbvUgPtY5bvU
c83WSzT9XIATWo+y8Zvs6QwZMgJiCREXP/CyJLMHpdF1MpxMDKhEaOonDUSN
gjV8zFMRiYjQnv8AxavTHGJa5J7TWzs4dZZ1VsDnwTGLIN17DpPZ8UoPqz6O
IEJ5YEQEqySM90oY5PkTgYxjl6dnGfUZZTqcjle0u5OaWJPWwjizThD4Yylj
ru8n/jE4qExZoT8knv6rpNmCOQxAGU+WX2sX/IL0+TK43GV2GHQ9Hqemx4qM
JXLicXYdVE4oQkDux/Ad3k+L1f5uL/vHhx4sk4gwrXT/AFPr9FM7PTnMQ2Xp
GO7JI/8AFrsRhpzLMsv4jOZnpQnplfL0/wDefzfVyrty9R6csshtOkCfsw/t
uHVYPQmQLo+Yb47JOQ/EJiPpCgBxKt0v+8/ILsJB6Mug9MZDIkSgY/B8Oyf7
/wDmt5uu6UYJgRImJDcCGut6uUYwICRNgcCvH3f+Y/8Ayi8uPMYyGTkixTK8
DAnxLzXHaZdgnqhl6ndnEdB/c2+WP/mtz6TJEExn+/8A3jLNpSOCOVdKyZjA
R/3Yof4Ybv8A4q9ubqjkkTCJ526B4elzDpMwnlbgPsl9Hp8v7RKRA8u7f6d+
X98acMVbWBy9RizZTKVWMY2m/i/7186esX3M0IRs2I6Svzbsktz4mUSjplUW
x0I+pxndklxjjs57NthMpnHPcOUykZndLktNrQykWHqjhMxbzzjUqRSo6Bgu
l0HMoAdYx0chy7IGcmSkoQKqkqBoiSBKqsUDThktMFAChUha/9Hyv2rJOPo3
cLsRfQn03oREpyAEwJbfjfl4OvL6PSYjkAIYG3+NGUZZTj21Gz4I5I5CLj2O
hfWzYsURrME0doiHyTpKx79PKiPvPR6D9nOGfrAXHzj+KSeiyRlhjhuEyfs
iU/5f/d43DohGOUxyDaSDtMvsT/8zJwHZ1EhM6/Z2fBv/wDFdO0hX4teXHiz
VRMfTn/4zE+XPkSHcPt5sZn02WBU4SGaJkNstmT+XIfE5x+4ozYEjTO4hqrQ
YWjKjcykdx1QnINuiHJ3WmApVBRRVKAqDRsISgdo9TIOwBc8OATJvsXbpbX
D3lj5cpH8Tg0P7PCBs8BqM8czQpHUxJhp2eKB2kFJSNDryx9Lzw0awZDMA8h
0yD1In2vHhnsrwtUNCc0TGRDvhwCt0nWeKOTV0AoUE3gIMZZ4w0DY25RqHO
eSGM1WqwzSmaiGQDcDaKeHqY7ZX4u+ac4C7DxymZcm21W4Zccg5PPC7gBXLk
ruDISSTZQNfVAKhVQFVVAuJsUWmBoW9XSOVsGGE9sgez72I48uGGTIL9EnFK
/N/Ky/8AA5sn/icz89w+3+ESjkkcUz5csfSP9X/ou0zuGOXFDfkwkiZPmxHH
H/ef+7GMuTJOXr4omImBimfsSyf283/m17xj/kRljjWTBKskoAfY/u+g/5j
0Gsm6Ogx5omWP+H1v97/AOLzMNngZMP7NkrPHtYET/F/b/8AMb2Ys+TMQMYj
Gx8RHm8v8t063p5dRhGQ0MsT6M4D4v8AucLznJDCfTMdxFWMg27Z/wC9/tsL
3k9VjyGRjOW4gbo/6f77wXRspFPriAYxil+O2Lw7b07jIGXj8J29IY9XI4eo
mQJA7Dfki/8qMz/AA7Fjgd2WJnXljDdk83/ALreTaBrer6XRiJoykl/bif8
X9tFrOjJx9Tkj08cAj5Yn1BL/Gx0/UZPUjrtobTKI8/py/u+MfQnLFAVKZI
Wu3btflzQlh0Ooku4tlu36Tt/EZ4dGEJynP/AB/wyfKht3wFa7uSfJ/5T/IP
b0vSR6iJnkyCNfZ+Kbv0n4fDLMxmSKPIIH/wRsYGU8ZMpxEADZ5O69s//GOU
8Mb8h5G6v8UXf05RmccTRJPP8bx5AYGpHUPFVactnR2TRth6j0cOXGBZyR2P
nHpzE6kX/hdyDW48JAs8X7j+/qPRGJcBjklmPlkAJafwvoQ6nD6ElmxlBA/
ih6bwQwTyAyAJA1O1rBMRnEyrTyy/pl/vERTqz0wJSILHOBMZHDp04/w/wBr
0f8Aylmw/wDoV4vxCM9wOQ613+P/AMzPX1XUDBvjjl6kQBt2y27HOUCTjnGI
kJRMJeX+L/f7z/xP/mJ0aanY+e6ga064ogg3r2Y6mJiW8RBHh3YVaFYcoxg
xLySO6Vus4n4vFyARQS4cy3JhFKgLLRRDQJmgZrEWVTFA1IHaaci2XNAWosO
oGiAkubRZQFqIzED//S8KRvs9XS3kjiASRWn9LzbiRXbs69POQIUCQfYjmt
T0Z9IZa7RDW7mfM8HU4owNxxDr8P2nPLlyXRLloelnKJy6bQPtS86LizIZCZA
6Ah7+tlGTGSRtHI3Q275R/73+T/6DfLAJHue2RGXpRwJY5cfbnCbTJ6elb8u
3UwyQlhHIIIGH/pt/dfAIESYV5tb/ANL6+PLWoe8ZJ2GM5CpS8/8AvfUy/wDd
PF+KYxh6oyHBlyD+nlg1gcMfBlsgkDQIOkiHSE5QBIDpIVJGMNznnrRLOnZ1
nEU4g0w60eAeEKrDYQR318EKhAKqtlHT0sqlXi7Z/LU/AvCLGoUyMuWRiWT0

J5YVRPL5yqkoDN49RKIEI6m0JAbBAgns3jyygfYwqB2+tjmPMyeohAeV41c
8SyVkyHlbLmIXRBVNapnHaasH3IEJVeUBtVC8IBSar2spBpAXQGw58lqPNNR
iywLEjEiQ5dMEvNXi5FQaNh0c9UfR/hssuliM9MeYERkf8DpjyAYpR3C8Et2
OV/3l/8Axp5enmOp6WeEcw/n4/8A6pfKNnTlyanCT3pdT0sMkydY5Y3Lb5vS
yvKc+DqeoGTP5YkfzDD+KI/9+PlgePL6fSdKcuGcZRqRHqYZ18Xp/wB7FjZr
gVN6nHmxxllwWYE7YbnfJDIMcYGMY1xKP8Acnu/mfzv/faMQhGIM5Xfm8vx
xnuBl1WEHclmUxxKctzSyjg80tCf+U1GEyaiCT7GchkZWxp/D9pykTPIlt3H
ZHf/AOVciMYSdObJEiN/FXmccuQyxgCJlj8UntBjjwmwBkhMenOA3b//ACn6
39jK65Jj1MornHc8Z8m+Vf3sWL+b/wCM/uJVNu2xwdJ1MRmiSRAAUJbfh0/f
+Y+ucmOtJbpVV/HL/wAp/wA18Y9GIY45r3RI/D8Ucn/d/wA1uWOYxE3Rj7/h
l/6DbMGcdTfHPDmyTnlGojuhHds3Zlf3HDq88M4jOMlxBNy2/Hu/8Y+dASic
kTZNeXYN3mdcWsTCYII9ly2aiAjDLLGUYAGMtYymf7P/Alr/AMYuMZMMTj3j
Xw+Ly/7tyrnwA3aljn9liQGuk4Ttgs7B1Gfpoy23GOQbZHbt3PIDuuQN/xP
q58mHJhO/LKUzUtn2d7yZ+qydQADARFbY7I7fLF13GcHqHpJRxEbPjN7jPzQ
fSILNIAMVAi/IHx4QjOQiZbNfi+Pb/5rfRicuQDHDQQjev2tzm0xgdK9py9f
0MfS3x+InV8KBrQv037L61Qll17P4n53qsRwZCD4qrlFahlxhd1xTgRTvE3G
weA4E26lZS5ZesYCRbzEeakUscMSbcygbuPDDoEAS0YakWUBAsujMGigSWUs
oFRbZi0dED//0/FkDC4dr4dOmzy6aW/GBv7H+FHUZvWynLEVblHysOaPSzH1
z62Qx3S1LBxRyVHGN8rrZ/E1h6cZMYmPnr8LqMclxkAQJAXGnG531qeTKOw1
WodcPUemCNkZA/Fu+JylMSJJ1L1dBjx5ZmMzoQa/r/3b0TPOtTp6GUPTIHeY
yNjb5p/y/wDyl/5UR+JgZemw5hyQcUv9DBI6PqgQfKa3D/DP+7hdNon02bFE
2MchlGf8H9tpTyJ/Zl4hEjSjWBHgUHdBHMdzz8F6BHxc8kRH5pm6NSSghQrk
6iqqgKaQm+YAEoBSGKGgikBDQQEoCtJCUCSEOgiTqohZo9kCTXZkh12ULHCa
AqQ+bAZbTSiBlvs65LPJRHWOoukDlgljDrk4HbtTnTQBVpNVygpCLsSqArdaq
qlaUQikiZkKPZSbdHJ4M9H8Mz+jljKXANS/on/LyvqfsPTx9bFOhOJ3Ypk/Y
l/afncUtsr7PpnFAY4ZTOzu2ZYX54xj/AN3/AOY0xXWDoHU9NjllkQJHafVA
8sN3/wBcJ6f8SGEbIRNCe6N/Zx/93/5qTDpOn9YbTeKYPmlZsm6jqen6cY5
wFzXkwybR8cP++/+BsNHndd08sHUGOOtsvPC/wCCbh+zzkTVSH8UfhejrUqn
1ZjcaqwP6f8Au/8AvHfppnpoSjOB1HltjNJfsmCt0YyJ2ee5f7/AP7z/wAU
+UfvfWjnyX5Y/c+VM0arVzVtlvCOiH4gMXTy6eYsSON+H98i5OunkEZxobY+
l/ilCbywxxxyEchqJPmnW7ZF0ngjEkY5GQ8a2upgwkmgngpDGMVki9B/C3h6
jNiiYH4bv+pOho83qUIncBv1H2f/ADInJmyZNZG9vf8Ah3LTEkyoIGWWK/TO
3d4PVgwfteMky/mxlrflbD0ngB3d6973wxYZYoGGuYG54pHyh/8DWoj/rGH
VdJ6Eb9SEpcbIHc5RlixETjsj4jL7T6kJ9LtzQl2gny7h58WX/uv/Nry9d1
kOq2SAlmBWRsInwbdJij6ZyRGvwyB80fN/4x6ceSMI9riPJ/8C/8yPBLMJGs
Og52n+GMWz0uSMDuPb1K+1tcQ5OkqDn6rIMuSU9u34Y0Ph8v/IR26fMcP80n
caMR9r/xTx5seyRvUJxQ9SWyFndwPtOzmpT0O8HNKibA5eDr+ikl+pl3uJN/
wvofTQjGMD8UQ83VdQcsBD27nmpn/dOtmoxfqPDxnsPTkjtN72gADrqHoSTc
dR/LEfB4hqbbmKOiKCKCbK6TLmUAx1LoWcda2mXCBBZSo1QNIjRBaYkUCVVM
QgWNEskWcGf/1PEMTEAtSIILcAAP4Q+1PpzkkcXpAExO25bf/Mr4uSOzy1Uh
8TIMHT0/8wmEdBV09MOnogl4elkYzu9T5ae3ad2rzthDOtMUef1MduQg8sYD
EZI7/hvzPd+IAXOoHm824jzvnbsHqjhbBnsfimCGKEMkKERosfL/AOK/+Oom
DLHL1ETuv1oenkj/AAZ2vBPCZ9LGYBJ3Ss/4lt4894ISMgJYp6R/ih/8TaXc
8+jjnLGfaP8AKMR00fQ/FsYxdScg+GW3IP8AZI8B8sqRh6gvwc8movwbl10Q
YWEFCZjokshLk7iqVQAqqgKUNDRAQD2XaeXWfvoMw/hPdgBGNtxjYurTERie
dURIQI8UUJAgVI8lviEpXVdmyZHWggMdRqLpSalZ78sCNI+yZRqj2QKIIURy
xelU0QIkEcNnuLsIAjzS8NXMk/NqNjUBcvNnkoGRVOiGkFVVAVVKAFWkoDHI
12uY0dr0t0jjeZiETy+I0YxZbGY1cSlz/gyx/tPADrTrgNSrt8X/ACUYnE7o

TxiEBHaJxuU5T+1/5T/7pvrcuKWUekfLlfzdg8m5c56U5JSiCYyAMBHy+nN0
hPp448WWQG6EvPGPxZl/+VGHWYJxddiERHJG/KcU/wDF/wCV/wB8rj0OQCVS
Nggj+hvJm6XdOoylkbh/g3f/AALK88MpiNn2Sxsq6ncM8eliy8PVC5GVVfD6
UxiilmNai9HDq5xyYxXIP/NedcHB1upUnD0s448sZSAMQfPE/wAL6suow48m
UYRuxTj8A/i/f+Y+Jd6E0Hu6ACc4xjfqE+UfYepwUf8AUOiGfJhEMti4Ax/i
9SP958/qv7hkRqTu/wCU+9j6ORFxEIHZD4f95j/3X818j8RxwhMGMxMEbv6U
aemBxY4GchEVZNebyxfU6fFh3CUyfUjcfJ9qL5uPlcchIDg2+jg6jHLNvENs
Te8A+VPqZo9jbLGOSxjhrI+aUj8T5Uo7JGMhqO76Y6mAkAObeLq6MzIcn4/8
MnCbeP0sl/xEdNtOSJuiCNP4n2Y5cMD6dATswjGX8z4f7f8A5TfAAMJDcH1M
PT45kCdyqXkljPl3y/8AKzoxV9Tm6qU8kyDVgRI/pl/3X/IN5Yxl1HZ97qRQ
+ERIOMoieSXm8n+4fAle7XRpGIJv05Oeddp/TL/AHb6x6adSGwQB7yl8Mv/
Al444YjH0m/HKyJXkx6f+g8v9z/u0dP1cMglhyD4/gl8cvV/3Hpf+U0all8z
rOihKU9shURvH+L/AMpY3y4SsPscdJQyTjmoy77f3/8AQb4pGyVIJmgiZFgu
+HTX5OeSNHTujRhLVI6DgPLgRrSKXEUTaYkKBLUQy3EIFObcnNADcWXQal
AJYbkwgf/9XP9p6jLlxjERnVxP8W7/ePmZhPflD8Vnc7jqshjDYCDj09QLL
puoz5fOPNPzeb7SeLg59pywNESHINvqHNOXsB/hDwy6OQh6hP2tko/wvbjzA
wAAGnI3ScWR0oyMguG7KDIC61fPjCjQs32D6cpcyyRljPwnXyh8/PshMjESY9
jIbZNRm+D1PR/DIQzg4pk6mtu4x2xk8/TgRII6ckAES2yl/FD/4I59DKpkyk
Yijwdm7/AMplXzsf7QJiPlvWM/P/AOMdmNTbro+t0uHL3jeGX+j+0+ZkNiM7
uw+/6BOLqOnNEXlzQp8CtDGuDaJbqTuQZFCWkgwloWImNURcnZaBute6qrCi
QoVQgKqIAoAyAPhopAHe0woggoJB4FMBcREg6LAgA+KIkDW6Ru81juilEfaB
t272O7kRliqoMx9pQLiQCQeEyNiuSziCJ0bjOzZrRAndpSDMoMiUW0gk9u7J
UlliTwECVKTE92th4QM0tGFajUNiMdBygZKkgBaQFDSTHwQJpqK7bahEg8NR
mylB9obuiJOv7POXESXWHQ5pitpacIbPsx4h1fSmAoTxkSj/AOKyM4fw/H+0
S6eZJNUJCPw5Hf8ADekz4Jgzj5SDjn/RJ4OuydRinsnl+QkQKOi0xOmXS4IR
x5TpslszxPm36/zPSeLqfSx5ycVSxnr/wDgf/mJ4zKUuXaOKeQERje0bj/S
wampJzRMwaAMY/0x/wC8dThjYhKV9ht/qZEj0dQMaMhchL4Jep/b9NMeqzA1
CIHbiMlo1h/xHFMenlXPlDomiZ5I1IQN/GfsJzY5fFLm9snPca29mbGdH/un
R1cckchx7/U15j9r/wAqOuLFijjMJQ35SfjMvJGDfTQyZlXzSAOOB9K//Qqy
lvJnjidoP9W1jnY61S1fpOCYMZGJ+gB6/wANjHJkOOV0RLy/xy/7ty6mUjK5
Ag3/AEUANE9pyep2DBljl+WqP2vii9uwZBOPEZgSyAD7cP8A0ncOmyDBCRyG
9w05+JI6k2do4FuZc4HVJRieWQTd9h3L19LKYicdnYSJS/qcc2GYAybfLI+W
f2V6bKcUwTrG/PD+N2ccE/8AXY9jZtjXkHifi3f7t4Opw8yj5tBuk9PT5ISh
MnQXcB/U16+OikPY4bcwdoUHimXbsjZMVIWPB6+l6U9TIGOq183+GLr+JZ45
JjHj/t4xsx//AAT/AMyOzjjqeeRLb1J7vF1EPtPdZGoYnHddqQsMTjwndo6
5RciPBwljlhlUhV6h6MYsiR5R1Nhhkj6evL51XK3qyZAlenWoOh/wvNFFATTm
XSTEtT4IAAdAKYiNXRAiTKSUIBjy2iASUCSyqoH//1vPwvJGGWKVizuBj9r/
AMa6n8SMRjEYi4WBf+J4OnwS6ieyOj2Y+hGWEyJeaGv+GcU9TnqjLJnnUsYI
2zqchF26OURCUZ3d6PTjwYcOSInG4zjrvPwy/wDGPPjA9fYSDAXGMmNbGk8T
eOWMCDt0/wATw9Ti2+YkeY6Rj8UX0/SjD/IPB10QZb4DQhxU3fqctbpAE/N7
+t6EdHCMwYyvinzNK72+jmgcnTwnlktQrHUfJ/4nLk/7x6HE7unyCObFMARx
5o+kRH+N8HJA4sssZ9sf+S92ACXT+pAefFigrv7CfxHtzjMPhml5f8Alf3W
hqTyDoi797pkj5mBojK0JnqHMF1pzruxnSoVShhsVSUICiCaQEOpil6Ufe5O
sSBWpCB11ifFAa3eYkd0iR7AAMAaw7n2liAeTTWwAXaxiNt1ZtATLTmy1Ejax
wRYpEhtJCKWBU14CREE1TMTYotkSJ0OiBOWWPAp5v6ncdNlyARiS92L8F6jJ
8UaUA8kAmweERkSdfc/S4/8Ay3JkVKVD2Pbi/wDLcwx+LVsA+RI0I7dkYsZ1
0L9zD8E6eGu164dBhhxEKBJ8BHocs/hgXqx/gvUT7U/eDDGPAaEAGkPjcf8A
5buQ/Eae3H/5bcftF+n2rSB42P8AAenJyLeqH4XghxEPoKgYR6aEeAGxiiOz

oqBGwPndd0uPJUpgEA6vqOOeAnEg8lh8jldNillxkx2Ebsf2pxmjQPxITIDJ
jBjOtmSh8cf/AH490Tp8GHqttR9OY2y3ebZP/wAprMieKMTjMpYJDdpt/k//
ABZpg8eU5dVIG6Qj2839vHD/ALT3jPEBcrJ4O1584GQnLEERJ/0u3S4jsqfl
EvNCX+LGwKdC5zOQGOONX5r9ra8JiQeSD7H1JTx8znr4Y4vmZ5iUyY8MaDa
W5vgySwTuQFVe2fwPXjE+YAyie17fTnE/wDuvM+ZCZgRKJ80TYD34s0ckY+n
fqVITv4N8v7TQugc+KWWjJQrwO6T5e4h9mYlmsncZEa6fb8n/iv7f8x4Oqxb
JcVetlWTIhluOyrPvfWh+l48QxzlvIAceSIG3+XJ8npgkcsJZD5ARKWz4nql
0keozSOE1A3OO74trGFp/vlZeuBxSwCH8vdugf8Au938x87cQeb7avu4h/KH
Tz1gDu4827/xj4/U4fRySjyAWJpMrJrQ7Tnw747/ADRAju+zv+D/ALv/ALp7
D1PS48ZjCjLHLfiNf3Nf7eR8OyOOHv8Aw3pozkcX+3jG6X/AMDbJnE6fxDq
JYZjLiG0ZoDfH7f/AMRfJGOZuQBoVem516vqT1OU5CeeB/DF9Hoc+XqBtOWO
OIAjfljOcvIPGkKNd3t/DunHUzvJpjxjfkP+F0/Eem25fJ5r8u7f6k8km+uA
6PDHo4fFLz9RL/6naTvPO62X7bOebgHTHH/BH+0+fjmCKlpT2nweHLjInp3Z
JauTMIBqvatlabNMURLkWjMAPD5ORkRwwTaKXEJkaSOGJFAIVTEWUCwNESLT
EjZQJVUxFlA//9fzsGDJi254kAXtP+F9TJgO7ICTRiJR9Pyx/wDNT5scuecJ
QxxqlO47R5otdL1EsxJyEykE3CkxVTgcZynbslqAiMyDY7PRnhGM7I0I4eby
g0Tp4hkziTFOGz0t0shlJqqv/U4ziDDuYx+L/U9WKMZQjOURI1y6zE5wO0VQ
3aM5LQ6ccJPEiLOj6PR3kh+zzlAJuO6EpfEjospjllMhEn7co+o9mY+nlHmM
xMbDPJ/Lj/5jdl5wcXQ4YyyZMFk2Jbdh8s5Qd+tgMnR48n2oE4pOUr6brKvb
R5x/Z/8ANj2bLh1HSnkfzYyP2tqB87MAxBc7p0AuMh4auVNMBvVzmKdD7GJp
m6gAsJREpcnQVStlASpSUAaV7W8Z1qmALTHym0DWNbaPYrt8prVzM7JI0tWF
KgdCCmMqBBPLmkU0hVx7WV3s1a0eUAgmRfqPwr8JiQJz1L8vE6gv3v4VPdiC
B6GPP4QGgDslgJCWgFJpVQFVVAVVKAFSqaAFSqaAoSqaESaQUd5v8AFsmPFA45
aSvdCQeCX4qd4njifg2S3ebf/wCMff6/FisZMoBiNDb896+DHjyY7BllvweX
9/8Azl0wziEs04GG3yDkV/5ryt9H0WTrJbMXYO2b8SIKe7CNTxEJj+J5un6v
L0kjLGdplpMJrcyz4zjmYSBBBqi9PUdEMGOOQ5lyMxcoR+z/wB241LMTPWU
r8/8W17cnQH1AcY/lkebd9lh0g8uNS0Ogerp80ccfSkAAZbzkH9zyvHOO0ke
DUALBne29aac04wPX9W4+a9Pt38W/wDs5P8A308eaPqAyib21r/FCX/wN7MU
d2yBEal3QnP/AN1M9TljlEqsRljpp/5m9X/AMSw3geXA7j5uP8ACHv6f+Qf
UxyBNHyj4v8AxXp+/XzomtRRejp4zMqxfEQeE2jKUf8R2GOWVSlodq4Z+jl
HGcoNm/M9J6oQxxxkeYW4y6nfAwkSBL4qDhTP+6dW01i/UedCMpyEY6k6Pq9
flHTYo9HA6jzZj/5U/8Aibh0OfH00zklrKv5X8Pqf95keLJI5JGR1J1eqOGK
RmkSI4Xa79N056jJHFHklExPQ/DgMMJdZl4hpAf95lfPnklkckzcpHc9n4j
miZR6bF/bw6f+My/73K+eS50K8fT/wA4UdSlzgNo1A/5yQ12YhMHI86pMiQB
2DWSPpzl8WPa6OyxCMMpi3lwlNO5zHZsckUPDBaLmSgJbgGHQaBAS5tyYQFu
AYdAgf/Q5eo62HrSyYgalHYXj6PLHFkuYsU+ofRxQx5PKJxlr9rdD/yq+b1W
TH6xlij1jytjnMM366cc22U17aHY7niMQD7Pa9XU/iMupgMe2MYj+CO15GaBt
Nno9PmMY+kDoNQQ745SJJPyt4+hnGOTzXRGtPflIMEojx/EXD1O1cVqZ4CJ5
wfliljz9jJP/wAqtdWZHDIZsokb3Y4xO7c8vUzjl3ZN206EQ2/G+eQ9Di9T
0fxAZMkY5jDaKiJH/wCCPVgyn18OWctwnH0jpt8v9l58vV4p4pc75RjCQ+x5
P9844Zylg2XEbJepG/7n/mJo3OTNj9DPLGfExeUii+v+Mx/mxzx4nGOR8vMK
kjD1JvRmWoT719yKZR5dAXN0Hdk6hpDQQijSKSpQBStKgTSatMdDq6GluqQM
Qk68NgDUlgRE8sAmJAAtErGhRv0lZlktA1gQDq/XfgmW4bfB+K313fpPwHPUt
qKfaRLTljNh1dEFVsgKqqAqqoCqqgKqqAqqoChKoHJ1WIZYGB4kKfIMf4bGe
HJKyMsCYmP8AT/8AE37LILD8l+M4pY8gyQsDJzX/AHkWmbGXSDfgybcxgYEV
v+Jyz5sWTBsHxY5HYf8AyjJ4x0uWUtoid1bqemH4eRGGXIQMcvtfFKDNjG8E
YupllEQaia2ykPtf+VXWQyZN2+dEEimZ9JHp8s94IKEPLvj/ABY/4f1EHqpT
qQgCfh3UyDU9SM+CO0Thxwf6nn2n4Y693oyDNloTFA8PJss0eyMuP+E9TD0s

J9OMkJn1b/tf4XHpxHBIZpAS2yqWGX8LWHNOcBDb/Lx67oj+P/vXUDZdSjQ/
1f8AoNKDfRnJ1xicm4ADd59sf93u/wBy8wNcPR1MonalM6Fbnrx4cGSMRCE5
zl8+0+WM/wDklw4b/wBR5pyXy9HS4cnUS2YjrX+nb/5Vcc2I4ZmExUhyH08m
38O6YAaZsup/wYIBFgeRRiSg6asmZ7oLozoOpfW6f/wDpjn/AN7I8mH/AAw/
3vUPL+H9MepyCJ0gPNkl/gi31nU/tWUzGkl+TFH+HHFF0xOWqHtRSSbSBWrj
UaDqoFrdrROvZGYk5uphYsch5AX0qvR86cdkjFqOtXsCR3GyhVadCZMNFAR
qXViAaKBMjBkqgGPLozEJPCB/9HCfRwx4DI0M4yqUf8AC8XX7DkvGABUfh+F
6/8Aq/JOU4zIUgN9f944ZukhjwRy67j2I8qRzZw8NCRqnMm3WEiAR4ohWOZh
qDWr6noRNHcDYt8yEtp4v2F68WeMAN9kDs4eJ0o+Jp1GMGAGMeYaSt87cle/
h7JT/aJGGIEmXER9p48uGWKRjMGJH2ZNSM2f+RmTq9vTYpZZbsdGQ8x+zGLx
zxyh8Qp6ug6mPT5Dv1hIbZfadmU2ej1uO+juuHnxy2SH9b4MhcAfDR+jGWPV
nNiAl3QjOO7+PG/OxGko+HmRLGQNJPsRaWkM8kaTDVuUQRfdzgXLOtcUWjJ
ZYaKACZ1ejPGq32QKBUtY6JqWgQfYgSSmc7A1UhiSBO+nIzaLkWgTlotCoBD
7n4TI2ZA+GH0ellskCxhH6TgluiC9AfO/D8m/GC+iGgKUJQFVVAVVUBVVQFV
VAVVUBVVQAQ+J+I4TOEoj4o/zsf+j+4+2+f1wMDHIOx1/pRGeDm/FgJRywj5
wNst3w7ZPn5vxKc4SwgAQkb/Akf/ACm9/wD1XCfUzwyItFb8dOP7Fjx4TkIX
qQn54H7WOKMOTj/apyjIEk7wBk/hlGP9p3w4zgx3llqY3R2nc9UPR6bLMSI9
HILr4/i/3f8A4zE+b1OXFkzXjG2OnlQTg3lmxRrUmjuH2fM82eUZ0REgm9x/
iesYBEkxhYNShL/30jMD6dH4hwB5mM1jucG+vgsA8goBMjSctcHTVAnPwNjg
IHICaMPtavT0eURyHCDPZI/Dj+08mTFInETjqboh0qXTTjOJqQA/TJGn3Hb
1/TjBljmEJRx6fH5pyk+f1fUS6nKZz1Jdup63N1YEZkn2X8SI/huejKUdoAs
mflDGX0RxiN8qYUaF1elpvSq+b0dBLHjy+pl1jEGVfxS/wB2wkbHZ1A/YemH
Tj+7I8+b/Bj/AN3hfNPg3kyyzTlln8UjbmWNjV/7tQJQrgobrRNkiidAyrSF
XTydVG/MOz0nRiVEUWYVYOTgBrVQpFeVFOjqbDBYefJHaae/HmAhtxZDulaK
ACgiTRLmSgBVTEWga1Qtgt+xzQP/0uU9dmyzEscdQNug3OUodTlxa36d/wCn
c3+GdXHpchIPginef4jACcYRPnN6sRh6GOP8HyyyjFLSxu3PDMenPZlchV7c
v4lNyUR5SNPK+fI3mZM/i723Uy8AyIBsPfcTTwmPpyGQCvUjL4p/wDIfE8R
xgAEG7Gv+F6ul2y8stARyw0p3HpvV6ae+B2yDPWZsmbJuyndJ6TkxdzKRDh1
OSEXyjrKqmivQ4iDTA5dtxqr0Y23wkzm1/1j24Sjj6nHIE4kVHGQP6fSfJ6v
F+z9TKHazF9fp5QI0pvTbH2f3P8Avf8AvHj/ABobpQ6gfbjGX+qDorxR5EhR
1UBvLRN+LHGrtC0DVinEaF2cpR1cs6ULT96AfFsDS2HQhMQ0NUmJCEery7DC
gxEBZ1DJRYMaX0Zy4DY60xFRiB7XOfUSlyWkBLAR8RAeeYA7tkkucxTQZqqo
BevEaAeR6sfAQPt/wTNugA/QRfjvwDLR2v2EDYYistKq0gqqoCqqgKqqAqi0
bggUrllLEd3M9TEIHSryftV8BlykoHTbydXU4GJNX4t+o8XWwOWGyJoni0Dx
PxPLCIXnHMHJEbJSj/C+LkyTyGySS6yhtkRkNUSP9TzmykcbGISEdbq+PsvZ
+GQhPPDdKiTppueAW9PRGOPNAz+G9WMJ4nrS6bHD1cUp1KPMw2fiiwOvxdPI
ZoAEzhtljH+7yReLr8cul6iUbsfZMvN5Jvn8IsFdoNM8hKRIHgsx3HgXXsfV
6XpcPUdLInTLE829cc3TY5xy45bYGPp5BX2o/wBv+WiY6ni5Rn2icgRE/Cfh
3Pd0uKPT4JdTmFmQ2YYy/wDdr19NOPWR/ZauMT/c/wDKUHg/EuqGfJtx6Y4e
WEUWNzgzxOOQmOQbD65j1PXD18cdsSex8sp/+KzPjtjLOloEge9kkWAcvT5M
R2ziQS4xhvl/S+90kT0/TS6udykfJivzbHwzcSSO/KbwNJbsckJH4TStxyx2
7SPMnQuJJxa09VTNWzBmq5aZJVNUUXMi3RCBydTCqI9LjzoHvyQ3RIL5500
dl6VYRLb72OTbQU66tKQWG5FhFA6RBAtgOt6IALKZG9EIH//0/HxAGY3cXq+
/LpMGDNGgDAjzby/Oxfb/Y4SwQzAmRNXGR8rDC0K6jN046eWKNboy8IPldfl
jnkMkQdQN1/xxfc29LgIKMhECUf6tsnys/U4p9MMAid0TYk1EscEYyIEnsGs
flkCxAmOorRIIla3SMqD1hglE2CAPa59R6YxiF3RsyQBvAIPW2hgsSNbRt7/
AMaOuJ50ZC70/wBTmTR0dZ4zA7Z6E6sTgl8GwlGhycnph+yQIH+y+oSNvqDd
Ha69ZiMukMTW7DMx0/hm8XQgHLEGW0HSw+vDpo45ZOn3GRyQMvN/HD+2loaZ

80Ruxj2aOYF600IXvj83GmnPqFMMRyyERyy6jL6l8vxFln0OtFjL+EM+n2Gm
8eC9A54fUILXW33emjHF5jy4hnXA5cX4RmmbEaBTl6E4jtnoQ+rL8UyA+QB4
c3UHPImfJbxEnMccQOXOfTeqKtueMjUIGTa64oknmZegnHUavLKEo8v0EMgl
yssMMuhDYIfO2pFvf1fQnF5o8PADTAZIDrOFiw5UgL1Q4eanpx8lHs/g2Tbl
Afu8R0fzv8PntyxL91gzWAXFPQS4+ozLIRw0hutvGc0+wczLJJA7zMBg5oju
8XpylyW44I92FNj1UWP2gngNwxwHZ0EAEDD+ZL2JGGR5L0gJpAxGCPdsYojs
6laQzMQHKej0F58iBmS+J+Jdbk6f4OS+zJ8D8RiJ5Bu+Ecoy5jA8I5DI2dSX
WGHJkPkiT8nu/bunxf2cl98/Op/F8so7R5f6PLFhd44vwbqcmssl/1F64fg
mOA35Mli68gds34ni24sxNzj8UHkyfieL+ZGETU/Nz8MkWEV+OREDjjRuMa3
H7UXxHt6vr59XGMZgeXweJhGGyNFCLC2iSj3vTI0nRA4xcsnxzH2YPhEPR0/
XZunPkOn8J+B7jm6TrtMsfSmftw/ttLqeRotvoZ/wrJjG/H/ADlfxweAitO6
MwzWOXLHGQJHYeY25zyGdXyiVDWJu+UGiOK+bSuS5Y4zAEQd37/209PjhUt8
tpA8n9SenzejITF7h8Jj9I7h1mDqdOphR/73H5f/AEEsNBjqebHJ46OmjvDB
LIZwwDfEez7LxmMsZqqLiOhptf5GuwOZBCRlrSQ+bpYooYTj/p9RiroYsGJC
MgPseLPjqV+L2uWbHvia5ajScM4gLQQ1WI90OzoZkWyRT6WHAJR3PJ1EdppF
MYho6NYxXLMkCFVCB//U8QcvqdH0kuqwyO8jb9I8t7OjInFww99ZOTCPRw9D
i2wyzuidsxNwzSxdPPNiiRsl8n9Th6GbJj9SUvIDUtth/wDMb0j8lgZmMpkj
aJj/AFOkGeLCWyVhvcPCwjLD05mJ7Gmjt5GnsTMY9T0+hJywlt029npx1IkT
PPI+Z0cxA1E6nl6JEnWJvu4abZ2VIBw5YASi7guZiKu/9L19ZKR8ACb/ANTy
RiSDrTtHJ9w4ye3lfbP8jPDNORMyY2SP5coyfDidpp9fFI9XiGORiJRFRJvf
5UtQtEcHX4h0/VSieLP/AD3hGOUj5QX1/wAYHqRxZx9qOv8AVjd8WalxCeI0
873ddFyOIkq2v+J4WTGcluWh8GMOI5Dfd1z31E77Pb0XSgG7anOvxG4/5p0Y
sYhEDu7+jli244o7tTo+jjOKOhehk8g4pRZMCeQ/RA9PXZymMZ+EKSHixxSl
oAp6OR5FF9QSES1kO/UIHzk4GJorCZiX3z0+LLC+75U+nMSQimuOYzx2kPz/
AFvT+jM+Bfcwy9lvP+JwGSO4Jg8OB7OeSO0t0Rq6ZY3ESYDkerENHmenF8KB
1dMamD7X7Tpp6B+KwfGPe/ZdMPKGA9GJejkPNB6gNGgzIUBoqgNJQm0Ccxq05
JtA1W3002gXbJLG5bQCS45AeQ3dsTkgc87p+elOc884jUU/Q5CAH5eOSI6k7
5GMSakY/woy2c3UYz08/C/BwEgDZGngHfrCBkO0mUb8pl/C88p37WGHqE86c
MplIvoKpVrVsUiYB2SMdw44Ql+LWOBmaHKCKUkaEUD4rYdYYMhjviDt43PVD
8LySyelliMq3C/tlqOEihZ4RbU7iTEnjxwhgdODq8vTm8ciH1wcfWYvV6nH
tB4y4/8A35hfCyEE2AB7LeSXWTGkSa8EbSO/PiEJ7cZ3R7SYGE909NIOQah6
ttavJtnoVanP6QX03bcg5doMau2GoPKHU5MGTdjQR4PqYfxuGYbesgJ/wCO
PlyPGenEtXmydMRqHsmcXU9CscwTA63pH/Ck4TiBjKjLx/+JvkQySxmw/Q9
L+MHJEQzgZl/4vj/APNrGc4jQ4d8o/ELaEweH1f2Tp+ss9NLbL/u8j5vUdHP
AamCPayBPX1EbQViAJC+O6D5Y7rs+Cl5YyLCcf8ASzh6jH6cyO1uL3dRETjY
5DxO0zSnc1x5TEbXCZ3SSWR4tNBpzkXSR0cSgKQLKGohA//V8QvZ0nVRw7oz
FxnNa+J41Dkxud/7btxyxQjpl8sHN1GY3G7iNvl/gfQMen/ZoTAG4EGX8X/I
R2I+J9PjyGUASJAcfxRaGeDI6bLGAzSHllwXKMARD6/wvfn/ABA5cJwbdL0k
8ENx0i6MYG2Dy5Aew5fR8sBRnp7A+TrHV9EYBICW27DDa0/0mefJCcRtBIBe
LflPpzxilKZVGxpH/E+ZK4jdGzX2kRrtMyaOr39H1EReMgky7x+L/wAU+Xky
GR1YGUxIkOQglSd2bq516VeSBJEf4XCHUnZscpdQN0iOJBxxnxY1J0rgehhH
i90biPK+Xiz0aD6+MbogsSxNN4G2AeL1yPg4YYvTtehgMDejrEkOcYmJdSUC
BDcVyQMB03j1k69SPKiHNAmldNscoo8oMSIW8wmQbDCkZ+nMHI6kVj1fRGbe
ak8P4ptxAUeUyni5yNBTMoD00ZZichTR+AuEU82npxfC8/d6MPwuiHTgPnHv
fs+nPID8ZhHmD9f0+kQwHp4tXq7PNgGlvQeGgCsraAVRaLQCtlFprwQDafaw
m0CrZWIQC5TL04z5QOfqDUCX4/PO5k+1+q63JtxEvychZtjcHOxep7v83XD0
5y8UL8XExbwTljmCNe7mzhYDLXK0P4jpn0QhG7s+7yvJCNyp9LB6vV3K9L4e
Xq8Jwz17pTP+6auksf8ASyYhsJBo+5JiAAbBQRpdi/Bzllnl0Y0PZ6P8Tx4M

PpTjZ822v8aJ/jM8phIAb47ojTdvfHnCclDjTO08ScMcvx3E17karjqdU8py
kyIAJPDmTHd5rl/w/E55J44nxc55ozIERSLxUyVluXliER6SY1ldoyGOiXpx
9THIno5cts6VqjTEBABuRMjo6bAAxu1Hg4Oxlh3KDGzo7ZKuoahymdgtRiWY
RhmhKOseHOEt2kuHQZZOuPppZImYGgekM58kzz+pwCt0XkhMwNvq7N9inysk
dsiGoxZHpwNBYBi+h0/4lkxD081Sx94zG58bo5/ZfROGUomYFgcyZoctzt9Hp
eqP8o+nP+Gfwf+bHj6j8OyYviH+ofC74fw+eXFvBFknbH7UtrPT9blweW7j/
AAS+FzMjtODL0+2G4Ss/wvm7gX6Uy6XqtD/Kl/ysb4f4h0M+jndgxl8Mo/C6
RpOTm5RTQbxyjGQMhY8Gg55lzeiUN8iYigxPGYtKZOgDEQ7Ad0D/1vEUJQ4R
hnpdD0A6uEpbqMezsehx48EM/J3eeL52DqcmEEYzVrWWZ262ezSndtYcuTH
KhCcfKf4XyAdpeg9LkMPURQHf6m+r6CXSbdxsSFuznic/qEmwPk9UMmSePy
6AF55CPMdA7YskIAxskFhpdrIICWkpSvWiHOeWWGMsY+GXP+I1Imxx+CNvHI
nvn59llhqEcsyOzmQS9M8mKJ8o1Ymt2rSmG0tRjejaAdpRTt6eEcesn1OmzR
yeUPzxmS64MxxStiWMIk+pjAA6cPUJDs+b03URzCg9sIGPudmTbINFMSSHSM
JELxRZ6rh6sOInl5uuG0IFilli+T5mSJgX1OmBlht8/Pd6opzykALL871mc5
p1ege3r+qryRfNxAGXm4cspqcG2O568WHdiJLllkJVEcPo4gPTpyinzc9JF2
w6hnPCpl1wRuLSG+EeYP1uGPID8riFTD9Zhl5QkD0cHD0dnDENHYyoU0AKEK
gFB0QVthQ2mwxnVaAshFJaBsqqCIWHGfLqC4S5QPL/FJH0350SjGcRPgl9z
8YmY49PF+Zlly5Y1JmJPosuDpsUD41zb4lybDYY3Xyzl2zitDWjTXptU7OI/
EJdLu2ixLxc+p6ufUm5PK1GO4E+DYSDx1PZ6Tpeny4rIMmdfBEPIZAYEg6F9
L8I6o4iYcTdbPxOP4nCHrAmV7vj/AMKRzdQjqBm6KWKR82M74/0yfG2SIEzi
NA9fVQwxj/KJJ8fsvCMpETHsWm0ZmRLpgjctXlinbBzaKdHUSFCIT0mORIYC
YiJl5+HplI9KNQc9iNLqejjG6OrEKNhz6XqBONS5ezBg3ahzBtMnp57Z1VvX
lxYOojppJ551ikNHeMB8RCiA3Jwz6MYom9T2cMfVZMMTAHQvrRzxBo6h4usx
45SuOjtPqYdeh5+6XIL58gJ5PMXuyyGMF86Pnl72TleGB6PR9LE5aMtoPcvs
4MOTATDJ/ZmKIP4of+MfHxCRyCML9u1930Z9Li9TDk3R+1CThmXqcnT9XHpz
6c7IGMt0JR/f/evBln6kzlaWSX3ldHj67GMu3Zl/wf8AwJ8/P+G5cVmPnj4w
amZaPOLh1O6cOeHplpgxsNRmYPOxm9C1LlicfTm3y6NnT05jWvLI1MgdA53T
nl2WgYhoghQEHwRT/9fxUFKC4RlmmM7ZA+BfoOo/EcEZQyx8xj2/qfnA+zg6
DFI6X1dd7UNjnn10SMsYx8s9R/gcc2bP1WMbxcl/ap9Mx6bBmxyiYmBGybhD
rcWHFkwHXU7CHWxhnc7CRuA04XEPNZ7lqRPI1cTOQ0Ya0Z1yjKI20B7Xgzz0
prNMy1u3kkbaalJUSIRXdNWil+ogysskUFFBAsikh0jHfFylpA3w55YTYfe6
X8TjMvLI+bSDSB9thzxlwXvxVy/B4uqyYuC98PxlKBTZlfcwmDw8H4jEbbfA
x/js4Di3l6n8Tz9RzoGFPo+n67HgxVlvzvX/Alockilcl6T8N6nrj5Qa8T8L
19V+AS6SHqZCD7kd583M2Wto7ZpAGouHKBvhPi+x0xSPiY+X1+jPZgPK64bc
hpPSzoO34IERnZDy4JdkDuxG5j3v1eleUPyeD4w/WYSaFpA9HELDjXxOszo
0E21bISwooW0WgUCO6SPBztrciFUi2dy3bQG0bmSUWgaW4F0ug5S4QPA/G8m
gi+A+v8AjRPqAF8dEFaJ4SBbJlRRahkMOHEybG2Q05CA7iDaJTvnVBEoi+z
BOjCNFZMxnEAmq8HlaLDSi9GHQOHL04o0EDSQ3B1x7ZDaeUVtDiZUWFOoY5R
Gj29N1hwCpPJ03Uj4ZvTmjDJ8LC9x0ZOq9U29uDq8Zx7ZcvjCO3RzzbwPKCF
BqT1skoY9SeXzc/VRsvznM8lyUdTPLoXlynlfYxEHkKOXohQO0d26GdT1vw
fbjkJTkYzPwmvK+j1kv2jPHFUQQfi+zN8/p+qhhiBKAKY8PR0PV4Me6OeF7j
e7+BzBmTu6jJ+yiUtpxSl8m3zQnN8XH1ubDLfE6k2Xb8R6gZZ7YSMoD4dxeB
sGXY9OPVYOpFZo7ZH/eQXJ+FSMTPARKiP4fi/wDNb5jrizzwm4SI9zEhyk4O
rwGlsiiHmibD9P8A9Y4uqGzq4Aj+OPlm/N54xx5SIHy9nZqrJSQCNBSCKQih
iCeGTq3ZiPeygf/Q8YjVDcxRYeZBAAdRnnGO0EiPg490tZhdBBD6f4fgwZSfW
Jodgx1+LEJAYBID/ABOkRo5OnwTzXt+bn1GI4pbS9PSiUMmzueyevwyiBlhz
OMHTj6ZPPqO3cTTyE8vUMZyAxHPLjLBs0J1dBGIZbELO3u1HFkUhCtTo0pla
QHSeM45GM+RoWNB70Dfpz2ayxouOH4tXqyQtgOXhNplHaUgW0EgtxkjYF9NA

3jMB6MfUQjy8G2nSOO0D6npP/LjxdNj2bbp8v8T/ABvL1/l+GH8lfJIAUoSZ
qqoFQ5fT6GXmfMi9/THYQWA0/FoaAvk4TUn3vxGO/FYfnxpJA9Pp/jHvfrCP
Afkum+Me9+tw8BA7sejsTejhB3poBSUqwE0zw2ghAi00u0rtl2QJka5ZuuGM
s44/7kgHo6cY8guJtoMSSXM2H1fTDnPCJIHAJWFItO3YaROVC0D5b8bkPXoe
D5T2fixLLOSHkGqAKKyGOC6Rx3rfC7fFAzjtia5dMmKMhcTR9jIMC7ijHjnL
QHRgLjAbaLzGG2VEvYQYii8swCUVnNLQ0impiizbSC9mMcPLjiZyEQ+jCAia
LGA5DEGnntay1ucCaSBoMdx3lJlHu7Ryj0TDu8IULYpNWSUQe1+G/icOmm
JZI7n6LN+P8AQzxEBbJHw7YvwW60bnRk7epzQnlyiKBeQyYtUA3b2dFj9XLE
cvE+1+CRiMhyTsCluwkzK62bosJEYR8mQnbtmfs/968XVdFPptT5oHicfhfZ
6Td1c5ZpVP7G37cYf96+f+J5YCXp4rA+3D7O5phnlGxohOq+9hgCSNuhXk6c
KtFpZArDDfMRHvL0/i2PCcO7aBMcEJ/DM+LDM+sLBY/E5wzSMcfw9nOMnarS
qeEDYakKYjEg09EMEpOpgupjKW4qHtj0roOkc8kXiz//OfLyhydpkSiDHhyF
Vry80RkIKfbsY3PQ/DMphk2ggbhVyenrhCcNwyGcovl4pjHMSOtHh78nX49s
o4obTP4morPPhMiQIHkPZ1EJ5cW+XF95f++3boOgh1GGWQk7h2ezL0WHHGE4
EakXu/xJrEqeGJ83ggDkAJoX8Tt+JdPi6WUZYcgyeP8Ahe7LLDiyTjMDzDy7
Xwp86lqZILOfU9SIAINs5c0sszki8R1ZkGadFASTy0LZplISARlgvbe6lLyx
Ak9OKNimAzkFAdp4qYAolhCbUV3SI6WgCRsJgWpR26MR0aBmrUjowECZBQWi
zSKXAW9OPhXhTULidWMHrGPqdM+BkjtL9B0s92Mw7vj9Tjom+WENukNmL9d
0/AfjOknXyfp/wAP6sZTt8GmowPbi78vPA29wg0hIS077Hyvxf8AEo/h8RpZ
KB3NiL8z0H/lwjNIEMgoF+oGSFXbChEaa0Dx5vxDFj+0Hy+o/F4j4TabSKk2
eR/5cZMs/IJoDhH/AJbfWSjkOMnQuHXZf2iZk+b0uc9JmE+ziOTKeMH6hGVh
TKu783D8dgYgRkLYyfiBy6Rk12g0qyer1OeGMkkvh9d+IGUajpay3Ea6l4pY
jmkIDkuHY0kkcHV4TjkDdgjdbhAE6h9PqsZOKj8WM7T/AEvn49HVXKOYRCRN
tbABqm7dl4py1AJdSWDMRpBBHD6GL8Nz5dQK972Y/wAEJv1Je6mSIPAKPF5p
xrl+tH4b0+L4uQ8fXYMWWBGMdTWUiD5rNqAXEPRnhs0HDztRDTCDvFPpyG0a
8vN0canfL1ZZbh40xIOKZouMnbNPcKpxAtpAX2Uail4SNWgBFMukhTICBKGS
CmEA3T6/RZZ4sZiOJcviQjulD9Lg6fDm2Y4kwIH8yUvh3MM2O0dbgl9UEwnt
2GEHxZyMjZNnu79V0k+mIvWJ+GQ+083f3o5tgv71T2ruj2ozlj3KeF7+9fY
0HXjjhDdkiJdq+1F4MuYQRlymMaeGUjI2yDpXH/AIT0slhnO6gC90cQHD4n
T7xLycv00OeylMxq8rVbeB6K2UEGFdkwxykeHT9piRw5HqiDQasvqR2P/9Ly
OnO7FXgyQjoZaSi3lavPcMkBRsvZ0fQT6kSIEgU1GGciH1R+G7cUc0tblRi9
2Lpenw5tsgNshpu+y2AeN0mbKJeljPpxHh1/E8UseQR2mlri9ziZnFmkcPYmq
TDqjPLGWYmVH7TcSYRBv0eDp80JftEiJV/L2/wAT5c+InIGUR5Qat+m6jqum
wZY5l0dKqL5eTq8QOT0xpLhQWTyM3SSwECfcW8ktofQ6rqJZwBLS8JxWcFBG
kZGV8BmnQAUBysNKNI3w5CC89ukNDaB17jdHhk8ty4BczywgKCQSmUWaQKkb
CAE8u56eUcYydiimEhbmOXUOJ5aC0EU0EoDCVO28HkuAGtOvpMIb9PIMZg9n
v/EsMMc9xGkxcXzBERqn3s//AIT0cmnePILih6HzOE7ZkPp9DkOOdvBkhsyA
9i98Al6sszpQ+n6bqoy5L6R/EMMdL1fIMJBGh1dcguNuebRvhOJ72X8Uxx76
Pzv4p1MerkK4DwykZHVlcmcltal86YOGYkOxfaP436kBE6PJKAlyz6MB2bMo
ivAMvVRn3JTDzC2hCI4CY6aMwjArzGxc5Yoy5DtSKcnM55dPE8aFvGZw+LUe
Lrw0lgtl7mlZo7I9RAw1Orh65Et0dKLMMM5aRBeiH4dmn9mv6mM27Nm3WQEP
CY+HLH/nPIY+nrJtyDR9TJiyQ24ZESrUCP2Xj+KVDIjwEzv6fDgxHzRD3S6z
DAVED5PFI6eUNpycc0CxLqhjiBCIjXf7TW3/Alo6Ybs6Z/iMulXlnPLnnHcZ
CIP/ACngydTKZsuZyE6s9T1f/pMnKi2Ouccc4+ecifY88sWLHAKTOv2XGUi4
zG4Wkol8ydDh6mjxq8sRZp6s0XkB2m3ujJ3dNIwB8VMiFhIkbfVJGhLAcSzZ
QCmUmS6AkWUwGrNuuld0CpCzQUAVTQ4tYjVEMMnLATM6IARTo6aNzD9b0GLI
cJMIxmJH+YD8b85+HSGOYnlWB2fpeo6/p54icNwmdNsfKkYep5XVTG4wgTs/
hl9mTy8hMju17osBHIB8V4+bEjhwllRUjfdog5Ry8csrMZGRRtVlybsh04c

9pD6PTjSnqOOMvLTz5HZVwB0GEYqyy5fT6n/AMJjugNQ8+3bERK9NkOGfseh
k5KI0bjCw93VdPu/mwefFoP/0/A6GRGSh3erKKL5uKRjMEeL6uaPd5vUPQwp
7ek66XSWALt4nu6Dof22Rjuqg1GH2Ez67LMGN1E/ZcZ5Z5DciSX04dBAY5k3
vgf9MnsxnDizY5ERjGUWIPmgdperF08cojImgWvxCMPWI6esV6fKlx2Vfdpi
vRIDpsYmNpvsVfth5z5TjJrwLoZ5iPLEAFz35OnrLEkS/wDJI2dUvwnFDaZy
0NiX9T5X4hixRjH0+eJU3kzzazJOtvScnRjpTDaTmuxNgUM+d2EmmJCi9Er
BsMnESCXRuzBQWgGKRTuABxg3qjYeWcA3Chy7SjKI1YQiUrYt0BAu3OXsQEP
QJkxrs4xOjUdGINBGxYDz5Brb34sh2EA1bwZSgMS0S4RIRbJQKE/M7xkSdOH
jldbevFpr2YQ3gLBB1fa/DCMmOeDxFh8WE7NDu+7+CgxfLftcsHjZ8V6dw1
kjEY9wNHwe/8Tw+Jnl7HzPj9TLWnK6Eq4Z2dDOhRfW3xMX53p853UX18U7eW
ZXGT3ZbmsHNkjUixT09RHW3OMJSBIBIHNO6qUeG6izRiQh2w4znntGnvdo/h
+TLMwEhUe5dQYOJQRb34oYsBnryVI9pBvpsvT4wl+nuyE8lsCDihGU9lxJem
H4b1GTttH+J9UZp+qMNxhp9gNS6WWXEZTkTOJ8fLtRYPPH+HYsX97KP6YtSx
9NuiMJNfaMm/xLpsY25MdajgPIgUeVBcEfSdL1McsP YgAKGIOOYk4ZbpeeBf
F9Q4jcDRY2zz3RuRZCLvB6UurxYmSc+kt0fNEfZfLz5YnlZQFAmw4ygYSqT1
Dp45YfyrJ+1/hUikNz/ukHPPJ5i4iRnKuGsGf0jtNUdF6v04kHEd3i3EsYL/
AL4c2CeLUluPVAYvTI18XMdZKOMwoa/aLigEzyAkaDUiWTWNTbDs33Lh0ngl
IJliHIYywhjIUTb6X4d1+PDAwycxbBIOMGeT1P4dPHRyGhLgvjZlbJGPgX6
LreqjmxRgAd0eC+BK8mTVqUG05O2MajEOeWRjoHTsHnyFI0YIF0pQ0FRITw7
fDgVFGCUhx3dJeaVlgJAABrGLNlKrfCApdtA5Z8IAanVktYsZySACKd/TxqD
t7UnGcXlkKIqDNGHneLATRcZSbke7zzk00kRObzyLbU5OSOiqU0BQTyGuj16
RFd0UrBllkAeH2MdRO4vz450fR6QzIOJOsQeHFlubTPazTGhAcAQeX6zHhwd
VjB2iqcZ/g2CXFh3JmDxsHUAeSXDy9Vi2SuPwI9nJ+CHmEvpebP0mTHDbMfN
A//U+VfXFSxgJwfl9PpJiWLB3DixQPf+HnPjJyYrDdV4SH0Pw7rY9NuEuCE
jJ0iHUdRHfuAjl11Br/q6MM3pTJkCPIXnh+JDHAwhHUm7ccv4jmySErojims
yZdReGRxy7aOeAiMxLt3c8k5ZDulqXN0jHKGe0cslCjLT2PLn6vGY7lixY5d
N0WXqgTDs9o/B9sl5JS0JG4lStnlxG7h7Oi/D5dXPZEDjmX2X0eqA/DliOKI
lkOZPBjzZemHq45Vfg53NKFqc34l+HS6LJslqavR5algdNkevP1M+plvyGy5
5M5OH0a0vlYhNao8aUSjae705JjbrUd3mJJdGjbp57Do9WWRPLwwFG30J3k
9ujAYiPi3IjEDRBJlpk8lGdtBgNhpTrhCUBZGheXPAjV9bJunhhch/S8nUV6
fm5YDyIm1KtAQ9uOtujxPTEjbxDENsZ1fa6LqRhybZS2xkHxsJjWvLnLMRMS
5pyU+m/FRHLijmHbyvzWQI9X3cXXx6jFLHmjQ+zT4eTGTI1wjMYyZbgCCH2O
ll3fllik+h0pO0exxdYHoy3jB6GSO4avqQ6MYoR2HyTre+cBuFlf2qVjFOR2
cCnNDOYsZPQHRdPjnlE1pcDbx5cWKKWCo/wBy/i/icepilAUCnocoG6Mu2oek
HHsOXp8URIAyfCX0uqwYoQ3YhUhrb5/WHzbo8cvu4cePjgE5yGo4cuZLVKGj
yZfiBNTjECY5l/Ess2fKDO+fieOYEZGuLrj6z0ZURuB+y1zsSvRlwlunTNBr
Ng9Mbh8Pi8mWZySjGgPZTKUwlyJlbGMljCDsw54ZYmGQiNfa/ieKWxbLyXod
Gp4REWFFRAI7KFBo0z5pdQBURGmMeKcQQJGj4J3iRoBfNlgclGccQ9Si9VVp
pXg47CCD3d44pSOjms1ZutW9Dkz4xE6cFxfjHaX3cP4RlzD2PUf/AC3pVy8/
eW3PM/4KGnl7WtSp8/Qd554zglxjRHd36n8NlgNW+fMTh3dVza20ObyL1/0j
OMiNXhyYjA7vF6vV7SdUV2DHi2G/Lq9Zk5Krq8TggTIU5TJk6YpEStrNirzj
gtNnl1GG87RyyWsd3o0HRjicd32TiGpk6R42nktbBGFjIEMDLn2ojHcaSqa1
4LUJGHm5YDKlHWns6MGExldtXCrNvXg0NIjeB2Zcss0zknyXGX3t+xzka1Rx
MZl5pl3m8uRHSpivVWnQvFG5O2Q2XPGKfPEbKlb9NjBIZ4euXVjETGLwzJj8
LlduYnU1MI9jovxTLinYkQ/S4vxuVDcBJ+Dunt6fqzHydyEk/QMP4phyjU7T
7XXN1OA4zukCK8X4uGQS4aJJ5RcD/9X5Qvd0EgCY+Lxl26SWzIPa5alFO2Y1
Ua6BvKNXNwjIOCIBS6ZIFREaO677MiltQWPUj46ujMtoj1Om62PRicY+bcNC
j/rXKcXpae984ncHG5yPI0U4Fxbg68nU5MukySHME1V6ORuMqly6jUKdyRDh

m2Tp8kliR4PDnHpMuYE44mW34qbn1WTJEqkEfhoro/xXL0oMYAarEJ1k8XJ
i1ovR1X4fiw9NHOMgOQnzYv4HeWLJ1EyRGzyaYyfhmWWP8AZRavaDxH0Ojm
CCHDqukn0xqXdHTHabR0OqUfNouwl10I3BgZN2gQMc0aNhmLvmBAo6vPG7QP
SI/Zia1/ic5R9SJoupgRgBOnscoxNExRTy5BI0yAxJBYtpAgPXHpyYh5IS8w
fXx6hAxh09cu0MMRq2toG2PwccgFpElmAgc2SYjqXbpcgv2PL1ETTPSSMZUX
DxUG1g0z6DFkBFOXUwujHm0QA+I3lj8rwThnbMU1wOzN0OU47yUNL5eLoATm
AEN9/Zc98pmiTXvfWHQ48M8ZjKr+LV7nk3lHH+ISmaEoiMQfKAjFHFiwj1DI
SP2ae6UOnxzyQnKzL4S8vWdTDJgED8YKhPUjbTk8rKRKXI4Z6zo/SxwzRNiX
/Nk+p0n4dHqI7zLR0I03qdPkwcmHni0JNYs+eibCbYh/D4NU02aQjvuzq6gR
eYEjhkypkFOreB5RqQ2DfsePHko27457zZ4ed3Gh2pWdTtw4zINDjxfSwnB0
2stS+PPqxHSKcREjuyHR8lqt42PW0+FH1OD8QObTFC3pnHqJjQxi+L0/4tHE
NslvXL8RikjUdCfBe5FYu83/AlMs5PKc+itOP+r/AKQ8rrehmSTPJZfGy9Lt
+0+1m6Pqc2oBfMzdBnhysu3+8dLJf+aW0E9OSatjLi9MOssOWLzZlPu+tPtP
PZLoZE629ESCNh1HLzkguZvkPRHnaLljsmnbDh2+aWgcoSe3pNk8gExY8GmT
nkbIYdcpBiDE/J+hPQ9LPGCISBHxPI9R0eME7Lr2tB5XHtURMjQdMsBDS2t8
ICgiGcgMfGr6HT9NWD15ck7YvHiwnNMADI+i/EscenxYunHMRukwj0PlqnOQ
+51vu5zHZHFHNN5cj1zeTljrUxUK3ijuk06GsvLAOkMZEdx7uvoGchHs3mlj
5QwhyTIRcSW8vLlruihGq7SER8xocuvSPLQVizyxnR7odbGWhZ6L8Ky9b/a1
prqPwbqen1IAoH//1vlinHLblHwKssB7WWyNx7vO64rnhBOrm810DAWomtUI
Do56MrJKOTmg82LIMUt9XTsYWxk6aWE+fs9Q6hQWrcjOeTNK+CUDDRO46o9U
37Xuz/hnUYoRySAqXw15pM0Onac2LEZy8ou+zYBgaPZ7Pw78PyzyCQugdSj8
SxjF1Eojgt2OdtUzLqMmKUQICi5dNRyxj4t5elOMCR4KcOCZPqDiKIJGUm7Y
nqZoS6ee6Jq3bpQMsZRlq6ZDDNjjLW2cEvRIYqLjGf8AdPRhB4H4oZ5ZCBGk
dA+RrDQv1nXdMZCWUGJAP+rzPk4/w89ZuANGIsOIO5ybSZwY8h4erFiiQSTr
2fOIMTslOQ9nTGN6mmmitpkCS4xj5tXr3RyDTIk47NIA6MhMsG29B2cMMpYz
rrFqBMQqe7thib14RTy+q+MmqBeUvsfjEYcCtj4p8YtIXiITq+pglYfPwg09
mE0aQOtSgKTaAQkiwxbpGdBAYnG4G3zscyJvsY5xIMZPJ5Y7cujham3oe5hl
uAL6QG6Fvk9FLSn0cRNU8L4M7VxRn6MpUYCyD5g+lKxgyjO6rlzx9LK4mMqE
zq7w6OAM4ZNSPhk964o81sGeNniWTcOLfUHR/tsBkkREV2Xqo48uACNbh4OH
SREBsnEykfhF+VpjEehjsySwg3R0emX/AIP1Eb4I5JOebpZjNGtulkeLydTH
0pDziZHgjU+k8vrMP7P1EodrZ2Hvo+x+LYBnhDqY6Aipl6n8F29L616gbmlW
h4k5wiObPseKebfKovRgzY8cgvGIPLGpTMhwio3ia0dfV7B5nXHQ97zaO9Xs
bY9PaXojG/iLzDJWg5d4yEdTqXIY7VZ6HT4DLnQP0PRnp8I5G5+VhlnLh6YQ
yS5NPnaaf1Z1a4t/wDpM+n6n8Rrx4Y3HUvzHVfiM8xPZ2PTxlpZkUn8LnViC
d+TnMsY48F6K/wDXuePPMT3cJSe7qOllj5hT50wYnh9FYehzbtuiZ7SPa85F
O0yD73MjxeyObxIIAhqE5RNjQvX0PS5Osn6eOvm+t/672WHxC/6C7OR5mP8A
F+pxRMBLQuU+vyT51fVP4BljTcD/AEpxf+W5llVgtkh4EpmZt7Oh/DsvWTAg
NO5fqOm/8tzHA3kN+x9kQw9FCwBGIYDi6f8ADcHQY989TEXuL871eeXU5TM9
31utyy6vF6l1C6jD+NMfw6GGeOUhujMeb/DJsGHieBXs0Ylxb9PLp4QxZcQr
TWFvzckYag5Jh4sr35HgysN1MXq6SOtI5QLfXwY4wxXLlptnd1Eo44bo8kPj
k2bKZ5CdCdHKcvBhCco1pzKerSt/LyZJWWIDjyHHLcG55jOW5xpR7UU9j8L
/F8n4fK46g8gv1WD/wAufpsg/mAxP/Kfz207igf/1/mZijTmXo6mO2ZeZgPS
6HzQlvhsii83QECdHuHryCi83qGQEE9J4RabtHSOb6FRfcGPB1eCG+QjKPP8
TeL8OxRjHJ4Vuv4ZOkh0/S5yZUlyGgdbjY8HJhwjLQl5R9p9bJ1nrdN6eOBJ
j9t8fKljiTHWN6PZj/FcmPGccAADox1lIV4UM5sXWZojaJEW805mRsmY7ASy
G+Sx6MieHRzcsRkIKgTYD39D1I6eVzFj+F5I4C7xxOWpZ0rMHP9PKUgcUtNb
/pdl9PCW4E6xePHMmVyNu0+oPSgkC7Whrj1PP6mcch07I6TN6GQS7d3KWWWWQ
GY0D0dL0WTqtY8eLjEkQc/43+HbZ+vj+GfmfJjkrynI+2jCMR+x5yDfwSfn+

u/DTimYkUfF1MCTghLumXU605S6fJj41DBP8Q1dGpOn1CdWh1JHd5xOPiU7Y
nu0ht1fVHPERP2XgOr1SiK0BJeeESZUinTj8tU7A62kY9OG44j3YDWJtLMdG
g0Dt7pARdNgGSBnLI45Ruer3y4cMmKzblo0mXhlskH14ZAHxCCH0cUjIAvPM
W50y3sepjIPNH04mvawOkz5JTEpeaA/5TfTeWpeDIm66UMhOPS/itZbwgxmr
GQdF1ERlxy8h683UAj+WKPi+KJE5Qe5L78Pw+RFyOjXqZrDWJy9TtGlyyz35
Ps0xh/DznxjJYAeLq8Yx5DGJsPX+FziOJx6kh2YUS0TPqdmCXTEXryxP1c/S
Slmaj5dn+FevxHHksirccPXHpzogICe8bdWdxVg+LPnpxjf1qAljRcsTCevK
ZHTRppAjw3G2Yi07mM2jYTEdO7tiF6y4eWpIXUiR9zzaOyZ3ftlj5YB6cH8w
+c6Pn4scj8lfRw9DklqXjaDSda/F6D6PpJ9NirbVvVI6/DjF3fufDxdDOPsd
v2GUuS4q71wrwqcrXyW5dsy5x9d+l+qTti+JlmT2fpj+G33c5fhp7G21XEj/
ACKafDU+QmHE6P1Ob8LJ5i+L1fQSxajh9FbrRmZVvhYPwvqZdPmEo6l+vx/j
cAKyRIL8N0+U4Mgn4F+7wSw58QyyIAkPtPZHkx0YvxXp8p2iVH2vbGcZaxIL
8p1WLFcRijNx9n8TzwyxfDIgtZIM+0nMYwZSNAPyf4h18uqmQD5Bw45euzZ
obZSsPlyTLsd3S9eeniYGIIH/F9lyl1uWYoyO27DzX3KfejEvYMskpakkksE
dk8ao7e9EMMg7vnZn08ofMzco6Vlxixy9hJAefB3ejkUWm3qZzLgS6zN6MkCr
7sKEzOMad3nkb1akWQ0o2qQFKAKQm0IH/9Dw/wAQhtmS+e+3+Kx1t8UsBrgl
tyAni31MovUPjA0X2jITgCPBxbVDYxawwEjqaDKADu07tqc7dTql1WXb6e47
Q4zkZ6yNpyQljPmYa3iNUPLYxykPBsYZCHqfZcpkaWWMqU6nZ+HG+eXpzx2y
eLo5Rhk9hfR6kWAQEmdlg5bTTn6huqaJkdKdA0hQOpd+rnAw2jl4ziyCqGni
90Pw6U5RGWQjGX2nDYPIB2xIPBe/8OkBYkSB2Ae7r8PT4scYYfMRzJ4cBICY
2aJNLANNm/V4fJEwjLcTzJcXVRzD0OqGvab19Uc0xcpACHmfnsuUznuLo5vD
U7up/DMmPzQ80PGLjj/C8uX7H0vr9NkOPpBlxayB80Xv6XrpZR5sZj7WcQeN
i/8ALdvXJQfRw/gfTY+RZfTh1GPIaBF+DsAGwag8fqehxQgdkQH4/DiBzy9j
+iZ47okPwWaJ6fqZe9BHSYgDV4OryGPDrlymeg4eXLEyGqSKdEDugC0Hk6aX
lp6gXQCm0KgachxNu0WJ6IGc9Q+j+GCER3I848N4xQtzZSjddT6U5MOMVEvl
dSLnp3eLEZSlpq+1HAc8oGcaj7HFa8WXNcqDII0YERK9X1o9B1U8Y3zFEePw
ul/DdxqU6j9ljrp5MljjOS48O9TmsDy8ul4pkSNt9D6gy/yZUZc2xONHU2+j
+zQgYEA7dDOSwOeMyYdZgmPNKQnLvt8z5+XFOEBkl8p7v02PEIZj6fwSDn1G
AHAcmglgfDIIPdT4bN8TEvB7uuxYsMtJbi8GSQIRDTaNcm9KTt7uECQbD0E7
nLOiJu30/wAP6M9VLXh8mXI0fofwPLRpy6yiWvxX+8e7g6HHhGgeoRA4aCXj
B4m29QUmkotEGk0gyA5YOeA5IYXi+hptD5P4vhAx7g+h+1Y/4g8/WZMeXERY
4aE2nJ8FI50fR6bPvwjFWsTy8GeO2Rp7vw6BlT9NT1X0N9apMzIDXu6ZMUhD
f2ulljixxifiGje04vDAqOAYl9ouLnkxmMQRrb1YidIUwO7/S558ZE9OCN
yDWBhtull24Zqjfldsct26B7uVaUOUZAa5Zlobau9K4Qalplj0lyAfS+Zlhc
qfWMdK8Hlz4hDH6neRR0rqcmMVw1MpxiwiQ0pGzE6rYprRcgA1CKYFluJAOq
kWdGIIV09KR4d8fRTmiSjlWiX1sf4bfL24/w+MezJJyP/9HP8Vw+W35mQov2
f4jDdAvx2UVIhgM31+llvxV4PkPo9BPQwc20KjWmTobdNup7MkWxanO2g7jN
J0UBqeHICARy61ZnFL/eDASnrxTnME6vVj6fKNKq3rw9AZ2b4cydEnEnFgxZ
c3mjHQPtYOMMPNmkBGvhfJlkyYiRZFaNHqiYiNOYLzO8HpRkO7WLVrsGP8A
tQB97wdP0wzx3E1rT04+kjEE9x4u0Q6YdVDqobZc38MA8nWTGOVC4iu7phn6
OYCFa+K/iUCSN0txPZW0li+jHr4NvJDni6XITYHDp+F5BkgYyBNjSnsxx6mR
lgAB7XLxOqcGX4jgE8QN8cvk4D0uGN5okz8H0c2PPC4T5u3yetxT9QHldD3d
V1OvtD2Og6+GbdjxREaFxfIzdb1WW9TQ/hfQw9Bgx4zMTJIXMWcGXDPAce7Z
IHzX9p2Zxg8/D0ucyibMd3En3ekllwkwyTsjhwx9ZHqJRxAUB3dMh2T8x4cO
xutDc/i0IHblBiXwvxWOOcvVhqC9/wCIRjmMTDXTzPN1WfCMBhQUiMTxhLcL
HdiWsacIZK8o4b3NNYGOE7bD2xNh5wBbtA1o0hpbqUqCrQGJrhOQd2Qab5CBI
GO+QIO76UunjHXd4+mkIZLLrn6ozlo83MnWqwOjp82HpzuyOuX8cHw4o/S+
VIG7UuMxpbqDDOjN1/UZL81ex498swuRJLZliRfdyM4wvY0heHNKM9sjo/R9

NHKcYmT/ACweH5U5DKQk/Uzd2HDD0yTCYty9ZMm/4h1uTHIDGaiR2fGzZp5P
iJL6uePr9IJH4ocviyctsyed1ltyxw3RL05tXnxT2utjdcTEEWL1wllG3LPE
E2O64ZV5StVJ00cEz1L6X4Xl2TDxTxbS1GQhwkyWrJ9yeuxQiCS8eX8ZhH4X
5X1SeS1GVvJolcqm/rPoP+tMuQ+UPX08M+Y6mrfn4ZZj4Q+I0/UZh3L58xM9
IK1Xw8Kn0cfw+JHnJJeHrfwvHEWJEOcet6mqAJ+TxdVHqs/IkyE16KXy7f8A
jnlzMP15ILV/0HI9TiGPiTwyySHcvoz/AA3OdSC4ZPwwLHkF9FcNTja1XoeV
KT6fQ9TEERL5+fBLEaLljkYyBe66nF4n2fUY4YsRnW6M/wDmPk+XhRv32fRw
dTLqOm26XCpV/E8OQjLlzlppyYcMtsGQa3eUu2aB2GJ5gf8AmvNu9Q2RT0ep
uAme42SRNTnsxojWmslCV/xahkRqwOU8xo8hhDOtp8bSaB1CnzajsvlStllq
7dvxrCMWHEI9xblGpPofjeH1MWKUeKpl3XqfNYDZpcsTA6vTh6OV2Xr/AGO+
WGpPH2k8NDp5zfcj0cYu0cMR2UklNh4/w4y5ezF+GgcvqCICbAQxOfH0kY9n
cYox7KZ0ycoQwNQAE2HkPUAOM+qrhE5H/9L0uqhvg/F9ZDZMv2I7oPyv4njq
ZLAeW9fQzMcleLyt4pGMwR4pqUEerkFFh9CHSHNAzkaAenH+GiOIZZam+Hmi
M8cA9no6SZ9aJkfZq+7DFixZqEQAR3fE6qo5z6YuvB1oRHudSAKLGDJGMqJ5
eaeXfhuV7g8NzAEnMYnTkkjbrgd5AFh87aZmuz62L8Sn0wJABMht8zxQEpef
s6iDk2rODphmj0sNoN32cJ9dkloAnAN+Ubhy+iMPpDaQOXSLxODADKUZ5vg
7vo5svT5hsxae1w6g4/TMb1JR0X4fDMDLdoNNEHgafh3Ux6TITLW+709R+Mm
OTycUwOnwgr0qV1Z+0+b+LkDLtoAgfZYkV2aWbfVfiPrG43o8ebqZZ6B7PKJ
09fRxjkybZcexuhn1W1PpOkIKOEVEDTI8HP0k5ZzHQk+byvo9KAN0M0zXaLZ
wXMZcAJjHSRRYk8uOSOPyg0bfZhk6bZUyTJ8blIxykc2+hp5ZQo2PNbmEaq2
Tk3SidnIA/6Ly9P00sgkRRFd3vhpLaaNvPks6fjgtl0pk+blhODKYsblDf4
nglgyiV8sGVjRpoEqHDUJauRBSDB2hWccxJ1sFolaiiRpYG0DfFhvUuOWon
yvSLpwzTEA4jE6coUI45ZZHhiUZga93qklkUOTq5x+HzF0YMjioi+Gc8BE6c
NTzCQoBynk3ADwaQgv0H4V1OTJARkN0Mb8+++EdYOmykT+GQ2ljB73T5o9T
OWLgSHD42XGYSMT2fZx4cODHHPGXmv4f8Lx/iePbk31QkLcPQw0eLli+eNCQ
+vKi+Z1MNpsKr2KmAAdcKLOO91FkS3ccumKdSFujrMms7J1YL0ZwBHc8YIZBY
sSvA978M/Bz1fmloH6PD+AYMY11Lx/gefy0/RDIKTqpxOPOdTxn/huDHrtDv
HDjjwAu/xQTrfZYLQko0sBbDjKvSbmOxh3NZSBLM5AiqY3M24djDsfK/+XDg
EKIEU/OYobpP2f43g9aAHtfl6n8NHR1Wol5d00OlbRUr8PzehOu0hsLpnEwT
il0jq8ANG30s2QzhHJA+YjbMPRkTIHLuryDUNihcB3XZQuqk0Md61q5lZy81
E/NoxkCD2LsMbQgApLBzjh2LccRGnZ6BFPCHEXGMB6ZTM4CB4jw5XTJyAMNQ
kabQEVOc4DjPqaRJR3GYcpZAHZ9WS4y6iRaTk9j0znAcpdUHkiCRbzTkYyY
lZ3y6glzOQl5ozt02kuoHEoXlRkjTpCDtDD6h1UG0j//0+7p5XF8b8Wx931u
klYeb8SxXESZT5lqGpiiWGkPpuh6z08XnG4Fif4hlkDEGo+DzfheM9QPTt9b
F+EjeYyPAeelZ5c8+TKbkSacyJRN6h+i/Y8UMV0LieXk/FhjIGJiRZdGGY4z
KMBwdy48R3ASNg9nGHUiENnJHDH7Teo5UQWUDqcZhLaeziJcBck5ZTzsrLFO
AuqtGdNdbBGUpChQv4n3D08MV+pK+4t8aHVenh9OnKUcuUCciTFqgM7es6rp
4mQxC9w/5zwdL1uXpgdnBcuo2CtkSK+KTzGcgKDTcl6Z9VkycnvbnKZmblqW
YV3eiQBj5OyNGO01bWGZhMUa9rpjyyGIW5Zvi4pgPZxz2T0kJkvr9NHPmhLC
DGMBzJ8DHkhKEfTiRLvJ9fpl4lkepMgVrr8UmA8jJGPT5ZRuz8Nt4oSyYyN3
B7O34jixzyXg+Hxa6fCcWkfNuHm/wo5pQ8SsOMRIJOob68nfGzcKtqOKI+I0
XfJ6BwkUTID4mwak8D8Wninj0Go4fKwyEo+19yPTetimK/pL4UAcmzjlygnJ
pqXM+DuC5kVJFOrGAA3EuAm3DVFNJmWlRd/TJDznyyQO6JsPB1WcA7at6ZTq
NvmV6s0QHqSKYEfad43kHI7OUo7uOWgck8ZFRFFxknabWRA0KIZ23A0QWEop
9R1OPfGE8XEhw79TjOfpAZfFDQvn/g3VZlakbo4/sl9Lps8eryTjIUJDQPPC
TLR87OAGoeHOX18+PZlXpYvBlwk8MT6kk8y6dRMS5WeGUXOMTb0NpnREyOnl
RsPJek+WlpyMg5k3En0H4N1MYGiX6L9rx/xB/PY5DHh1GeR7stiY9tPc+8PX
Y+8gj9vxnTc/ExkT3fW6HHjmfMXja3FHSv46f+R9CeqhV24T/EcUeS9+DD0+

3Si+Z+J4+lJxVvLIZJWfD1/6P+kCyMuz4r3SZfi+Ed2P+ucZ4BfLh00Jmw9E
emiHuqyee1KJwgdX18uoG2ApzLJnIlz4D0+kAmqeiUBdEcY6YB0EBEU7khy
lIOicUiWo04yyAOcuoAYJSOslgyAeGfVjs4S6kIE5dD0zmAcZ9UA+ZLMS5mR
KGJ3y6vvcJdQS8pJdscARZQVZOvDIS5ay9PliwNGOhiJZYxPFv3/AOzYzDZt
FUjaqfm4xE8uZgRKn2/xPpB08iY8PmdNjOXIAitHrdD0fqRsvN+JdBtFxGo5
feiP2fG8s57o3LlpqD5vBDxeqoh5uqyiEzteSWeUu7oh6cssYuR60Q1D54uZ
d49KZclH/9TbpJUad+siJQfPwS2yfTyDdBMHxfUx2zLg9/Xw2zeFgPT/AAmM
cWSx730+o/Eckp7o+v8HpTWQP0//AFdCMI5ZGweXLmQzy5dRInoSdWfSnKO6
jQfosXSYS7AFEAOU54oCeMkUjDPnjhkBZenolgZMT4OEsupXFkkDcRq6xML
imejuEBVahE8sJgRka11cfQy5pHcWv2OIBBNmkdJZzTIGTy+YPXATIE2dv8A
heDbR00e3DOMNZ+a2EquipGUZcmMxFbXzX0pjHOxImL5xluhw1HQQ9kZR2amn
jSiG2LdfIR1A1tzhKi9GWJ2aglp0css4mEKoPqdLkEY/CJGJ1fC6Qx3gTkY
x8X18AJulxy8n8TGDv6rDlkBkyREldoh8qHV5BlmPzfqchM+n3EjUPzeGAwi
Uux0aYep1zliRla2jHMSILcNCHqHowgO+jkOpjA0I6HysKeSMk4eSB7vh9XC
ePOd/L7ssf8A4RsOnd4vxnDG993IJEU7nJVCyXEHW13XEIDTRtDzPfiw0LfO
xmiH3MUbGk5aCJaB86RuT6EoSjw5MEonhhScsqg8mKew2+hn6esUcg78vnR
gZS2hEN4SEJbonns55Mgskcl0n00oR3F5wQOAgXDdPQllil+LR9b8lw/tEzE
mn0fxP8ACYDHugdQpB8uleGr634d+HHq47ohwx9KBevZ9X8CzmEpYfmGSETi
6KfR9SIHWMxTnAnpeo9xfZ6zDKO3KdTEvB+LYwJxyR4kHMBksZ/iuPbk3jiQ
t8uchEW+7ml6roxLvB+dzG9AmIjnE5sua9A80i9OLCchJcMsNhoukbSwNMWQ
7aPCDkgHbFEGO15MsKNM1Z0xSk2gDINRD0/sGXmi1+F/E/ZQiNo0c2wOFrtH
xf7JIHYvRghkx3oX6wwj4I2R8Hm3JFn2R83DL1EeAXHJDqMhuQL9VtiOzz9V
IRi5SScwaf5F3geV0kqFF7DIB8n1qkSzPqz2etTm3B6sswDzT6sB8ifUyJ5Y
1m9CqWd+Trh2eWfWEpJgFauM8YDJRv23EsBzyku4yYqnp6TGMkqazEEwxk1
lg00fQn0ezUM14uTokoPPj0xly+h0/QxmNU2A9fSRMpKRxPH63pfROndwmRj
o/VfiXQGcNw5flpYzdF0Zg6OkY7ZCQ7F+uh+NRjjoV+GiTilo9J6mRCNzB2
fiXXS6mVdn0PwPpNx3yD4OGBzZAH7Tp4R6bD8tUyamfXnUQHvfL6vL6cKeo5
DMmcnwwxHPuNBpo83LPfllgCzQV7Ohxb5WWmTq6PoSdZPswwwgKcxMYhTjPq
h2bBD//Z

---=_linux46186e8c--

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?.....PICS

Posted by [Kim W](#) on Sun, 08 Apr 2007 04:27:54 GMT

[View Forum Message](#) <> [Reply to Message](#)

This is a multi-part message in MIME format.

---=_linux46186f4a

Content-Type: text/plain

Content-Transfer-Encoding: 7bit

I'll try again with the pics....

"Kim W." <no@way.com> wrote:

>
>
>
>Hi.
>I second the capacitor/regulator idea.
>They are cheap and easy to replace, so why not give it a shot.
>If anyone's interested, I've attached a couple of pics that show
>problems that I've had in the past.
>First pic shows a capacitor that's been anchored to the circuit board
>with some kind of contact cement. This is common practice.
>With time and heat, this goop can become conductive.
>If it was blobbed over exposed wire links or component leads
>during manufacture, the conductivity can cause the equipment to fail.
>(Happened to my SPX90 some years ago). Just scraping it off or
>carefully cutting it with a scalpel blade fixes the problem.
>
>The second pic shows examples of bad caps that were released, in
>billions, onto the market, when (allegedly), an unperfected
>formulation for higher density (smaller packages/higher capacitances) was
>the subject of industrial espionage, and stolen.
>So a huge number of motherboards and other equipment has electros
>that dry up after only a couple of years, (depending on how hot
>they get).
>In the pic, the cap on the left is actually bulging on the top
>of the can, and the one on the right has leaked a brown substance
>on the top.
>These should be replaced immediately if you spot them, as they
>WILL cause failure.
>(The pic is actually of a friends' Dell mobo which has become
>flakey....spontaneous rebooting/blue screens etc...)
>Kim
>
>
>
>"Edna" <edna@texomaonline.com> wrote:
>>
>>
>>Its possible, but not likely, especially if its not a new unit, which =
>>would be more likely to have a defective component. Something caused a
>=
>>current overload through it to burn it up. But apparently not a direct
>=
>>short which would have blown the fuse as well. I've seen many leaky =
>>filter caps do this - these are the large caps that filter the ripple =
>>voltage or small ac component off the DC. A blown voltage regulator is
>=
>>another likely suspect, as far as the PS itself. Can the PS run by =
>>itself w/o being connected to the M80? =20

>>
>

---=_linux46186f4a
Content-Type: image/jpeg; name="cap 1.jpg"
Content-Transfer-Encoding: base64
Content-Disposition: attachment; filename="cap 1.jpg"

/9j/4AAQSkZJRgABAQEAAAC0AAD/4R87RXhpZgAASUkqAAgAAAkAA8BAgAG
AAAAhgAAABABAgAVAAAAjAAAABIBAwABAAAAAQAAABoBBQABAAAAoQAAABsB
BQABAAAaQAAACgBAwABAAAAAgAAADEBAgAcAAAsQAAADIBAgAUAAAAzQAA
ABMCAwABAAAAAQAAAGmHBAABAAAA5AAAABQEAABDYW5vbgBDYW5vbiBQb3dl
clNob3QgQTQzMABAdxsAECcAAEB3GwAQJwAAQWRvYmUgUGhvdG9zaG9wIENT
MiBXaW5kb3dzADlwMDc6MDQ6MDggMTM6MTI6NTYA AAAAHgCaggUAAQAAAFIC
AACdggUAAQAAAFoCAAAAKAcABAAAADAyMjADkAIAFAAAAGICAAAEkAIAFAAA
AHYCAAABkQcABAAAAAECawACKQUAAQAAAIoCAAABkgoAAQAAAJICAAACkgUA
AQAAAJoCAAEEKgoAAQAAAKICAAAFkgUAAQAAAKoCAAHkgMAAQAAAAUAAAAJ
kgMAAQAAABkAAAAKkgUAAQAAALICAAAGkgcACAEALoCAAAsAcABAAAADAx
MDABoAMAAQAAAAEAAAACoAQAAQAAAIACAAADoAQAAQAAAQOABAAAFoAQAAQAA
ANwDAAAQogUAAQAAAMIDAAAPogUAAQAAAMoDAAAQogMAAQAAAAIAAAAQogMA
AQAAAAIAAAAAowcAAQAAAMAAAAABpAMAAQAAAAAAAACpAMAAQAAAAAAAAD
pAMAAQAAAAAAAAPeAUAAQAAANIDAAAGpAMAAQAAAAAAAQAAADwA
AAA6AAAACgAAADlwMDg6MDQ6MDcgMTM6MDE6MzgAMjAwODowNDowNyAxMzow
MTozOAAADAAAAAQAAAL0AAAAGAAAogAAACAAAAAAAQAAAwAAAKIAAAAgAAAA
YFQAAOgDAAA
AA
AA
AA
AA
AA
AAAAQylIAvAAAEAAAGgCNAAA4AgAAOAIAAAAAAAAQAAQACAAQAAABSOTgAAgAH
AAQAAAAwMTAwARADAAEAAADgCAAAAhADAAEAAACoBgAAAAAAAAAAABgADAQMA
AQAAAAYAAAAaAQAAQAAAGIEAAAbAQAAQAAAGoEAAAOAQMAAQAAAAIAAAB
AgQAAQAAAHIEAAACAgQAAQAAAMEaAAAAAAAAASAAAAEAAABIAAAAAQAAAP/Y
/+AAEEpGSUYAAQIAAEgASAAA/+0ADEFkb2JlX0NNAAH/7gAOQWRvYmUgUjIAA
AAAB/9sAhAAMCAglCQgMCQkMEQsKCxEVDwwMDxUYExMVEExMYEQwMDAwMDBEM
DAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMAQ0LCw0ODRAODhAUDg4OFBQO

Dg4OFBEMDAwMDBERDAwMDAwMEQwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAw
M
DAz/wAARCAB4AKADASIAAhEBAxEB/90ABAAK/8QBPwAAAQUBAQEBAQEAAAAAAAAA
AAAAAwABAgQFBgclCQoLAQABBQEBAQEBAQAAAAAAAAAAABAAIDBAUGBwgJCgsQ
AAEEAQMCBAIFBwYIBQMMwEAahEDBCESMQVBWUWETInGBMgYUkaGxQiMkFVLB
YjM0coLRQwckIPw4fFjczUWorKDJkSTVGRFwqN0NhfSVEjI8rOEw9N14/NG
J5SkhbSVxNTk9KW1xdXl9VZmdoaWprG1ub2N0dXZ3eHI6e3x9fn9xEAAgIB
AgQEAwQFBgcHBgU1AQACEQMhMRIEQVFhcSITBTKBkRShsUIjwVLR8DMkYuFy
gpJDUxVjczTxJQYWorKDBYy1wtJEk1SjF2RFVTZ0ZeLys4TD03Xj80aUpIW0
lcTU5PSltcXV5fVWZnaGlqa2xtbm9ic3R1dnd4eXp7fH/9oADAMBAAIRAxEAA
PwDiczVwxAPe7Ww+DfpOXZdLb+1+gV1XM9XafQsO4NI2D6XqRY/vX+YuUpXR

TRZvM32e4k9wfitv6l5zcf fluxby4V3QWBok7xw3Z+9YoMsuLUfonRsRx8l13
lsscSpj+gZWA+WdRwhLdzDJsQpQ1bHta722Nbt962umOr6gzGcGS1rC5pnVx
sDXMZ/Jqqodsfu+mo5Tun5Quzbsa3Ge39FRbYDTYdki0B9b/AH+7+V+kWL9T
+rMxOqMxr7Sa7a3Vtj6lcx2+n2/8U9zE6M+McJFdCxGNajzbln1OxcizMr6f
nA5TXFxx3V7WB4/wbbvpe130n7FgZdDr80vuDgalqyGPnd6jS4Gqfa76Puf/
AOfF3PWBRgZFPXqHRTW5rOp1VnV1Dne3NpH/AHJxXv8A0n+mp/qLkft215r8
m6l1j8uyx4yHD273WH3RPs/QNr2sVjGCDwhjJvXd2cXo9HU3NFVbcOqshj3A
S1vGr2f6RbFHRem44EUNkcvsaHOM/uyI0NzG9NxntAixm97j3LzK0WDeQ3aX
OJ0A5/spkpSJIXCms/EwnM2vorcGjUFjf/Mdqzeo/V0U0G3GkW6OGI4S7aRu
3ssd7m00/R0v+mtzulmKXOaQ+0xLjq1rgfzB+c9QedCSSTM7jrM/1k0SIO6X
jem3U0dRxcM+svZQ4va+fcGkOY7d/V3bti6PqdLXVy2CwiQfEHv/AGIm5PS3
2dRv2FtdTrNXPBDP5v7TI/R/0P03/wDGqwG9Stw6m1hoprYWC0yCdpO2ZG92
9n8n9GhzELEZ7Xouxy1Md3j+r9OrJc6lvpWkES3SfuQ/qziWY+dfa8zOJdHc
8N5WIIYVITbKnvNpkkOdyAf+qVPozXNy8wO5GLZr5SxMhLSrtMo63T0EN9HC
HhWTHyCv9PyziZAsH0To8eIWc5zgd3Dj/AERKLW+GgqQD81h/Y9oa68iqfpMs
Gh/iuC+vFr8CvGDeRcRI8A0+5dN0bqDmn7K/3N/MCzvt0d3VumbqQDfik2M
aO4/PZ/mo8Otovo8103reLa1td1gx3EmNT6RP724bnUu/fZtW/RiZdjPUrab
Ga++sh4On/Aut/6S43pf1O+sPUQLKsd1NDubbvbp/wAU73PXZdJ/xe4GNU12
Xfc+7uGvLW8R9Fm3aj9EP//Q57Lota/1Cd28kNYzUgfR2OaPoud+YxBxKbjl
MqxyTY5wLiwF2glLjWG/S2+2ti7pvQOm2WI9pL6CCA7dtkz7m/oh9Hb7fYhb
+pwcXpOAZp1NbnAvbpuj/Ceo/wDk/uKCEJdaDayZYaiNy/AOVmPeLBkZ1T22
vY2aXagB0scdm7063Ob/AIP9J6dv9hc5ndO/ZnVamxuo8PYQNNp+C7h1DKx
jDKsruvZY4WOkOAFgM7y/wDOY8MsVbrvTz1XFY/BYLL8Z4LbdrvSj85j7Wj9
391LUSoA/wBnRjFEW4/1ktYzoZ9O5zm2kDSwlpAT8fd/bWVhXNt6bjVWGK3N
LR47hMBF+sTAzH2Osa2zRza31tNkT+bkshtzW/yq/UWViunAFZkhlij5yYc1
Wly9QLFW72n1W6j6YHRsw+IY0zivsMNLXHe6rf8Avtd/NrqZDSa2aAftSjg/
L9xi81qzacqg1ZDjXc3Wp8DYfzTu3fvfnrW6H1L6zuyqunNb9prdLveZARA
P UeyvK/Mc76FXrez1E+WlyNiv4+S3ip69tkCZhhEbTxCjfkY9DHW2PbWwH887
dXD27nkbdv8ALU8VtGTWLqTbaxxl2uaWvaR9Km1kex9bvpsQOpmj1qsXLYwY
wa6/Jqfy8EOx8av0x7/0lj7LP+spR5eROpWnMBsC43Uciyo35FeW4Vtax9tL
2h9J9Ys2U/pfdW/La37dXjtb/RamW5H84rmFnW3/AFdxs8tDxbZabjJ0DrH6
t/k7lyPvRWUPs6abLraqlAzAqte47WWBrnMf/U/9Rrqvqc8O+r9OHYPURELR
WY0cPUsrs/spnOAcMQNQCvwXZJ6hyurGqq1u4+20hrlkjXzVHEpNeRmuAhhx
HbXeJLmbmq51ijabOn3u1af0b+DB91bv6zXKI03JfdVI1WCLaqC20/yt7G8f
uvb71VgNbZ5Gw37pH2SO1Q48yiVgNjQiTpPCFnl1b6A3T9E2Vok7miNeJCsR
2+rEd261xY4PH0m6groG9UwK66xtc6yAukaNXONmYPJ0Vqqyr9oV1WiWQAF
DylC6RVtrrPWeq4trBjV/onDnbumUv2r1G6qtzsY0CP0j/E+P8IX787pmJls
sD3ztaxolHaWX1ajcHD5Jx16o+j/AP/RudHtltsotaWtsaLKKQTEmpE/B/W+kr
uf0/l6lbWKsh1FYG2ymtpdl/eb7m7nfv+ouQZ1fJdkVWudJo2ljeBDT9FdXk
2ZvUsJrsE7GP92xvs0l/e0/6bkBvST3YPw8XpTXVMBvybG0dUbd2sdHtcWf
zawvtXWcblpq6651tFhDRL5bXP7ja9ldf+atvpvQs1mFY/lt23AyGRvaGx/h
rvzf7Kj9YsRmR0u6trmXXY7N7thD4LeQdijycVabdWSFXR3eRuquzen5TXH1
rKCDucYI2lzPb7fouWNgDdXk1u5jdHwC6vplFtrqxSwvL6yLoHNcid+7+U5Y
P2Q4fU8igjUNd9wPt/6tIS189VEfg57iYLDIP5fBan1RzL6eqEstcw+i8CD5
tP8ABZe0h4jg8DIXfqyY6txzXYI+StYybYJjQ+T2d/UeoWkP+35FbgNp9N8N
l/l1x6b/APq1Cipoc60zZc+C+5/0jHGv7rW/QYq99rqxSGQTbZsl3AG1752j
bu+gj473i0tc4uBYHRtDQDu2qcnRhAcPqbR+173AtD9tT2nSSCCxzWDX933u
b/39bv1dttd0vG9MIOPssxuA8lz32WNLW+79P/22y5YvVd7esajc22gbgf5L

ntb/AJv+v+jf0vRMAtwKBaN1T22B0Egsc10tg1lv0q/o/wDF/wDCKrzJFDzb
GlfkHnPrKcyxr7cmz1iCHU2gQCxw37NrW/R2/pFQ+rjXu/aL3d6a2jv/AIRd
n9YsRgxbKwCRdvc0AS0QNzwY9rf0v6Rn/GWLIvq9SW0dS00/V2sPfvz+VWEh
Rpl4Tdun1Bh9VhI4qYPLlxSxhB07qxnSjvAaNGtamoqdPHJUkT6VpGqcNBgH
SfyqOL7s+x5Gjf4I5qJGvLdfuVbCdBybPAEymkpAdTorsS5j8h9lfcXuG52u
gOm1ad2S8sDGgNH8lZHqM7cBhOm6TPxV+OCNfikZFHCH/9Kpn1YeNi4+b9Xs
f7dS9xAvmS17Pbc25z9rnv7C0vq5l33MdjWOaH1/pWAH2hj/pfS/dcs8dRb
ThV4V1fp20gMds+gCPz2tb7f0iF0zD6szqjLcbGfbQxwcHH2sLHn9lwOdt3f
ve1Nu9V1USHp83p4zD7s11dLgn1G67B/V3OaxDqHQsbGNPc+6+2WOBB2R+8
58NZt/4taWTiY99DqMkCqp0GXHa6R+dXW2XblXrbg4v9GxwXCIssMu0SIVUV
Rvo82zDvwuluzKnAek9tT2tcSSC9lb28fQs+k1C+s3TbKM3FzXNO3laWPce4
cD6T/wDX89WsrNzLur2dFc1vo9Qcw1WNBAreHC1zfTn6H6NdBThXV51nT+oV
/bsJ+5+Lba0Phrj6jq7f3XVWweooowJvXY7+C8yA+ofJWQbHMdpzofFWOge3q
9B/eLmEf1mub/wBUus+tH1NwKOoDIxrnYdOQ0u2wHsY5v86Tvc17a3N9/wBN
YWPPhdJx8mtjsq7Js9VjXBlJpEyA39Nc/1dv8qqtWlZAlw68Q8D+bERY8Hevq
e5jCwbnV2NfBMcbmu1P8l6sY9dxc22xuwFpY0amZLXbt0N8E/wCsMkVNFg4B
d/Oz/wAY79G7/tun+uoBr3uLbGuYw/T3kbn/AMj2ud+j/f8A3/5tWDLTXRHE
dWpkV+r1FijTDbKC2p0xuDX7tzhHua5382xdH0Jov6UK7anXVVWuYCCBOxwd
ud7m/wCFWLmyMzGZ6ZddYxwo8CQQTjt9L/mW/6T011/T8avp+HXQRqxu1w
blmx36S303N/lu2qhz6rxOl/wDSbWEdkOQacip9EFr3NMNclJj/AKpcT0qn
0aUOVO0lycSn/p2rvsk1mwvjaGe8iJI0+jp9Jcj1GkYufYwaDL6nglvaQQ5/
8VBikSGWWyfJD2fabq2tsfW5gDHabh+c0H83+srGM3HyGV5FM+nYJbPl/ea7
+Wx/sco2isMzS8tY1twB3dxt97W/2Ssbo/WLBe/EFTt1jnPayCAHfSdt/wCM
r/Sf10/1a0xSIBF7F372MzS9wOsaLHrdsWmp/BgifitHJtuGMfUZtJ85WXZI
6a8f6RzW/e5Ojdap06Oz04enh1s/kj8ith0jTVAYIraweA4RRIA1mE4oD//T
1un09ENFOW2p2RkvqaQ54B2k+6Jd7fb/ACGLQZnZAn0opk8tEvj931Xbn7Vg
fVa+u/plQbJFYNeVmt9q366ieFDxaVsya3ugLSSXHUzqTqUwaYPdXGY+8Ok
6BSONW0bjJQtTww1iuyMHR2Jm0fTr22AdjtMOB/aaV2OD9aukZeOLPV2PP06
jqQf3Vx9d6K7qNm6oxdRWXmb+8CdWrD6lwurO33mSHRo4a8WM+l/bT4S1IRO
NxBert6g/Lz22MYIra5rGWCQQfpixpH+EZ+Ys3qP1TxM2belZRwnHUYt7fVq
a4a/oX/z1TN3/Gq3gVPFjPTZuNcO2cCP/M/zf31Zu6n04uDay22wae32aTta
3f8A6Td7GM2WfpFFm9yOTix70OIjgBw6/Rqv6Zk0t3PD3aDc6slzZj3ce/6X
0dyr4rMq81Px8QkWlstdudaGu7n2imt1c77N1i6TE2uaHse5kgENfoYIDv8A
OVp7mBhPrNkRt3El+6fzmfRc1GHO5BpLHHiHXb/mrTgH7xrs5+H0pITq77wL
r2S6pwEsq3DaSz96x30PUVrefoD6epazTdp319qm+wTz6ju54H9ZD3FriQRL
oj4qvMyyTmP/y/qs0liloKFewkdHv4n95cj9ZHWnruHXcWNqry8a2oxBc
0bt255d9Nnua72rq9znA9/FZX1m6EesdMLKtMqoGyl3BkD6LVJjIB89FTFh5
8WYd2bk9TyKn5mNTk3Y/o1Etk7a7K5tZuftu3eg9ja1T6jl5WVc7lXqKum1Y
oaxlYBqsdB/RPHql1mW/3e9/5IS0/qRi2YvTsjHtfutGS9zjxlC2qHfgtHqu
BXIUuY4BzwPa53j8U+RokVdME8QmL67uWxwfhMvBJ9Vm7XX5ldgmjHr/ANJc
z8BuUm0Px8CrFclcxnHhJPt/sp3geviV+G95+Q2hOC/p9HZAcRB08Cnaf00T
lgaef8lPMN/10SDLHO3EjZEAj6SBOyqf/9Sp/i/yfUZfQ4w5jg8j4iHf9Su5
9WljYJk915j9Ssn7L9YhjuPtvY5hH8pq9EygGccEKCQ1LL0DM54qc4t4Onkg
uznPO0nTgLNycjaDlnXuqTuoPaRtlCadGWGLiF29BU4HKrdxva9p+IAf/wB9
Vc9E6XkvAyKQzIraGI7XGtzx++HVuZuTdOtttrssbtc25o8JDgayf8AprXL
WuYQ8AgSTIkf9JNi+aKqx2a9FGJgUDGxhuMksr3F730Osvc7c7b/AC7PoKVO
BRjgONTTaPc55Gu4xve3d9Dc5cp1b6xZVlzbph+x47JBdUNr7D/ACns9zWt
/dYh9D6z1CjOqqdZbk0WPDbk3uNm00031K/U3OZs3bk4YpcNg76reMXR8nuQ

dD8EA5eGHWD1WTSB6smNs+7VVH5luP1Qt9QX1OqJdVuaDWazEtPtbtfu/wAJ
/wCk1yH1u6scjqON6DfSbZLXAOBL2tJ9z2t9rdiZGBK4mnp3fWUWe7DpFtZ1
bZY/bug/mMY170XA69j5OSzDvrdjZdn820ncx8Aud6dnt9+1v83YxcLdlRe1
tjfVqx5ZW0PLDH/GMV3odV563g5BhzrHuc0OsLiQGO+le71HMap54ocJI6B
jjOVi+r6ABxyZ4Eij7WU1utdMVguO1pc6BztYPcsz9o0+jWLi4HIPpljNwMk
7XzYC30G/wBd6q1dSym4dJZc0MFpr9WR6ha0x9B+/Y1rPpPVcQkfBk4h5tXP
29O6xVn0mMDqjeZ0FkbtB9H37IK/KcSQBvEwXKti0N6jgZGLkEM+zOdve92j
bAfUpvpqa9uPTTucz6Pr2WMe/wDSU/o6kPDe+6omyv8AT0uNGTWdCyxnoV7L
ILQ66kafwWbfXVlcd7d543AePGqDWPV6kyTIZUPxKs21+myljtHPe50eQDWO
OC39evJ/N2t+4SiEF1XOER4JhYY5QbbdsJ63SJJ+KRCn/9XnM7Cf0nr2Pmsb
toNzH+GjztcA35uXp78c3YzLB3asbqfRaepdLLKmzcG7qbHauP8AhPpu9/vX
Q/Vs/aeiYtjXFkPHg4e1wUAlxVXZmqgfN5vPxHVuleIB5J0Crsbh4tZt2+p
eB7XHUAc+xh/O/ILd+teOKen3Zu6KqSNx7BcvjvORE+p4LW1bfUb3JcNzWT+
b7fcq/MSkaANAFmPg3OTGM8Up6mOkY+JbfTHZN+X6zAdrGh9o7bR9D+06xdO
4j88aHkDwXK4I4symtqu9CiyxlZc0msBhO2z/NaXLpnVmGsqO2tkNAOujdG/
SlyWMgitqP5rOYPPFi7iv8V4D7M+rq1+JINkNftAkDYdttdm7f3q3LQr2VC
toDamFztGaSB7t3K0Op9Kqs6oy+y70LNoDZBebYlvsYP8JVP0WI+HigXurox
zvbDn5OSBDS76HpY9bm+523/AAisifpapjq07cVoyQ3GO4mya3Tt3NJ9rq9G
v9NIXq12e/8AnVi/WjGtty8NwpNbAbGNE7gHM3Nuq4Z79+3+w/euvw8d5zbK
8vHFray51OQW+2XO3/1Pf6vt+n6X6ZZ31rwnvyMPla6ag8tdWBHvc0B1znT7
nPrqZX/YQEvUB36qIeTxpe98l/0mw12kH2jb7v5XtW90KxozqTj7XvopseW
GY3emGnWG7/z/az/ALcWJdbXbfa9ntbYQWg8kgQdf5S1/qxi5FI919Yc37OG
uDgPF35v721jHvUszUSgdHfAsyW2hz2uN59ar2PYzcpexpZaP0m+r/rb/wBl
gY+PeKcnJrZsosAY8WV+8NkerdXo2p72fT2f6Nn+EsWrThYppbdXWxtplzLG
6kkn1O/5r7G/nf4NWcQXPoYb2GmyPc0kOl/tDc1VzMVQXiJ+1zWdDppZZc8i
yxpDxubAPp/m3fS9X2epX/1z9Gq3VjXjZIXsfXEzQKs2ZA8KMgt/wCg5bIN
Ho0MqY4ua0aufBJ/6lqyutZLmvOHksBwL64scAXOI0a7WfY+v6daEZSMkkAC
3OzMiet4OIDu2ucO/dzv++p8cH7VmOb2uc2f6o2qniYVzPrN0tlxl2My2s9
5aA70Xb/AM/9G/6a0/q9V9rw35YEi+220HydY8t/6DVKfTXkFg1vzaOdnCq3
bEn/AFKs9Lyftbm1NgOc0gTwCfaJWd1fAfbmPIMAO+6NP4KXTHjF3+/Y6tgL
DJBdBbura4B22yxqRIIloboqi/wD/1uvx3McwQdBp8Dw5v+cidOxeoMdkY9FI
VOKbPVpsALrCbBNrNksrr2WfQf8Anr53SVXHv4Niez9G5P1cwbaLvtYOc91Z
a63JJe4Tyav8HVtb9FIVS4X9I3DPvxMW21jrn7musYdzmta3c6hrBve/YvLE
kM/DpxfLp/0td04OP1cPb/ncPpfa8X6h5FzAbLbMZ7iJyLPpFvu9jMRp9v8A
161dUOm49OJ6Vcu9JgDbnke4tHu3Rt2/yvavmpJOHtV6auvqsl7vW9/o+9ZG
L619ORXZ6VIILZiQWH3fRIql6dL72WFjTYwSx5iYn80futteBpJnqoL9H6Cs
c/Y8VlrX67S/6IP8qlXOfWHKff0yrIY0usxi6y2oAyWt9lj2bfa7b/l/MXkC
SMPmHewiW30esrOPa0bPcZ0LTMfH91dj0p+Tg3vzb6nHHy2ihg4e4tDrG2w9
zttX5j33PXkSSsTvgN1XVjG47vtj8jK1xcKtFYIBNIDmw6S53qg11Vubt2u
2KxV1SrHoYzJeLb2t/Smr3CB+dv9rPo7d+xeFpKD01/DdeLfoA30ufs3tc7w
BICzcYZVGxoBsaQ+vfXuH77fd7dq8ESTBvouO2r7N1HpmVh4dfUK3h2TiNsa
7SQKnj2tmG/zH7y0PqvTRifV7Brteyt4x6y8OcBBLNzt0/ynrwlJTG+EX3Yx
V6PqvU8qp9pNFb8kPtLbLa2ksYOffZ7Wbv3EMvD6w+qHVtAO8agfymx9JeXJ
J8Oq2T//2f/tIJJQaG90b3Nob3AgMy4wADhCSU0EJQAAAAAAEAAAAAAAAAAAA
AAAAAAAAAAAA4QkINA+0AAAAAABAAtAAAAEAAQC0AAAAAQABOEJJTQQmAAAA
AAAOAAAAAAAAAAAAAD+AAAA4QkINBA0AAAAAAQAAAAeOEJJTQQZAAAAAAAE
AAAAHjhCSU0D8wAAAAACQAAAAAAQAAAAQA4QkINBAoAAAAAAEAADhCSU0n
EAAAAAACgABAAAAAAAI4QkINA/UAAAAAEgAL2ZmAAEAbGZmAAYAAAAA

AAEAL2ZmAAEAoZmaAAYAAAAAAAEAMgAAAAEAWgAAAAAYAAAAAAEANQAAAAEA
LQAAAAAYAAAAAAE4QkINA/gAAAAAAHAAAP/////////
//8D6AAAAAD//////////A+gAAAAA/////////
//////////wPoAAAAAP//////////8D6AAA
OEJTTQQIAAAAAAAQAAAAAQAAAKAAAAJAAAAAADhCSU0EHgAAAAABAAAAAA4
QkINBB0AAAAAA0UAAAAGAAAAAAAHgAAACgAAAAAgASQBNAEcAXwAw
ADIANAyAAAAQAAAAAAABAAAAAAABAAAAAAABAAAAAAABAAAAAAABAAAA
4AAAAAAABAAAAAAABAAAAAAABAAAAAAABAAAAAAABAAAAAAABAAAA
AAAAbnVsbAAAAIAAAAGYm91bmRzT2JqYwAAAAEAAAAAAABSY3QxAAAAABAAA
AABUb3AgbG9uZwAAAAAAATGVmdGxvbmCAAAAAAAAEJ0b21sb25nAAAB
4AAAAABSZ2h0bG9uZwAAAOAAAAAGc2xpY2VzVmxMcwAAAAFPYmpjAAAAQAA
AAAABXNsaWNIAAAAEgAAAAdzbGljZUIEbG9uZwAAAAAAAHZ3JvdXBJRGRxv
bmcAAAAAAABm9yaWdpbmVudW0AAAMRVNsaWNIT3JpZ2luAAAADWF1dG9H
ZW5lcmF0ZWQAAAAAVHlwZWVudW0AAAKRVNsaWNIVHlwZQAAAAABJbWcgAAAA
BmJvdW5kc09iamMAAAABAAAAAAAUmN0MQAAAAQAAAAAVG9wIGxvbmCAAAAA
AAAAAExlZnRsb25nAAAAAAABABCdG9tbG9uZwAAAEAAAAAAUmdodGxvbmCA
AAKAAAAAA3VybFRFWFQAAAAABAAAAAAABnVsbFRFWFQAAAAABAAAAAAATXNn
ZVRFWFQAAAAABAAAAAAAGYWx0VGFnVEVYVAAAAAEAAAAAA5jZWxsVG9uZw
SFRNTGJvb2wBAAAACGNlbGxvZm9uZwVYVAAAAAEAAAAAAlob3J6QWxpZ25l
bnVtAAAAD0VTbGljZUhhcncpBbGlnbG9uZwAAAdkZWZhdWx0AAAACXZlcnRBbGln
bmVudW0AAAPRVNsaWNIVmVydEFsaWduAAAB2RIZmF1bHQAAAAALYmdDb2xv
clR5cGVlbnVtAAAAEUVtBGljZUJHQQ29sb3JUeXBIAAAAAAE5vbmUAAAAAJdG9w
T3V0c2V0bG9uZwAAAAAAAKbGVmdE91dHNldGxvbmCAAAAAAAADGJvdHRv
bU91dHNldGxvbmCAAAAAAAAC3JpZ2h0T3V0c2V0bG9uZwAAAAAAOEJTTQQo
AAAAAAAMAAAAAT/wAAAAAAAOEJTTQQUAAAAAAAEAAAAAThCSU0EDAAAAAAa
3QAAAAEAAACgAAAAEAAAAEAAAOEAAAAawQAYAAH/2P/gABBKRKIGAAECAABI
AEgAAP/tAAxBZG9iZV9DTQAB/+4ADkFkb2JlAGSAAAAAf/bAIQADAgICAKI
DAkJDBELCGsRFQ8MDA8VGBMTFRMTGBEMDAwMDAwRDAwMDAwMDAwMDAwMDAwM
DAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAw
DAwMDBEMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAw
AAIRAQMRAf/dAAQACv/EAT8AAAEFAQEBAQEBAAAAAAAAAAAAAAAQIEBQYHCAkK
CwEAAQUBAQEBAQEAAAAAAAAAAQACAwQFBgcICQoLEAABBAEDAgQCBQcGCAUD
DDMBAAIRAwQhEjEFQVFhEyJxgTIGFJGhsUlJJBVSwwIzNHKCOUMHJZJT8OHx
Y3M1FqKygyZEK1RkRcKjdDYX0iXizfKzhMPTdePzRieUpIW0lcTU5PSltcXV
5fVWZnaGlqa2xtbm9jdHV2d3h5ent8fX5/cRAAICAQIEBAMEBQYHBBwYFNQEA
AhEDITESBEFRYXEiEwUygZEUobFCi8FS0fAzJGLhcoKSQ1MVY3M08SUGFqKy
gwcmNcLSRJNUoxdkRVU2dGXi8rOEw9N14/NGIKSFtJXE1OT0pbXF1eX1VmZ2
hpamtsbW5vYnN0dXZ3eHl6e3x//aAAwDAQACEQMRAD8A4nM1cMQD3u1sPg36
TI2XS2/tfoFdVzPV2n0LDuDSNg+l6kWP71/mLIKcUU0WbzN9nuJPcH4rb+pe
c3HyLsW8uFd0FgaJO8cN2fvWKDLLi1H6J0bEcfCNdyLLHEqY/oGVgPlnUcIS
3cwybKj6tWx7Wu9tjW7fetrpq+oMxnBktawuaZ1cbA1zGfyaqqHbH7vpqOU
7p+ULs27Gtxnt/RUW2A02HZItAfW/wB/u/lfpFi/U/qzMTqjMa+0mu2t1bY+
iHMdvp9v/FPcxOjPjHCRXQsRjWo825Z9TsXIszK+n5wOU1xccd1e1geP8G27
6Xtd9J+xYGXQ6/NL7g4GiKshj53eo0uBqn2u+j7n/wDnxdz1gUYGRT16h0U1
uazqdVZ1dQ53tzaR/wBycV7/ANJ/pqf6i5H7diOa/JupdY/LsseMhw9u91h9
0T7P0Da9rFYxgg8IYyb13dnF6PR1NzRVW3DqrY9wEtbxq9n+kWxR0XpuOBF
DZHL7GhzjP7spdDcxvTcZ7QIsZve49y8ytFg3kN2lzidAOf7KZKUiSFwprPx
MJzNr6K3Bo1BY3/zHas3qP1dFNBTxpFujhiOEu2kbt7LHe5jtP0dL/prcrPZ

ilzmkPtMS46ta4H8wfnPUHnQkkkzO46zP9ZNEiDul43pt1NHUcXJvrL2UOL2
vn3BpDmO3f1d27Yuj6nS11ctgslkHxB7/wBpZuT0t9nUb9hbXU6zVzwQz+b+
05f0f9D9N/8AxqsBvUrcOptYaKa2FgtMgnaTtmRvdvZ/J/RocxCxGe16Lsct
THd4/q/TqyXOpb6VpBEt0n7kP6s4lmPnX2vMziXR3PDeVpZWFZU2yp7zaZJD
ncgH/qIT6M1zcvMDuRi2a+UsTIS0q7TKOt09BDfRwh4Vkx8gr/T8s4mQLB9E
6PHiFnOc4Nw4/wBESi1vhoKkA/NYf2PaGuvlqn6TLBof4rgvrxa/Arxg3kXE
SPANPuXTdG6g5p+yv9zfsAs767dHd1bpm6kA34pNjGjuPz2f5qPDraL6PNdN
63i2tbXdYMdxJjU+kT+9uG51Lv32bVv0YmXYz1K2mxmvrleDp/wLrf+kuN6
X9TvrD1ECyrHdTQ7m2726f8AFO9z12XSf8XuBjVNdl33Pu7hry1vEfrZt2o/
RD//0Oey6LWv9QndvJDWM1IH0djmj6LnfmmQcSm45TKsck2OcC4sBdoCC41h
v0tvtrYu6b0DptlpfaS+gggO3bZM+5v6lfR2+32IW/qcHF6TgM6dTW5wL26b
o/wnqP8A5P7ighCXWg2smWGojcvwDIZj3iwZGdU9tr2Nml2oAdLHHZu9Otzm
/wCD/Senb/YXOZ3Tv2Z1WpsbqHvD2EDTafgu4dQysYwyrK77mWOFjpDgBYDO
8v8AzmpDLFW67089VxWPwWCy/GeC23a70o/OY+1o/d/dS1EqAP8AZ0YxRFuP
9ZLWM6GfTuc5tpA0sJaWk/H3f21YVzbem41VhitzS0eO4TARfrEwMx9jrGt
s0c2t9bTZE/m5Llbc1v8qv1FIYrpwBWZIZY4+cmHNViMvUCxVu9p9Vuo+mB0
bMPpWNM4r7DDS1x3uq3/AL7Xfza6mQ0mtmgH07CYPy/cYvNas2nKoNWQ413N
1qfA2H807t373561uh9S+s7sqrpzW/aa3S73mQK2j1HsryvzHO+hV63s9RPI
iMjYr+Pkt4qevbZAmYYRG08Qo35GPQx1tj21sB/PO3Vw9u55G3b/AC1PFbRk
1i6k22scSNrmlr2kfSptZHsfW76bEDqZo9arFy2MGMGuvyan8vBDsfGr9Me/
9JY+yz/rKUeXkTqVpzAbAuN1HlsqN+RXluFbWsfS9ofSfWLNIP6X3Vvy2t+
3V47W/0WpluR/OK5hZ1t/wBXcbPLQ8W2Wm4ydA6x+rf5O5cj1a1ID7Ommy62
qiwMwKrXuO1lga5zH/1P/Ua6r6nPDvq/Th2D1K3i0VmNHD1LK7P7KZzgHDED
UAr8F2SeocrqxqqtbuPtllayJl181RxKTXkZrglYcR213iS5m5qudYo2mzp9
7tWn9G/gwfdW7+s1ypdNyX3VZdVgi2qggttP8rexvH7r2+9VYDW2eRsN+6R9k
jtUOPMolYDY0Ik6TwhZ5dW+gN0/RNITpO5ojXiQrEdvqxHdutcWODx9JuoK6
BvVMCuusbXOssALpGjVzjZmDydFaqsq/aFdVolkAHw8pQukVba6z1nquLawY
1f6Jw527plL9q9Ruqrc7GNAj9l/xPj/JV+/O6ZiSLLA987WsaJR2II9Wo3Bw
+ScdeqPo/wD/0bnR7SLbKLWlrbGiykExJj3gf1vpK7n9PyOpW1irlDRWBtsp
raXSP3m+5u537/qLkGdXyXZfVrnSanpY3gQ0/RXV5Nmb1LCa7BOxj/dsb7NC
P3tP+m5Ab0k92D8PF6U11TAb8mxjnVG3a9rHR7XFn82sL7V1nGyKauuudbRY
Q0S+W1z+42vZXX/mrb6b0LNZhWPyLdtwMhkb2hsf4a783+yo/WLEZkdLura5
l12Oze7YQ+C3kHYo8nFWm3VkhV0d3kbqrs3p+U1x9aygg7nGCNpcz2+36Llj
YA3V5NbuY3R8Aur6ZRba6sUsLy+si6BzXInfu/IOWD9kOH1Plol1DXfcd7f+
rSEtFPVRH4Oe4mCwyD+XwWp9Ucy+nqhLLXMPovAg+bT/AAWXtlel4PA5V36s
mOrcc12CPkrWMm2CY0Pk9nf1HqFpD/t+RW4DafTfDSP5dcem/wD6tQoqaHOt
M2XPgvuf9lxxr+61v0GKvfa6sUhkE22bJdwBte+do27vol+O94tLXOLgWB0b
Q0A7tqnJ0YQHD6m0fte9wLQ/bU9p0kggsc1g1/d97m/9/W79XbbXdLxvTJdD
7LMbgPJc99ljS1vu/T/9tsuWL1Xe3rGo3NtoG4H+S57W/wCb/r/o39L0TALc
CgWjdU9tgdBILHNdLYNZb9Kv6P8Axf8Awiq8yRQ82xiH5B5z6ynMsa+3Js9Y
gh1NoEAscN+za1v0dv6RUPq417v2i93emto7/wCEXZ/WLEYMWysAkXb3NAEt
EDc8GPa39L+kZ/xli5b6vUItHUtNP1drD31c/IVhIUaZeE3bp9QYfVYSOKmD
y5cUsYQdO6sZ7CbwGjRrWpqKnTxyVJE+laRqnDQYB0n8qji+7PseRo3+COai
Rry3X7IWwnQcmzwBMppKQUH6K7EuY/IfSH3F7hudroDptWndkvLAxoDR/JWR
0Ju3AYTpkuz8VfjgjX4pGRRwh//SqZ9WHjYuPm/V7H+3UvcQL5ktez23Nuc/
a527+wtL6uZd9zHY1jmh9f6VgB9oY/6X0v3XLPHUW04VeFdX6dtlDHbPoAj8
9rW+39lhdMw+rM6oy3Gxn20MchBx9rCx5/SMDnbd373tTbvVdVEh6fN6eMw+
7NdXSxp9Ruuwf1dzmsQ6h0LGxjRj3PuvtljgQdkfvOfDWbf+LWlk4mPfQ6jJ

AqqdBlx2ukfnV1tl25V624OL/RscFwiLLDLtEpVVFUb6PNsw78LpbsypwHpP
bU9rXEkgvZW9vH0LPpNQvrN02yjNxc1zTtyGlj3HuHA+k/8A1/PVrKzcy7q9
nRXNb6PUHMNVjQQK3hwtc305+h+jXQU4V1edZ0/qFf27Cfufi22tD4a4+o6u
3911VnqKKMCb12O/gvMgPqHyVkGxzHac6HxVjoHt6vQf3i5hH9Zrm/8AVLrP
rR9TcCjqAyMa52HTkNLtsB7GOb/Ok73Ne2tzff8ATWFj4XScfJrY7KuybPVY
1wZSaRMgN/txP9Xb/KqrViMwJcOvEPA/mxEWPB3r6nuYwsG51djXwTHG5rtT
/JerGPXcXNtsbsBaWNGpmS127dDfBP8ArDJFTRYOAXfzs/8AGO/Ru/7bp/rq
Aa97i2xrmMP095G5/wDI9rnfo/3/AN/+bVgy010YRHVqZFfq9RZY0w2ygtqd
Mbg1+7c4R7mud/NsXR9CaL+iCu2p11VVrmAggTscHbne5v8AhVi5sjMxmex
XWmckPAkeF7Y0/S7f5lv+k9Ndf0/Gr6fh10EasbtcGyJsd+kt9Nzf5btqoc3
Oq8Tpf8A0m1hHZDkGnlqfRba9zTDXCCY/wCqXE9Kp9GrqFTtCMnEp/6dq77J
NZsL42hnlvliSNPofSXI9RpGLn2MGgy+p4Jb2kEOf/FQYpEhllsnyQ9n2m6t
rbH1uYAx2m4fnNB/N/rKxjNx8hleRTPp2CWzyP3mu/Isf7HKNorDM0vLWNbc
Ad3cbfe1v9krG6P1iwXvxBU7dY5z2sggB30nbf8AjK/0n9dP9WtMUiARexd+
9jGUvcDrGix63bMDKfwYIn4rRybbhjH1GbSfOVI2SOmvH+kc1v3uTo3WqdOj
s9OHp4dbP5I/IrYdi01QGCK2sHgOEUSANZhOKA//09bp9PRDRTItqdkZL6mk
OeAdpPuiXe32/wAhi0GZ2QJ9KKZPLRL4/d9V25+1YH1Wvrv6ZUGyRWDXRzLf
at+uonhQ8WlbMpGt7oC0klx1M6k6IMGmD3VxmPvDpOgUjjVtG4yULU8L9Yrs
jB69iZtH069tgHY7TDm/2mldjg/WrpGXjz1djz9Oo6kH91ZPXeiujZuqMX
UVlzG/vAnVqw+iMLqzt95kh0aOGvFjPpf20+EtSETjCqXq7eoPy89tjGCK2u
axlgKEH6YsaR/hGfmLN6j9U8TNm3pWUcJx1GLE31amuGv6F/89Uzd/xqt4FT
xYz02bjXDtnAj/zP8399Wbup9OLg2sttsGnt9mk7Wt3/AOk3exjNln6RRZvc
jk4se9DiCYAcOv0ar+mZNLdzw92g3OrJc2Y93Hv+l9Hcq+KzKvNT8fEJFpbL
XbnWhru59oprDXO+zdYukxNrmh7HuZIBDX6GCA7/ADlae5gYT6zZebdxJfun
85n0XNRhzuQaSxx4h12/5q04B+8a7Ofh9KZU6u+8C69kuqcBLKtw2ks/esd9
D1Fa3n6A+nqWs03ad9fapvsE8+o7ueB/WQ9xa4kES6l+KrzMskzKf8v6rNCI
iKChXsJHYRB76+J/eXI/WR1p67h13Fjaq8vGtqMQXNG7dueXfTZ7mu9q6vc5
wPfxWV9ZuhHrHTCyrTKqBspdwZA+i1SYyAfPRUxYefFmHdm5PU8ip+ZjU5N2
P6NRLZO2uyubWbn7bt3oPY2tU+o5eVIXOyMairptWKGsZWAarHQf0Tx6pdZI
v93vf+ZUtP6kYtmL07lx7X7rRkvc48SHNqh34LR6rgV5VLmOAc8D2ud4/FPk
aJFXTBPEJi+u7lscH4TLwSfVZu11+SHYJox6/wDSXM/AbJtD8fAqxXCHMZx
4ST7f7Kd4Hr4lfhvefkNoTgv6fR2QHEQdPAp2n9NEyIGnn/JTzDf9dEgyxzt
xl2RAI+kgTsqn//Uqf4v8n1GX0OMOY4PI+lh3/UrufVpY2CZPdeY/UrJ+y/W
IY7z7b2OYR/KavRMoBnHBCgkNSy9AzOeKnOLEdp5lLs5zztJ04Czcnl2gyJ1
7qk7qD2kbSAmnRlhi4hdvQVOByq3cb2vafiAH/8AfVXPROI5LwMikMyK2hpe
1xrc8fvh1bmbk3Trbba67LG7XNuaPCQ4Gsn/AKa1y1rmEPAIEkyJH/STZfmi
qsdmvRRiYFAxsYbjJLk9xe9zjrL3O3O2/wAuz6CITgUY4DjU02j3OeRruMb3
t3fQ3OXKdW+sWVZc7G6YfseOyQXVda+w/wAp7Pc1rf3WlfQ+s9QozqqnWW5N
Fjw2yt7jZtDjt9Sv1NzmbN25OGKXDYO+q3jF0fJ7kHQ/BAOXhh1g9Vk0gerJ
jbPu1VR+Zbj9ULfUF9TqiXVbmg1msxLT7W7X7v8ACf8ApNch9burHI6jjeg3
0m2S1wDgS9rSfc9fa3YmRgSuJp6d31fNuw6RbWdW2WP27oP5jGNe9FwOvY
+TksW763Y2XZ/NtJ3MfALnenZ7fftb/N2MXC3ZUXtbY31aseWVtDywx/xjFd
6HVeet4OQYc6x7nNDRc4kBjn/pXu9RzGqeeKHCSOGY4zIYvq+gAccmeBCI+1
INbrXTFYlJtaXOgc7WD3LM/aNPo1i4uByD6ZYzcDJO182At9Bv8AXeetXUsp
uHSWXNDBaa/VkeoWtMfQfv2Naz6T1XEJHwZOlebVz9vTusVZ9JjA6o3mdBZG
7QfR9+5SvynEkAbxMFyrYtDeo4GRi5BDPsznb3vdo2wH1Kb6amvbj007nM+j
69ljHv8A0IP6OpDw3vuqJsr/AE9LjRk1nQssZ9L+y5S0OupGn8Fm311ZXHe3
eeNwHjxqg1j1epMkyGVD8SrNtfpspY7Rz3udHkA1qDgt/XryfzdrfuEohBdV

zhEeCYWGOUG23bCet0iSfikQp//V5zOwn9J69j5rG7aDcx/ho87XAN+bl6e/
HN2Mywd2rG6n0WnqXSyyps3Bu6mx2rj/AlT6bv710P1bP2nomLY7VxZDx4O
HtcFAJcVv2ZqoHzebz8R1biHiAeSdAq7G4eLWbdvqXge1x1AHPsYfzv5S3fr
Xjinp92buiqkjcexL47zkXvqeC1tW31G9yXDc1k/m+33KvzEpAADQH5j4Nz
kxjPFKepjpGPiW30x2Tfl+swHaxofaO20fQ/tOsXTul/PGh5A8FyuJeLMpra
rvQossZWXNJRAYTts/zWly6Z1ZhrKjtrZDQDro3Rv0pcljllraj+azmDxT4u
4r/FeA+zPq6tfiZTZDbX7QJA2HbbQ5u396ty0K9lQraA2phc7Rmkge7dytDq
fSqrOqMvsu9CzaA2QXm2Jb7GD/CVT9FiPh4oF7q6Mc72w5+TkgQ0u+h6WPW5
vudt/wAlrIn6WqY6tO3FaMkNjxJsmt07dzSfa6vRr/TZV6tdnv/AJ1Yv1ox
rbcvDcKTWwGxjRO4BzNzbquGe/ft/sP3rr8PHec2yvLxxa2sudTkFvtlzt/9
T3+r7fp+l+mWd9a8J78jDyGumoPLXVgR73NAdc50+5z66mV/2EBL1Ad+qiDX
k8aXvfJf9JsNdpB9o2+7+V7VvdCsaM6k4+176KbHlhmN3php1hu/8/2s/wC3
FiXW1232vZ7W2EFoPJIEHX+Utf6sYuRZfdfWHN+zhrq4Dxd+b+9tYx71LM1E
oHR3wLMltoc9rjefWq9j2M3D3saWWj9Jvq/62/8ASIGPj3inJya2bKLAGPFI
fvDZHq3V6Nqe9n09n+jZ/hLFq04WkaW3V1sbaZcyxupJJ9Tv+a+xv53+DVnE
Fz6GG9hpsj3NJDip7Q3NVczFUF4iftc1nQ6aWWXPIssaQ8bmwD6f5t30vV9n
qV/9c/Rqt1Y142ZV17H1xM0CrNmQPCjllf8AoOW5TR6NDKmOLmtGrnwSf+pa
srrWS5rzh5LAcC+uLHAFziNGu1n2Pr+nWhGUjJAAatszInreDiA7g9rnDv3
c7/vqfHB+1Zjm9rnNn+qNq4mFcz6zdLZcZdjMtrPeWgO9F2/wDP/Rv+mtP6
vVfa8N+WBlvtttB8nWPLf+g1Sn015BYNb82jnZwqt2xJ/wBSrPS8n7W5tTYD
nNIE8An2iVndXwH25jyDADvujT+Cl0x4xd/v2OrYCwyQXQW7q2uAdtsakSC
KG6Kov8A/9br8dzHMEHQafA8Ob/nlnTsXqDHZGPRZVTimz1abAC6wmwTazZL
K69ln0H/AJ6+d0IVx7+DYns/RuT9XMG2i77WdNpdWWutySXuE8mr/B1bW/RZ
VUuF/Zdwz78TFttY65+5rrGHc5rWt3Ooawb3v2LyxJDPw6cXy6f9LXdODj9X
D2/53D6X2vF+oeRcwGy2zGe4iciz6Rb7vYzEafb/ANetXVDpuPTielXLvSYA
255HuLR7t0bdv8r2r5qSTh7Vemrr6rJe71vf6PvWRi+tfTkV2elZSC2YkFh9
30ZapenS+9lhY02MEseYmJ/NH7rZXgaSZ6qC/R+grHP2PFZa1+u0v+iD/KiF
zn1hyn39MqyGNLrMYustqAMlrfZY9m32u2/yPzF5AkjD5h3sllt9HrKzj2tG
z3GdC0zHx/dXY9Kfk4N782+pxx8tooYOHuLQ6xtsPc7bV+Y99z15EkrE74Dd
V1YxuO77Y/lytcXCrbRWCATSA5sOkud6oNdVbm7drtisVdUqx6GMyXi29rf0
pq9wgfmb/az6O3fsXhaSg9Nfw3Xi36AN9Ln7N7XO8AZQs3GGVRsaAbGkPr38
bh++33e3avBEkwb6Ljtq+zdR6ZiYeHX1Ct4dk4jbGu0kCp49rZhv8x+8tD6r
00Yn1ewa7XsreMesvDnAQszc7dP8p68JSUxvhF92Mvej6r1PKqfaTRW/JD7S
2y2tpLGDn32e1m79xDLw+sPqh1bQDvGoH8psfSXlySfDqtk//9kAOEJJTQQh
AAAAAABVAAAAAQEAAAAPAEAAZABvAGIAZQAgAFAAAaABvAHQAbwBzAGgAbwBw
AAAAEwBBAGQAbwBiAGUAIABQAGgAbwB0AG8AcwBoAG8AcAAgAEMAUwAyAAAA
AQA4QkINBAYAAAAAAf//gAAAAEBAP/hQetodHRwOi8vbnMuYWRvYmUuY29t
L3hhcC8xLjAvADw/eHBhY2tldCBiZWdpbj0i77u/liBpZD0iVzVNME1wQ2Vo
aUh6cmVTek5UY3prYzlkIj8+Cjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6
bnM6bWV0YS8iIHg6eG1wdGs9IjMuMS4xLTEXMSI+CjAgIDxyZGY6UkRGIHht
bG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3lu
dGF4LW5zIyI+CjAgICAgIDxyZGY6RGVzY3JpcHRpb24gcmlRmOmFib3V0PSli
CiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
dGlmZi8xLjAvLj4KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
ZjpPcmllbnRhdGlvbj4KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
Zz4xPC90aWZmOllDYkNyUG9zaXRpb25pbmc+CjAgICAgICAgICAgICAgICAgICAg
ZXRnbHV0aW9uPjE4MDAwMDAvMTAwMDA8L3RpZmY6WFJlc29sdXRpb24+CjAg
ICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg

WVJlc29sdXRpb24+CiAglCAglCAglDx0aWZmOlJlc29sdXRpb25Vbml0PjI8
L3RpZmY6UmVzb2x1dGlvbVuaXQ+CiAglCAglCAglDx0aWZmOk1ha2U+Q2Fu
b248L3RpZmY6TWFrZT4KICAgICAgICAgPHRpZmY6TW9kZWw+Q2Fub24gUG93
ZXJTaG90IEE0MzA8L3RpZmY6TW9kZWw+CiAglCAglCAglDx0aWZmOk5hdGI2
ZURpZ2VzdD4yNTYsMjU3LDI1OCwyNTksMjYyLDI3NCwyNzcsMjg0LDUzMjUw
MzEsMjgyLDI4MywyOTYsMzAxLDMxOCwzMTksNTI5LDUzMiwzMDYsMjcwLDI3
MSwyNzIsMzA1LDMxNSwzMzQzMjtdDQ0I5REM4MEEwNkU4QjQ0MTM1NEQzM0JE
NjU2RjNGNzwwdGlmZjpOYXRpdmVEaWdld3Q+CiAglCAglDwvcmRmOkRlc2Ny
aXB0aW9uPggogICAgICAgICAgCA8cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0ilgog
ICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
LzEuMjUwMzI4PggogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
MzoxMjUwMzI4PggogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
Q3JlYXRIRGF0ZT4yMDA3LTA0LTA4VDEzOjE5OjU2KzA5OjMwPC94YXA6Q3Jl
YXRIRGF0ZT4KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
YXRIRGF0ZT4KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
PHhhcDpDcmVhdG9yVG9vbD5BZG9iZSBQaG90b3Nob3AgQ1MyIFdpbmRvd3M8
L3hhcDpDcmVhdG9yVG9vbD4KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
ICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
IHhtbG5zOmV4aWY9Imh0dHA6Ly9ucy5hZG9iZS5jb20vZXhpZi8xLjAvIj4K
ICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
c2lvbj4KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
aWY6Rmxhc2hwaXhWZXJzaW9uPggogICAgICAgICAgICAgICAgICAgICAgICAgICAg
PjE8L2V4aWY6Q29sb3JlTG90ZT4KICAgICAgICAgICAgICAgICAgICAgICAgICAg
ZEJpdHNQZXJQaXh0dD4zLzE8L2V4aWY6Q29tcHJlc3NlZEJpdHNQZXJQaXh0
bD4KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
aXh0bFhEaW1lbnNpb24+CiAglCAglCAglDxleGlmOIBpeGVsWURpbWVuc2lv
bj40ODA8L2V4aWY6UGl4ZWxZRGltZW5zaW9uPggogICAgICAgICAgICAgICAgICAg
YXRIVGl4ZU9yaWdpbmFsPjIwMDgtMDQtMDdUMTM6MDE6MzgrMDk6MzA8L2V4
aWY6RGF0ZVRpbWVpcmlnaW5hbD4KICAgICAgICAgICAgICAgICAgICAgICAgICAg
aWdpdGlmZWQ+MjUwMzI4PggogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
VGl4ZURpZ2I0aXplZD4KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
NjA8L2V4aWY6RmlyZWQ+VHJ1ZTwwZXhpZjphYm91dD0ilgogICAgICAgICAgICAg
PjU4LzEwPC9leGlmOkZOdW1iZlI+CiAglCAglCAglDxleGlmOINodXR0ZXJl
cGVlZlZhbHVlPjE4OS8zMjwvZXhpZjphYm91dD0ilgogICAgICAgICAgICAgICAg
ICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
cmVWYX1ZT4KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
cmVWYX1ZT4KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
PC9leGlmOkV4cG9zdXJlcm91ZC1ZhbHVlPggogICAgICAgICAgICAgICAgICAgICAg
cGVlZlZhbHVlPjE2Mz8zMjwvZXhpZjphYm91dD0ilgogICAgICAgICAgICAgICAg
ICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
ZGU+CiAglCAglCAglDxleGlmOkZsYXNoIHJkZjpwYXJzZVR5cGU9IjI9I
cmNlIj4KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
ZD4KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
ICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
ICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
ICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
ICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
ZT4KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
bEh0bmd0aD4yMTYwMzA8L2V4aWY6Q29tcHJlc3NlZEJpdHNQZXJQaXh0bD4K
ICA8ZXhpZjphYm91dD0ilgogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
ICA8ZXhpZjphYm91dD0ilgogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg

AAAAAAAAACxSZWZlcmVuY2UgVmllld2luZyBDb25kaXRpb24gaW4gSUVDNjE5
NjYtMi4xAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAB2aWV3AAAAAAATpP4A
FF8uABDPFAAD7cwABBMLAANcngAAAAFYWVogAAAAABMCMVYAUAFAAFcf521I
YXMAAAAAAAAAAQAAAAAAAAAAAAAAAAAAAAAAAAAKPAAAAAnNpZyAAAAAAQ1JU
IGN1cnYAAAAAAAAEAAAAAAAAUACgAPABQAGQAeACMAKAAtADIANwA7AEAARQBK
AE8AVABZAF4AYwBoAG0AcgB3AHwAgQCGAIsAkACVAJoAnwCkAKkArgCyALcA
vADBAMYAywDQANUA2wDgAOUA6wDwAPYA+wEBAQcBDQETARkBHwEIASsBMgE4
AT4BRQFMAVIBWQFgAWcBbgF1AXwBgwGLAZIBmgGhAakBsQG5AcEByQHRAdkB
4QHpAfIB+gIDAagwCFAIdAiYCLwI4AkECSwJUAL0CZwJxAnoChAKOApGcogKs
ArYCwQLLAtUC4ALrAvUDAAMLaxYDIQMtAzgDQwNPA1oDZgNyA34DigOWA6ID
rgO6A8cD0wPgA+wD+QQGBBMEIAQtBDsESARVBGMecQR+BlwEmgSoBLYExATT
BOEE8AT+BQ0FHAUrBTOfSQVYBwCfDwWGBZYFpgW1BcUF1QXIBfYGBgYWBicG
NwZIBlkGagZ7BowGnQavBsAG0QbjBvUHBwcZBysHPQdPB2EHdAeGB5kHrAe/
B9IH5Qf4CAsIHwgyCEYIWghuCIlllgicL4l0gjnCPsJEAKICToJTwlkCXkJ
jwmkCboJzwnlCfsKEQonCj0KVApqCoEKmAquCsUK3ArzCwsLIgs5C1ELaQuA
C5gLsAvIC+EL+QwSDCoMQwxcDHUMjgynDMAM2QzzDQ0NJg1ADVoNdA2ODakN
ww3eDfgOEw4uDkkOZA5/DpsOtg7SDu4PCQ8ID0EPXg96D5YPsw/PD+wQCRAM
EEMQYRB+EJsQuRDXEPURExExEU8RbRGMEaoRyRHoEgcSjHJFEmQShBKjEsMS
4xMDEyMTQxNjE4MTpBPFE+UUBhQnFEkUahSLFK0UzhTwFRIVNBVWFXgVmxW9
FeAWAxYmFkkWbBaPFrIW1hb6Fx0XQRdlF4kXrhfSF/cYGxhAGGUYihivGNUY
+hkgGUUZaxmRGbcZ3RoEGioaURp3Gp4axRrsGxQbOxtjG4obshvaHALcKhxS
HHscozxMHPUdHh1HHXAdmR3DHeweFh5AHmoelB6+HukfEx8+H2kflB+/H+og
FSBBIGwgmCDEIPAhHCFIIXUhoSHOIfsiJyJVloliyLdlwojOCNml5QjwiPw
JB8kTSR8JKsk2iUJJTglaCWxJccl9yYnJlcmhya3JugnGCdJJ3onqyfcKA0o
PyhxKKIo1CkGKTgpaymdKdAqAio1KmgqmyrPKwlrNitpK50r0SwFLDksbiyi
LNctDC1BLXYtqy3hLhYuTC6CLrcu7i8kL1ovkS/HL/4wNTBsMKQw2zESMUox
gjG6MflyKjJjMpsy1DMNM0Yzfo4M/E0KzRINJ402DUTNU01hzXCnf02NzZy
Nq426TckN2A3nDfXOBQ4UDiMOMg5BTICOX85vDn5OjY6dDqyOu87LTtrO6o7
6DwnPGU8pDzjPSI9YT2hPeA+ID5gPqA+4D8hP2E/oj/iQCNAZECmQOdBKUFq
QaxB7klwQnJCtUL3QzpDfUPARANER0SKRM5FEkVVRZpF3kYiRmdGq0bwrZVH
e0fASAVIS0iRSNdJHUljSalJ8Eo3Sn1KxESMS1NLmkviTCpMcky6TQJNSk2T
TdxOJU5uTrdPAE9JT5NP3VAnUHFQu1EGUVBRm1HmUjFSfFLHUxNTX1OqU/ZU
QISPVntVKFV1VcJWD1ZcVqIW91dEV5JX4FgvWH1Yy1kaWWIZuFoHWIZaplr1
W0VblVvlXDVchlzWXSddeF3JXhpebF69Xw9fYV+zYAVgV2CqYPxhT2GiYfVi
SWKcYvBjQ2OXY+tkQGSUZOlPWWszedmpWASZuhnPWeTZ+loP2iWaOxpQ2ma
afFqSGqfavdrT2una/9sV2yvbQhtYG25bhJua27Ebx5veG/RcCtwhnDgcTpx
IXHwcktypnMBc11zuHQudHB0zHUodYV14XY+dpt2+HdWd7N4EXhueMx5KnmJ
eed6RnqlewR7Y3vCfCF8gXzhfUF9oX4BfmJ+wn8jf4R/5YBHgKiBCoFrgc2C
MIKsgvSDV4O6hB2EgITjhUeFq4YOhnKG14c7h5+IBlhipiM6JM4mZif6KZlRk
izCLlov8jGOMyo0xjZiN/45mjs6PNo+ekAaQbpDWkT+RqJIRknqS45NNk7aU
IJSKIPSVX5XJlJSWn5cKI3WX4JhMmLiZJmQmfyaaJrVm0Kbr5wcnlmc951k
ndKeQJ6unx2fi5/6oGmg2KFHobaiJqKWowajdqPmpFakx6U4pammGqaLpv2n
bqfgqFKoxKk3qamqHKqPqwKrdavprFys0K1ErbiuLa6hrxavi7AAsHWw6rFg
sdayS7LCszizrrQltJy1E7WkTg2ebbw2i34LhZuNG5SrnCuju6tbsuu6e8
lbybvRW9j74KvoS+/796v/XAcMDswWfB48JfwtvDWMPUxFHEzsVLxcjGRsbD
x0HHv8g9yLzJOsm5yjjKt8s2y7bMNcy1zTXNtc42zrbPN8+40DnQutE80b7S
P9LB00TTxtRJ1MvVTtXR1IXW2Ndc1+DYZNjo2WzZ8dp22vdbgNwF3lrdEN2W
3hzeot8p36/gNuC94UThzOJT4tvjY+Pr5HPk/OWE5g3mlucf56noMui86Ubp

S883mnJ2ajAysvodBI9PICO+jwe10wnzBr0MrU+sxyMhq3Ty9ld8be0QJ1eJ
ppbGJgCKfL63oxzHk6B9kjr4pHfmET2DUzJ5MMOfBoLan1WWtsg+5KIIfP6n
ECDTm0ZhM8XDL08r2T6g4c8Zk6HI8vNlxI7Q9OUDJJE3p/54yfSdJkE5SI4
voAph/hWTFB9uGjpaGXqYdTg9YUf3k+F14n0sgZagv0pcOs6WPVYjjPPZ1BD
zOyjJHI9PFlvyHns/KYpT6LKcU9NX6XCB1GPfH4g5WBTz/xfJUcDy+V0sJR
ju7yenrrzZdh7dncgQhQdLFwTRHJDBPjQa1HGYnV74ESAA8sg885ncbOr0eg
TBu7U+t0+IQjo+Z0/nyC32qrh5s0VAE6jSmiL45Y3auhqgb17uQT2SBv0KAd
FB1YAV9CKdBILsvWKBzSsWSwLJNupjrj1HGeAOWkKgNw0emGOOMXk58FgY4Y
6alwMtx1YUqeaUjrwXyREg0OECdO7O3wal4Mm0DzvxDDYExyHiJp9nLDdEg
viR5ou0QoVwSmQ1FahExVANxIWjoHb0MiCYeL3yGIPkYZHHIT9r2Zup1qLws
sTaZcjTz5MgAtkz9QGJleeyLhJzBZOXL1EhrWhaEtwcc2Mg8WnDEgataQDJw
kS9RDz5BaQMTKmDI9kyYGjoyej+G3uL19WXI/DzrQenquUUrjpo9WT4Xk6d6
svwtZEcYPmejKPLHI3DURIWlgNNIXaQwGgg4pUX08eSw+QDT0YsiB6gNqQ5
Y527bmAylFwyw0d5Sc5ahoPjfxDGRkJfOL9H+JdNer8/KJBNorM7XjUlpSiF
iaSPa5rqgaxlTtDq5ROvC4OiyZu1DxfW6b8ljXyf8SEHnj5cB6v2mY+zb6
cPw3b2p6o9FSKf/S8AYwOHeMdo3H5BsQHz8Gcl3ry8Zk9MQaGQMbHxPLMF13
HgMT8CkGYEWGo6EFJjrSgeYOjB7HQZzCQvg6Psy6mERZ0p+Zxmw+nhjDqB/N
BNeDiNxYrJ+LYQatzh1MZZBOosf4mOp6DFIP8uJHtL1dP0kcMNvKcbGVO50y
mKeDPPIMjLDpzH/ovJlzRkOWQWTz84EpWiMhsMSxkkCXOwdHojLO/wDDM+w0
/T4solficUjjmPB+h6bPYBB+btGGe2JW0Dbx48xp19Z2ZPN/Guh9aHqwHmi8
P4R+IHCdp7cvvTyiQIL8h1UT02Y1wxoqZ09dkjLqyYHRvJ1G6NB87EDPJ8n0
o4RkFcFJ4lgmPWzAruIOTefM82bCYGmYmnrqjOh6vQm8xrin2Q+D+HS/m+99
0aPK2pooDwbHDHCiRcFK9jVhmk7S0FVpookQdERd8WPdqeECYRBIZDWTJWgW
eQVQczLcPawAAsaolDXw8sbkA0GSfBNI0ApAJLbalvInUIDo+JOMRIIPBL7c
qAs9nj6PpRikc0xp9I3UjwMs2DDsBidXbD0QiLlqSxlhHNmEIDjl6eqyDFHa
OXpBiWcGbDKGo4DtliMICPNOYjKNGR5D6OPAliw8szA6VxPKGcUpC41Xd1yd
OJGy+jKH0uMovCTpB588YDzkUXvmHkkNWFMBxIF6SKcpB0Q4pxci9Ug4SFO
zLO/8M+lvT1flz/hg1Lv1XLSFdO9Ob4Xm6YvTm+FMHDEXJ2qnKPLty1EYxtt
ztu2kKUFClOGrUTTKop24shesF8zHOi98JWEQ05QUGS8oHJ1GPeH5frenMJW
/ZGF8vmdZ0vqCgio+RTHGZ6DI9nH+EGUrlw+vg/C4w7lh8vi6DLIOgr3vq4P
w0YxxcvF+ih00Yim/SAUCTzcPR+L6GPClugjTfCA0tltbQP/0+ExENbt5yYk
EF2zWPzDzCr830PBHqYI6EGvpTI2a09jIh3JSGkM5CvcEYzVyTPU06GMY1A+
8tlaQltH0PV0uY45jwLwCW2Nm7OreGVi3SRizPo5caPBk6rlQTHgOmHOSNsn
HqYRidBy4SgjMBkkZCiST8TpnwRkONXUT9MV/sa8046imsh4GXEilyAp9LqcJ
D58o01MNAkO76PT7o6wL53Z9Hoz270iHfDqa0mKeiPUQrlziNKoodl4YHkO8
TLgxzddGloPgdXmOWVI9vOlxGgD4GY3lPkUGnSmpgvsQrnv2fE6c0fm+qZXw
xGgZb13a28kxtL07zPQoy49/veiwMmOHJ6Uxldi/UwkJgSD8pVmn2Pw7qNw9
M8jhl1OJUer7lpIFaFQ8yjdNAkIRCy7HbiHiUAemYxuWnsZOY1XZE5mfK0Cw
EjUpMvBd3ZiraQ1GQSG2TMsew+xkCmxKueGFJMbcQPFuUBzBzB8UAEJrRSbS
dNEDn6qeyDz4/wARBjUhXbR6RWeUokWB3fJyYZCRjAXq9a4ly4eB6PT5MOMn
aefFEsQy5N92PB8fJjyw1mCHTFkMlbol2Zg9Hq5R0j3fSBql9z8/kz+sBY8w
fosYGwX4B8+dsdcvQwLjxn7G8+cRO0auZkCLDwxOko5jZFyFF5p8vbKlXzDQ
ZFYkHUHktBzSi4Si9hjby5DRoNTIzu/DQAS31fxM/hwOttV8TsyV0wejN8L
z9M75/hayHHH1B0cougaiMWgU8pjFpAgtRQRSQgWqAIFEaF68U+zyOmOVFg
PRAaiEYfMHPGMujJnsQcYLvQDEigZjGA3oGtKknz59qB2bwu8Phy6srHrCpL
B7iCC8PT9SCdXqn1ApgKJAczkeSWeysZ2yQf/9TgkKHNSjp5QHqSjUCLj/ie
giMSd3xexZ5TkqJNRfNJ7IOLJlz4AADFiF6yWgZhh3HXs6JAlwuJyEaBz1
I75Ok5mXl+yECGm/v9lpGRMm6H9L1YIR6WNz+JjpsEybovp4egPM/obrgjm4

WL+I44GXUy8o0D0g+oNk9JB7cfSRwndH5uHVYvtx5DYgzMmJznYa0co5fNHX
n4IntNEaEucYx3+c6lh15cYlt8jqMW0vvYjHJGojQPF1eHTRxuaPBlcT7Hu6
MjR55xot4L7PRMzB7sHYGg8GHqa8s9D4/Zes5ARoQ9EYaOPqpaF8GepfY6uY
o6viylroxhF4D5wPF9K5Djh8nHplEvr45aVJmjLsSZDcPB3yjabDyZpgGnTH
MSesbmSJAnzMwyHHISGj3CAMbeXJi1scNTB9B02cZ433ezHjMuX5XBkPTncH
6HpuvjiBwXnZQU7t3pgxDjypleqA4KJ05bEaFoA8VIM1tLSEE2pNsgtgdyw
oSfFgoJpoNNxjqEilOvfwYA0ZNxYDSuxccm+XlgOfI6nJOMNx4fO/6wyYwf
B6Vr1Mt9D0Mkh08PTh8RYsdHi3y+lufQkZrzz1I4eDPLJ+IZvTGkBy9UjHZ/
zzt6LqJdWJGY8vZ82VY5yjHi31M+SPR4vThzwHwZ5DG75Lp6Err/ALpUCd1P
12LWA9z8TikZT9r9rhH8uPuD4sw9FTg6nEMfmjweXDHKjR4L6maAkKL5JG0n
Gfk4RX1N5CnmnF3jLcKPlcsjGaRy5ZDGLYxz3uHUxlzengjDPwalgSTpLw58
VHcHtPizOO5LAM2/DeD4r1PxNdAKse1jqPjehk06d2z8OXTOmc6JkON1gaYD
cQ6RGVaRKIAb2hpCd1tBghuJQNfAKWAK2hUU7+my09h6gAPIY2pyKkQdU+q
1WOa3gu3SBpSIOWyt8/qQS+hAWHLNjBaQ8M6lt7cnTEucelJLCmcJkcO/qSk
74+kp6B0zSHCLdoF6JYHlx2uSn//1ZOMak0JDjH/ABf+McJRBFx1P2v8D6U+
jJOoqPh/vJ/+OYn08YR1NewPIWOH7G0tTy/SuqFe1Zgy8mMe+T7OHpYyHvem
HTwhwHoqvU52zFojwsf4ZPJQOkX1On6CMDchb3epjxnzFzy9fClqlAeiqnd
sBhCHgGDmxxHiXzcvUGRsOBkS6wMHoZOp9Q6aButwfNgX08OsQ87m6nmjCN8
sZ07h64dHCGvJZ6mO3JGY8Xso6UXLZUMMdCnHPisPQCpFinJo+X6rEYy9jOE
aPp9fh7vl4cgy5KPBdojPQx7cg8fYs+mgeLDOTpjLzYzReeefqMWhjfyepzM
+owxAfPIAevJnlMaingKJSYAGXg+riNxfKqn0OnlcEwis3scoEg6Opjvuuzi
BReIwZZ6WPzR0dAY1TwY820vTCp+bxaoDLLHabrRrdrcS9MsW7QnR4J4pY5U
NqliU9PD+JGGk9R4vr4s+LILiX5KUurax5DA2CnWSSfXiYA97mZXo+Fj/ABOc
eX0+j6gdVZHlcOjEo67A5W7ScMjrawxEcrgxyQBXdOhLoMQbEQHXDqTkZ7Sd
Uxx62XS2SXSrGhh2OX8QmlwAfK6roswj6kTdjWL09dP1eox4x46vqdqdxih
HynSdfPppUdR3D60fxLEI7gKkXD8R6GMT6sB73zcJhKVS4dwhgzXJ1E82QyP
Z4skt5JfRyQs0e/Z48pgl7Y9uXlbE0jHCdsn7bppXjj7g/EQ+J+s6fJs2+BA
/wCU+a6OtT0CHz+rw/aHlfQvRyyRt5HQ8fdR3fS3KnPNH05EdjwzjnptLp4m
VgY5RYp84E4p12fUny8PU4rFhlnR8cravR4unyXoeXsEhSalmdfSBwz/ABO3
Ry3ajxcc3xl0iG3TignOnBwjqNGg54kN24bmoyt2jLNgWwXKLoCiFFQEEtRK
BYVfPyaHujCKbQ4ZmWo8OcywCHaGMycYal9HHHRCRgKCSLdKSA7MmXphPpB3
EFkKQMxEBos20ECClcJ43rpiQYU//9b15nc4TxCaJ9UCdHelFWWI022OObAo
OhhXLByVwwZEtMnm9YTGRrh5Y+Z9XNg9Vzx9EI6IFPOETLQOsOlnJ9SOKMOA
3KoMEnHj6QDU6vUMewacli1EIDTUuP7UcmiEsjqo742OzpgkJRt580vJTUM4
hEAavNo2jriZsQ+bzerLJxonF08svAJXESDOYZIOXyT+Hnddv0P7Fs1mQHH
JjjF1xMyeVjE8lo6j2OwyRkNG5AB4+qjt80Q2YGpPUgVo+PPI6cmQvLM22SR
BBerpz5SHld+n5ITCnPaGwzKVtkW5k9j2agxt1xZzBwHOqTo9E+pk9aHVRnG
q1DlkvJqHhkMdXaPUm/c6joJMpYZMWYvoDIJCyzLFGTZ6kOISMjQ7vsY+ky
dDWaJv8AjDjOnQ78oI7av0vp6UeGmW4M+n6mOeNxdnx59Pk6TL6mP4DzF9PF
I5RYTMwaErbQxSPZoYJEMBkS55DtFl6fSEEs+d+I9VDFHZHUI2iHN0WI5sss
0vdF9KcxF4seUYoAd3KU5ZOeENS+pyicDEa6Pzw8srHi+7ONRPufBlyXFmbq
jqy9RGHtJHLwRiZmhyWZEkuuCydNP4v6XGprQsiOOZiPY/Q4qFRlwQC/NSlu
nu9r9WcW7DEjKAU8b4M6V0OjDksbTyGzq8kJbgJ9x/0XsgL17PNo0mcPVYhM
e18zyyBqH3ckbD4vUxOOd9ixMNGZnu1c5iwxv2n2J3W2BJwTHpTvsXcysbhy
FzQEhTy4shidpdrEyz2vw7WF+1nL8RdOgFQ04c8nxFFOnpxUUdU1h+FngkDi
SE1QQ7RIm0S6Bwi6RLSFIMVAtoCmFDSPswCkBJh0jggadnnnJ6CaDyZDZYUv
HLV9XBLc+PF78E9qTDPsmQFjIB5p56DyT6gh1JmD0p9QlvMepEnzp5TLIYE2
ySwergVugLy4gaekB0ZKBUqrCn//1weHfp81+UuF6MY57JW5NHrAEhRoVxkz

GjoiAfE0gYglzz5BhGvLv6oiKDwdZCWQbmkMpdaXmn1EpPPIEN48M8vwi0IH
eXXHPV1j0EyLL0Y+iEeWFM4YJZj5Q9I6KMBumQHohHZ8L5/4hklEacpISaDP
0uE/xH/Ep/FojywNPzhl48tQnt4Y7LY0qvc9qXUZMnDIOWQXu97jh6kvZYzR
o8uOTLBxRzgm5nJuntPB0eWQ83tahYPLsyPU4gOA+bIPuZ42Hx8saLIGmYN
4dJME0uM+YOzJ31bzyFF6Q45RqkGZ8rfizwW7EhXDoyJqnOyGqZlo6RCo5CH
UZ5Dh5Ugu1YkHu/hWcnlb7B+gj1L8n+HHZl9f3OpMNYnsftUa1cc34j6Q8gB
fNFqY3ysCYnZj/Hly0Ohbn+JXw+Rk6aE3MdNOHwS+luHQano5etPJ4fN2S6q
e+XHZ0jinM/zNQ9YAHDJLoQMdDQuoVeGAehYfn8gqRfeJt8PPpMj2sZqo4+n
3+aR2h1uHww+EfFL+Jeoiz7lx5l4QBGJ2D4Y6y/xzYAdRtlI8ooaRp+qwESx
R9wfk5YzHKL5Or7cJmiNdw4eN8TpU3mPRnfYvXhn27dnCeP1cdXq5Yclxrg
5mjtyTERZ4fMzmGaJANvJ1EiY6yJP8LjGY9XTyitVBZMJki4nkPPcuxezq41
5x83z5OkZzcpEayLhLncGiN3BYA7NlfQ/h2uLSYI8Tf4dphDEuS5ZpHVIFAW
59W64juAcur5QObsu0NVogPRaGWEBoBdEhpDSLydMhQFhSqsAqXIARaI6NKA
gGR0eWXL0z0DylnhTXGHsgHlxvXHHAnIXn2mZ0byS1p6+ngKaiMwx9JfL1w6
YB6QAE7g6ICGKnTYGN6nlpAZUHlyRKdubmSwf//Qx3M629GHHa5Me0sKdnSZ
SY09BsnV8vDP05ex9QSEhokGIDeIUxRTTSGR6bHd1b0Q2wFAUiOvDp6QjrJh
SLvhnldgsuvqRHDy9TIEhTSGR6k8B5eqByQSOXQgHlyaPF/ZpnszLp5R1p+k
jijWjzZMfLyk6Hg48lcPq9Nmt4uoxbNWMOTaUBzfy8pqliNxAJZz+ad+KMfl
l15epzOyeGUo2JPI58JidS+7iG7Ho+f1cHEmjxpRpMTRdJhxGmjseyeE2xlf
6pxHRco0QOaWpRq2Y6cse52ZDuBPFiki1qw0GahSI0Q9H8NreX2C+F0RjyB9
qyHSMMtWAbWy6IUUgsaoF8ohqm2ALaARSgbTR7pAVgJk+F1WmUvuHV8brh/N
LGWpUISEAR8U+/8ADBFCIuPbSH+Of/eJx5jkiIcRA80kA35+B/u//gyKTOe+
cYDkHI9rFAkbo1q+D04/mB+iw7cURM+FPCx0QccpiYBHK5o+IPeOJaSWWSeQ
VAVfd2hjlkbxvPDg0cmbCNMo/1Pn5YCWQk6j7L6mHS8c/6Xnljne3imkOCU
CI0XzSCCR4Pp9RjMDQsl4M0TE2EDnIN12Rt1bPsajq0h7/Qj+QPc5HI36Mfy
B7nCtS5NHXh0Acuq+J3xjhyz6yTBzclbkGSKdoywpAUJDQUHSLDoAwFBpACW
FFIZJTE2wEzC8/d6MjzjIFoJE9N0HDEHWfDCHHknUnu6bJo+bPWT3dOHSDPR
EltiLbAKfFsACUKVCB//9HTBIDIHUTjyC8HrG2Jzs8oG0slvpdJPfGhy+MC
9vQ5hjnq5NHtDHIugEY8uJz2NHMyJdGQ5up2fC8OTrJkaoyyNvHkLSGn7TLx
dIZN/LwwR04J0DDR2igk8LLBkA3EaMbqFFyU7o8IkNwRhHI97qQ8ToeR1eLQ
vkSiQfc/R9RCw+F1BIE1bUAx84FtZMVASiWMcgQDw9MTbtGWadLkjiBpSOph
YcRGNH+IcPTG5w15TReeHljReaQrV9DqYUXjlagzoxHyh2yVt15ccPGjrk4a
Q5JFmMturchXlc3RBHOrdCmGouiGRCA2eKZAaQ7Oh/uB9si3xOh/uh9t2jFh
pIRSQKdEEqxklak05jqYy+EEoh0NPMJ5JcCvexlxz2GRkiwd4S54vgHubYC
ZHa+N1tHIT7H15nxfK/ER5wR4MZVqOOEPQuRoXcv8SyB275ir7f4f91gcOnh
GcrmajHzEPWcvrDfXlJx/Uw1BGOAxyERYat9nFRBxkWA+PCBjKJPxHI9WYlj
AyjS/LL/AOCPGzNo1jOUjtgKpnflhMRJseD0YpiRvsXcxv4Q8zRydVdaRIHl
+L+hMvMN/L2bNPM8fTw25fRPwn4T/V/8DSDObMLD43Uw1fdywOOUsZ5iafJ6
uCKeYBrSxuJo8uko1q57/OCPF2ZPpcEduEe55XthrivxeLu4KduMcOWb4noj
2efN8RRTAoEbUpGj0RkNUsU8qAiFhsMBslpYVIVyCZBYtEIARTLKXKPLpkc4
8oHXjbyclxjRGY6MBwXcn0cA0fOjrJ9PDw0jOkNWYEsKC1taWkAJQIA//9Ly
b1UlqSimoLcTRxiXUAlYU9fp8u8avVH2vkdMSDRfXxgy4SK0YZsO42HjyY
j4PsiHi1tj4OjB8/DppzPD6/R9MMGp5egRHZqIJYUskS0PDzZOniXrGlk1w4
TyQxnzGw0hOPHtFBucJAeZjN+IQAqDzHrJZdCsBiXONh8PrIvLV96OofL/EM
Xd4HZHDAUKD0gAB5cUdoovULp0jLMhHcD4W9WlwiNsAWujwRyWZdi9xgligE
2IPF6vG+XIU/Q9TisPhZoUUgT01EH2O8ya9zj0w8x9od5ajV0Q4yWSG5c0sq
qnZkivFK0kAF0QxkgNTFFAq9WkOrpDWSL7r4XS/3l+99x2jNg+1pgN8OjBw/
iGoj73fHpEaOHXnyg+16l+YD3luxoCjMf5Z9ygLkiTEj2MBWA+SPuduXDpv7

YdgwpmMW+d+lJWJfUifO/EIWloLU8/FiOSXhEayL1iQmNwFRiahH+OTz4oGZ
9MHY/FJ64CyCBQ4xD/6ocmy8cDuF9u+/P/ePvwxbsW2Xe3yIAbQBw+3gO7HE
961fPc6l4ulid5wn4ux/ieyEr0PI5Zy45RkM0OYm3TLMZMm6A0lqf6nOqGjK
ccuK6kOY6u99mZCxXi5k0ef1GT1cu6Xccvm9UNHtl02SM+QR/E83UQoNkiR5
MxejhHFtkDegeqYcwKLtBo+jj/YBPg8Q1L31WEe54sYs/NhDujy82XI6oii8
mTUsKZUvLptUB6lwTSQGgEiLQAB0iEAOgDCgppqkMKNMkU2AzJgOXIWYJylg
gdeNnPW3j4cuoOiBy4hZfTxDR83ALL6mNpDYNMhUUNqhLATSaSpQP//T8ci3
fH005+x93D+G4sUfGXi4ZI7DQRTyj05g9mOIMVvV3eQdXGBIGqldN7Tb6uHN
5RT4B6je9/R5twoudzWx6e+y6AuEWwWkNNzlk63YNoS83UYjyGkln1k5HI5s
mWUzqgxJOjQ6eZ7IGdu2MvRi6K9ZPdi6WER7Walkwx2YvP1cJTIX0xhI4Gjy
Z9llw6xiaTPnoXZejFoGYxBNO8MbIFZr02T05a8F1/aJSOjzyjpo49LkuRba
gelOskbfD6vHRfajGjR4PDx9bi0tmjKjx8J2zD0ZBQeaXINvbl1jbojPOnyg
tTYHLOMFAlkKTFMho0GMmWizdujJvgNTifa+/dvzsDRt+iibiC7RmwQlaV0Z
OXro3iPsdR8sfcz1QJxSpGA+SPuQ2N2pDyn3Mx8UzmljVgl6X+2A9DzdJpD
Xxekhnp6geDr4+Ue976eLrpXUO/LAjm6UxgJGfgNP4npiNxO7Q15v8EP+5cu
mxxkbA1jr/qdpjkDT+MvNs3GJeKW86cPu4yDAEcU+BhG0H3F9npJbsYHg8bH
RGsiTE9xj4o5ZHUVXd9LakReZogC+VMXQ6clQMjwfN6mGj65FvB1MwKpM5C
iWO70ZRRcByHaB9HMVhHueDD8Xzfr6jTE8HTC5MldvFvLLI6yKeX7SBYikQb
yS9P3uWDPvNSamZK20kxHZ3MGBDRSDKIdQERi6iKbKQinQhdrJBADnMu5Gjz
ZGpg5Z8tYxbEi6Ymg6Y6PN1JeocPF1JQH30cbwdO+jBpDVC2qAUspYUVKoK
B//U9WGQd3Dq8elh+Xl1uWcrt+m6XL+14xlosHzfVZMkpbS8g+J+i6roomVv
NPpoR1ARDkxYzJ6sX8ssQIWiyJcs0j2sU7DvGBk8X4fmiY+bl9A5b4aiMqMB
HlqUhlUXEzJRGy0hpGMB2bodmBtj8RcMvWCOkUDqqudHqx5MMBqbL89LqJzc
zlnlA97qfxCB62D5xPqB44l6lkgacuLYo2jhyYjhyUeC9uPp5y7aOeYTyxAP
IO57OlyZCK1H9TxczmzKfTbAfHaS+Nh+O36OcfKe5IL85iHmdVlz2xD1lgjkO
eaO+L29FUMu2Xwyb6rp/TIXY8O3ipMrA+Pz49snWJvHXg9XXYKNvLDS4+LEa
Zwzcy65YGJLiXqcy4ty4c4l0toMO60mWnvQHRkulfewG8Y76PhRD7XRG8QDp
Eeh0BK0mnRgzyR3QIHJeXHDPgljQ07vfTJDQcwx5JHzSr+l2hijzyfa3HHKZ
0D0RwxjG5SGnZy2iqTOlapF3xwrCgyTGOO54c2liHqS+Ii2jeaW77A+H/E6d
SP5Z+TGarXylyJqJq+Xq9MAUeB2/+CPLhJExT2xkJjaOx5/iebeBsxzSENB3
fQ6CRAMub/8Alvm5/j2+BfZ6GNYxfcW8rOEU3OU1wVGeuQXcQBZMe1PHkbMh
1A9rYyxlwWMkNvDnPHWrZB0H2PP1ETSMUyNC6T8wdIHvzVwqTxxHmA9o+t9T
ro0+bjF5lg95R+t0gfRdXpieDotZ/J7Ot8uN4vw/WZ9y2MndPu8w1kA9OTgv
Pj+Me9A6MsLFvk5BKEjIPsTJ18HhkACQe7hOGZZv0vUetHXkPQHx8U/QyaPs
DUW6eBU5AA6BgcthhRKotbRRk8mV6ZF5cjpEZYsdcLmXXG6ldN6Pn9QbL39n
zxsuSB09ONHui8uAaPUGkNFtCEC1YDbCihKoH//V4uj6SMvPJ9iJEBURXufH
6DLR2l9eMgdHJojLLdq8k9XsmQBTxS5aQ4soMDad9hvMLeSMq0QOzp8myT7e
GW8aPzkS+30Oe47WFPQGPxaArhY6t06MnPhvjo+TIEGn3rFPLlpYylaB5mM
kHTV2j08pnwfTj08YjQOggAgcUOjA1L0wwh33wHLjLPtNxWCGLMOpwbPM44c
3YJ6nNLI+R+1+jKjy87qdDdcNT3xkAfAxzke99Lp+r9Qa6U8EPPmlj3LIKC
s9GfUgEelqn0cvUDqMQyXqHx+s6SUIcFgjpOouO0vSIMtyd2TpPWGvd48v4Q
eYHUPq9LPdGj2elqSjLPjeq6ScNJDV8sjXwf0HNgjIFEPyv4h+GyhO48FsQJ
k8gaHVoF1n0WWA3VY/wuWwtRBEgNJCwzEJq3WEWgRGg9PTZjhPFx7sxxwzI8M
Sfk+l0XTTjEiYoHxXJINGsMkcgUj0YPSY4GwSPZBmXWekaMKH8XxN5TojMH
THGTzojyQ/xFgZBkFg2zIGjXLYb1ZCpZjLTgMjikV4pGjqEtCFBwll5penH4
R8clnkll+nj5+0f4XfHAYo0GFKAEQA0Ax1A/Il0DOUXAhjKjzoRjL144/wDJ
GsijHAUSTURyUb/XlhEVD7X7/wDIR5RJ0bJOKU/5h+19n+p+hhAYwAOwp8zp
IHPm3cRHH+h9aXLwzXsWpURbRyVoA1jkLo9m5Rjdh5pG5MZREg5GHa3rkBVh

5hpyzQpzyhRtscJPgo0dVB5nX47Fvj4o3mgP8Uf+k/Q9VGwXw8Uazw/qD0le
p+IGoPH+Gayl7no/EZeV5/wnUzPsi62MnflGhLhi+MPTmFQLzYvjY9AdOSNG
/F4+ohdSHle7MLGjyXu07h59pGcebHu8z19Fm3x2nkPHky1LagE45bouzKwP
YBat58eUSFt+qGG5LtpxEw2JhQBkdHlyO8y82R3UMwPLtjce7vBpDYnR86es
3vvnw+eNZoHo4Ro9IDhiGju0glm2iyQgVEtuYDTChSGE2wH//1vMGKeKpPcM2
luk/MKeCth2lwnJ0ag6Tm3IGS9Hnq0xFOjBrONvn5dC+tjwynwNHT/qzcbkg
eRB9HoBMTsjR9LD0WOAoB649P/CFBZES0TZdBhr4tE7oQaZJjMnQwENS4Sz
ns5ymTyySwayy+DkchLCuZnQLJaQWAXyAU+B12lwlvd9DkGj4/Ux81lpDjw9
VKBGt32foujXRIP1AOWfnBGMT0/U/hkaxhLUr0O+WIZImJ7vz2Tp5dNIMex4
fpg8/UyI5hryOHOYPO6bNsNngvrRNvBDpTdEPfGliGIFPF1mHfF7g45uGkPn
4zMDTrHbPmIPyYyw89BjPklhoVV/afM1DhHRaSdHpQjqYRAc5dXgx8GP+gPI
dRhy5PNuMnmjAxOrtUnVg9XL+Jf92PnJPTdRLMTuNvmEPV0B85Hse1apGWem
itNeE7aSA9DmYT6eJ1j5T7GP52PTSQetqMEDjHUx7iiiWQ5Ttxd+ZPXKAPIZ
ERHQaIEY4DGKDqyNGtS5ksBtw6kkQvtb0xjS5sfqQIHv2UNImDzB1ljjnA/a
+F3hD0sYgPjmLI/hi+cl2dX3+nxx6me4cfaP/vljfFF1OzoMXpY9x5L0xIJT
LwCwjXsfA3Lk6pQVQYIMjQFE9wNg6IHmKNGkZ2GZkJOgKDiRrZSUglHdSva3
LPDJONYztl4l6lg5o7ovhwhXUx979AAdtS57vkSx7eqj7/0aDL8UIWjH4NqJ
n+n/AMmx+LS8zf4GbhP+ofU9HoY3PSz/AAPPg1yPR1IAhffR5en1m5Kd8o28
JG0kns9GTqow41LwZ8spXfBYkRs83OSZmYaGcEatSw7rLzDHTtpHNs7cGe/K
9gJfLxgwkD2fbhi0B7FkkViBboHUQAT5UbTMJlwmXoyVejzT5SNGY5d4OMeX
ojoy0DI0i8OPWT25zo8eHWSB6mlaOrnj4bLSCqpQCGmUsKKkISwH/1xAuOfFu
4fQ6fpjkFI7Y9NGHteSTOlmxchQSyDXR9HF0MMfOr6EMJPGgWUBE6vUwYAC
Pwh2xYDk9iyzRAoOQzkcMbCR2jFjxGzqnJ1UQKD58skpcssksGk8xm5JIQwo
CqSqAFQQS0BTANlppBQMp8Pj9YaL7MtXx+ui0HnGVP1H4ZIEsYD8nlvqfhfU
bDVpBn1sZLzq5Y8gkHYUBQehzCzSUoCHDNLR0nPa8HU5aFDkoHLGIMt3te3N
0kOpx7Tp4F48cdCPB68OXadp7vku2rSdq6HgdRhydJLbMe4/xOJyiXxB+yy4
8fUQ2ZBYfn+r/BZRJIhNj+EvWtqv/iMHI7Yy4XDH05iQLGXDKwmpghx3kPZJ
7CT3hNO4M9P/ADMcz+lddgdYnPAG8L6rXphOxQxKM95PZG0ku+0BPGrelkzj
jb205ZOrxYtCRfsdrEgCOC64mZYapNgfJkt4cBymhx4sbSQSk4P2I5cxjDg+
Yy/gfdxYY4YiMNAG8eIY9Gi+HMvyO9UT4e9041c6rRd1aF5HQo8IFBFm6qkS
HYIEXvl7A1trVTHaFvs9EoA127NEKktlQXzuoJWWmvf9T3ZcgxR3HgPiZ+sl
kl5Y6Ds6SkjZx/ievmd/wQfypH/H/wCRePrc3qx8sZe+T2/gQ/kSJ/j/API4
3pbQwtT0erPKHvD5ZmQPkaL6HXGoj3vk6zhURZDkpEBMHcHrkDkotfh+IZsg
jkNA6P0mPo+n6X4jqeLbqYaxPC6fo55JAAGmOt/DZdOd0+/D7EvxKOCNYxx3
fB678TydSBu7MaObUowkY1T0dP1R27D2fNM9ywltkC5S6mKKNT1/VJSJkuED
u1d4xdnoSKvVym6uMkaJjy7w5cYcu2PIAjqTo4dONXXqSx0wSB6MHRzjo1bS
BW1QwpSDPskBynHW2NhGt20GIHRsJA//0On8Oz7q3HR9SWWMOH5roMlxD6cS
S5TNTdHdLqz2cJTMuWAmmsBSFpKAUstBgAVpKoApDSKQAqaVAUNlpAgvk9eNH
1yHz+thcS1A8Ai28RMDYUx1ajFhT2uj6vxL6+PqQe78gJnGbD24+sPd2mYaP
qfVB7sSzAd3w49WTw362SfGjqtJ25uo2vMCZHfJEcYHmUX6n9LBBelN3u3p
1py5DI6glFvDMW51qy8WahRejdbxnVqMq0eBo6JwjMUQCHhzhfWdINI7f6Xq
9RsSdK7Rlo4sXRehDZE2PazKJjzo+gCkxEhR1eqzrLUw6HmszlsizckdntI0
kfsmnCfST1Ght9Fc6r/3Tm6NHI4+ozdR/bEYx/iPmdv2SUtcmQn2DyRb6XpM
2EGJj30eqOCZ7PTmuog4z0mlxMRED2p6OROMR7jyvDhpJHnR6um6PDgiTHWR
PLztmI0qsywdGcnmnoPD7T2DbCox+Sbll32WgC+W93Y6KsGZkdwB7tnThlhu
Q8zZmSbocJiKUXz3dkC5SpymZQAMI7iTr/8ABWcUzkJsVRekB2IABTmlgHxd
i5TjuFNKUR4Mx+hootElyRE4kHgvmzmaHp5CDYPi/Sk0+N+IYdw9Qch3VmWef
1R3QEezv+EDbhl/xF4+oybeeHfoMwjDXxJd20MrU7PxCVRB97h+DTMchlV0H

k6/qNwAdfwU7t/s2/wDk2PQu5rkntykx8utt9X1RnKJvjkr1XT+p5o8vnnp
cmX3higjRObPR97hjP7RcDQ/xfwvVP8ADsmQhy/Y5QsDnumzm6mcOhy5AZQF
iPJczDS+760+u9LB+zxFD+L+J8zfcU+wzB1dHKxRe+qfK6aY3AB9cjRh2qZv
PJ3LhJ0UcbvjccbvBA5epLFTBx6g6vT0w0SDOtIUN0iAStKih4c5m23M2GMF
RDducZW6pA//0fO/D5dn24ah8PpRtL7Wl6PPc6M6A0iLaICkqUglCIQIAmIS
QtIAQW6XagQtOm1r0ygZALTrsWggYkPF1Ubi+hJ484sNQPnSNVGj25Om1eW
UKcSbluzT0Yx4PKebvCbFO0YZ1QllDg6bsh4oMRDqHZkY4zl+c3/wBF3JrQ
OUbLqEQID2YYmUS8oD1YTUS876Gq6ljH2LM8Pg6binca1fNDOhzbSEgkcu24
d1ERLVgJEmoz1pdjRFjRgKBbDIGJjoWxFAJmAdvdqjSxieaUzEdC6Am04yCL
aNduHDITAH2nRoOgke9i7LEBXHdMgR8PKAdQjgNgd5M7gwAINU5VWgbJv3OU
5iBAN+Y7Q6SBqG7YGjJlcq7OgWT4lslgc2WkUQjQGwp9qOUQPLjkhfudRqkh
oPlutwGBrt/5F8wZTh0Jfqt6ffEI+X6rGePB6pyjm8DHL3dw+z+BkbJn2v
z20h+h/Ao/y5f1f+RVtAtT3BwtVqojo2RYp5mzKtXDNI81vTto/JmUQWA8zP
0wJt8+WlxsPu5l3o+d1EaUnJ1OLpwRMF9oGw+Vij56fUidHRqpMuHnk7S4cS
6KVDh3jw4xGjtxFA4cxuT1YdHklrN7segQOqlbZidEoBpVQZIBCJoBpzlJyw
XGFNEsRlBQigf//S8fFmESAX3MErD81y+70U7iHmzpqepE26OUHYlg00AtJi
GAQE01VJQM6SA0VigERaMWgghgAKUpAWkCEHlqQYJ1aCSHlzDR6yXny8NBEc
QnG/Y+d1XT7dX1+n+FnPiEw4NHZG4Rlvh6hhrzR4cM+ljlQezpgzHHoeHacE
anQ6oEjl2ibZjtnw6iD0MBBdAzGLW4DQanwCIX7uTw2MZwy3Ruvtj/366YsW
3zS+L/ouxFvKzk6JQO4EXyu/byXy8uWeKXpg6dnLJkkDQkSCGQJO2fW45eUR
JB7sgZMV5Nw218Lz45kx2wHtLrinPqlygTx3UCTuw5hlhqKLtilLzdNCW3z
Ci7iGthw6op0CNqAwJFozvlxBTWOTZKjwzlwB9Rxy5HJQrxSMu2LpPCGSDoO
KhQLiQDPYDqx+0bofy/Dy/1OcZS0lMeata+FuHQJM6ZQjwWTIRFBzJMkUyCi
Zk8KARyVDVNgCi1tHOqAFWRpRr7EUHK2jXsnkoBA78oOhapSO6lMeEkalgKD
dNBjlx6Bvm3wvxDo9p3Dh+iceowjJEju6Tgyz4/N0wjoNQ+h+DDbiP9ck5c
ZAMD2R0J2AjvuJdvQye0DVe1unOErDo8zYC5SGrqXM6sACBIPDmxaU9pNMHX
IEPMwQ/mPTLyF2jjjA2O7nIG5pIMzw5F0o1qz3dgglbmaizELmNBHENZvoQ
eDFrJ9CCB0R4bZi0WABKak0gmka1bJx21FsMKZxhTY0SUNB//9P54F9XoJ0K
fGxyt9LoZVKnDOI PocZeileXEbD0xckNQ0GQHSqQARSlojRe1oEElumjJzJQ
N4lokOInSDNgNAVIPOZsmTQamVsEsgraATq5yGjalAz6eVA3wHolqHI6cXK
UTw9ZFMepRy8yPTxzbieSXkzdBKHGr6uECMpR9t/8p6CAxg+YjCcDYto9Rkx
1Y0L9B6QmNUxwR7gFkwXU8CXUZTVdn2vu9PhEPe3DpoRIMRVOWFMbbED7O6J
D6GqRI00HnZsXqSIEDWkYMQlAgx1enD/ADDKfYnyvQAA6kkHDHoi15tT4vXi
wxwioh2SKZJYAA0AhF3wwFjhkjwaCCgQB4pPgkaol792FAAmkgqNUQbpUFB9
p0aCz4oGgczmgNCQ5x6nHfxBQDfIFeHDEMm8dr/wujABPu4TaOUAd0jxQdFH
lOQCK58VXjsmkAjRpnQtIAEaJ9qaW0AqQeZ+IYK84fGOT0sgr4ZP1OWAyx2n
gvzfV4TCwQfk9KuTDR6GDK9dvjdLnsC+eC+pGW4MaKjQyDB5tB5ZtzBQlZKm
bJmGwQJLjMuhlbnLUugTJgctzZjymQ0gQC5dQdHQcuHUFoMcHL3wePpw98lo
G0WqRwlgJWIKoBtlLKUCkEs2top//9T5aHIL39NKph4iHXDKpAuWbR9Z05sP
bEPm9H0wH0YmnCKzYaJJc9yDJENTLRjdWjnuZtA0IJgyZJZ5QLM2d7BNMbqR
YNiWdzG60WwsGltDVxBbBQg0tNsW2C0hjDTLXiHtLxT0yxPi9wY9SrQ5MoMK
yDt8TpA79QbBdTQGrGcUsUjKGo/gYU6QLSBTjDPE6SuJ8JO1gsAaSwJAi+zn
LqMcNJFA2PDy5ZmZ9OHf4j/hQZZMukfKD9ou2LCMfHzLQVjgIARHAbAVbYAG
+y38inlBslBtKAooMAQp5SNGTFApBIHvccmTZEK3o+aOqnlInE/6VEiYPWq9
VunnHUAjCOC8vUdbUSI8tBt6yMLiNS8GTqJzNRs+94hnE5CgTXMXsPiklka
nV7qsl5tkiMpclE8JGoOpbGSJ0BSWEOfbkhrEvTh/EsmM1k1ZMSA8/UASHtZ
Emkz3sXVRyi46n+F3D8IDLPMGB1BfqcGT1YCTztWDScmifegC0hyUeEA3yg
gktba5ZJSgrlSplVGu7nkzxhzz4NccvD1PTSkTkxy18JJA7MeYZRpoXg/EcG

+PqR+INdFm3i+JDn/wB+PaQJR9hd6YoyfKQHpkHiN7Tr8L62GeIPn9bhjjJ
ladpJ6bqN0Rfl5ejxRk9ORcpSQZ2yPM4NAMmbdPKAzp3dAFqBZUKNYxZRAZO
WAaLpl+luRFgsYKBebOXojlPLm5aDXpho90A8mAUHsigaJLKEAoQpKA2m2bS
gFVQwH//1fmUxNFFUyTq5NH0n4fO4h9kPzf4bk0p+lxaxBcG2GigutOZDTJD
JaLBQElgyUs2wolhJkwZsNopLkZsGbDokdFgNCQeQySJoJR2g26ReGOanrxS
3NRh1gGfQxl4F7Im3k6iNwL04zuiD7EzKLOvKeWTIAgHu1uclJIAT0Oocj08
DxY/pd1LZBzfskO9n5luGCGM6B1MgA8HV9eMUflrLrUh1ZM8MPxB4sv4tGP
wRv+p8aeU5Jbp2WN2tvTiZ5Hpn8YyA/CKLvJ/GATUon+qL4xo0mNAG0uKHJn
08MscgEoF2Gj83iyxT3RL7+HKM0BMOGoNjyb+0vPm6iOM0Tq2YvkZ8UsHmJ
sW4UFPaiW+Xz+kzXUCeeH0AWxBJJIEPKdZAYpepEV4vsSL5nXzAjq1IHky6o
g12OrmZXZLx5p3LThrDqJO4J2Hd08hiG8c93plOrzHTSoh49tQB8WMmYzAB4
D1Tg5xJmJG7dv2iUeCxGUe4euA6XbZMhL3eVGjLJ12TIACeHlnMz1LtkML0c
SQwDiFzF+L9P0P8Abv2l+XGp0fqOirF08STTzvMYGkdZNKJbuOzIDKJmg2ZC
l+54myxLV5uo6mQlsA1HxS+y7WgmxXZqwlzHBnN1LiXwyesG+Hxr9KZwy+E/
B+//AJSfQw9QJR8x8w0k6a3RJ2Ok+1iU4cXr4PDkzSyyMAoH/OeaAiYy3ch
vEklZbwZxKAsT+KLSos9MGOHhgPM+aJTnkMbu9L/AMD62GHT9HG8uprT+Jsb
FUas4uoA6qB0qQ1D5eGJhM6Gz/yYx/8AKj7f7b6k9ogRGxZk8XXYJYpkR+0N
C1dDLNYahSTwHDp5keWfxDST1EJhAAQYtghOjCmNOuAeZkuuAa2gYZPiLI0C
ZHVI+FAMqeSepeuXDxnWTSHZiFb6oPPjD0xaQocqgFF6MKAqQi9UEoBSOWQd
WhqUAqhlQP/W+clpykO709QBAvMTbk0zu/Dp7Z0/WdNK40/E9NPZkbfukno
5eppaHpBiQajK2ZohiWC3JzKBBLfTSczow0gEuRk3luJTNoNskotEi5OiY3q
m2BKzQ1aCgsosHSnq6Ym3EY71erCBHIGLOTfKLgU9MbgEk2CEdNpGva16HJH
QEhUhyUWZGg05ZzBQgcfVdRtFDI8OeTcSZavT1MyZW8hG429K6mbaCLloQna
jXkaJ2nbu7cOzADfAXdegX2HIQNdUBBI78Pr/heYndDt8T5mPHKZ04fS6DGM
WQjxDLaFWp63Zxz4xkBB4LU80YfEXkz9VGcSI808oNnP08JiwdAD8f8AS9h6
mUPE/J5emJyeaWkRw9WXqIRiPTBJ4O5alrVvQwz9Vln/AIQXzesMwREmw9c8
kj8QefqckdpI0NaO0ZcpweN1B3T0dcOkDTymZkfa9eH+XA+JLoknZl0xgeLz
d9HfLMyjG+HA8uileEIVAoAnR2h02SXZelklyuXg9JnHvly9jUiNs45QOOdH
kPv4+nIPHCQkQYj4fsyfDJ35D2fpcXlJef4Q8rm0c+ORJBHI0L2Agixw8Uv5
GSz8Mv8Ap/8AxR3idpochVv1KGjNZ5I4xZNBxHUxkREGz7HhzYc0iTi7h2Ad
OnmMUfOKbAkPUzhKXm+zy6Y4ZMw08sf+k8WSUTI3/ZP/AEn0en6gg7uAGpCf
+cc+TDGA5JPtXFKYG4Cw3mzxlewWXGM54j5db+w3DYotljY4epzSxZPVEf6n
bpYxzn18x3E/DG285OY18JDz9FKpnHMjTX/Sxhdp7IILJpAUAjqMRy4zCXxf
ZdMOWMo3l1Ht/iebP1GCJqzuHtcJ4lbWyPFB9Gdm7J8w/wDfj6eM7w5finTV
WSI+LI5+hzfZJ1D01Rg65eTVNOxiJhREDRyUzELd8Y2g+5RGkyNQkinFbY1i
427R1ATBExUXkGsnty6RePGLkgd2N3HDhB24DoyEHRBXsySigvVklFotELDc
S5gtx4TBTXAZBWRqJLkp/9fx+qwEPARXL7vV47FxFnxHyYiNS5RoxBrV+p6
Ce6lfiS+9+FZLiPYyxUfR46ApqQ0Ywu0hbkpzkORD0EORDQc8nKT0SDkRtCm
J9jniOpDjiOzSmFLI26ga1T0YsAkblHCWJpS3COXDhnM6ae17I9PHGNdS9Mi
MYoPNkno8LXb0PVXLSUsmVHh55ZCDXZrfQcrs2kMDsw5zew93q6bQyD5N0QQ
+pi+N3Vyz5lUngdgVF6+xNtOYUGYXF2ruyYiqad5vqBUi8+7Snb8UmYT2xe
XHrHV0IBI4movsoEjoO7ftkE7Tq9mOgaAekmDkj085c6PTHBGA11TvN3d+x0
EtwtAgzrQOkJmM/LyRjX3AHyu+Mfzln2sZUTf2idRyGL3ESk9PUwG8Clr2rH
BLcd2orRgOXIDioA+Qnl6BmPw4hZ/iccWlyxzhLi/K1gmYxEMYuR7uWb5woN
jimDumRp4vN1UoGJ4e848IA9Qk5PtavB1Qwk1EVbUYxZ85PSRkBo9EL9Me0u
ecAEgOkL9OPzdg7clGTGYnkahwrVmBMU20CqqgBYyxJ85oPRA4wbjEk+1npc
YIGUjqRwHQT9Chpfd0R6mcf5uQk8v0kRpXg/OdON+S/a+7k6mGM69njbE2is
+MZIGPf/AMk8+GW+Oukg5dV1lxvGaNsxNuhlHEvi/qYgzo6mZGPdF5ceMTkC

DZ5L2xiOD8JeOQ2ZNMpytRCZ4Yxnt+yXIRIGXpE+W7D0DAZCRmNRw8cpTAEh
yNEy1cPA9XDAE7Yiz7HLqMWU66ABGLOOliDHWX/knHPHP1JEjKgfMAHKTDfU
iUt17+XD9InkO+HHf/F/5TeqUJYJGJ81jlrFjy5BXwguyGeacpkaERA1H9L0
4MEMso5KG0+z7T04clxw2nX3uXSg4py6ftl3D9//AEG5T2DR1dTjGTGY82/M
54Sw5DKI4Ov9L9ZGe4WXyvxHp7844PxJPYsEdPm3Ad7emQt8Xpsnoz9OXyfZ
xz3BMiCJUxmlWMTj3cOriWMe9iKcZL14hYfPE9X0sPDpkRHUCovHh+J7eq0
i8WDuWIp2w4dXKPDZdEKPDntE8OcyiAtDEpIE2kNhw6DgPPuddzGU1ayC40
5xNtZyNupclP/9C5C4Eh8XqYmQ9r70YSJLbeheXqcQifLy4RtnzphTgofQ/C
51lxY6mBGpo34OfRERy6cNehFqfY9Obp6+Q8HSGw+IFwaMdrllPUY25mLSHJ
KDjKL3Sg4ZllpwyXb3dZRpwM+wYU1AEWhOnEStbfPe0s9uVl8Viaym82WejR
LhPVwtTrbQncaaDMBZdCKds5rQrFDfMAe99EAiQR0eEQx+pLmXH9LrPxe1VC
PJmWmxqAfFpESck6MMg1v2IkUgsnRA8P8Wwbh6keQ+V05Mol+ozQ3xlL85s9
OcovRMwHDpkBe+B8zwQoSBe+PNI0QHc3/wAlrHqCjdqdLdl1WiBIKYjpEO+M
+aJ9sXkM/Nxf/SdzKhaB6fUYoy0k8UZ5CCIfCHQTmQNvm9rOXGenO8HQn4XO
hTE4tkRM3uJ7pw45YSSBdtTyyyVEinrwREBtuyfFMHDEkGshrcfNXllL/wAy
OHV4fSAFaeP/ALrfQ6/CZwuPMTuaMR1XTb6sx+L+lqZGj5TNR18OHoMfJerm
xxjlu4x7qj7GiDI4SGsuM4zRYDoFoaplA6cEAQZSNAPRWOEhpdI9XiGQi03t
yyCSWylO3pBeUe99KcJY5mdWC+f0khCQkfF9bPA5IEPJ6llODFIGtWn0IRgc
Y7vLhw+oOSJOscAxyvJKyGA26b+bAwPxRLGbdGQ3E0QiUhjyDJH4ZeWT0zln
r2LSHn+rk2/4eLawY8UBvyEwV/Y52Yx+G3qxdFCPOqkpl6WBBIEkaOHSHdKW
A8jWD6ICPHDwdTA45xzx5ifN/T/8ScpliTpgb1HduMBeopZgCQkPhl5/9X++
dBqx4FQD4PPnhsAy8GJemnm6wSlilLlJcp0SzQyTuPEvN/r/wB4uSlnExpB
f06f1JGI2kUfMS+mHT1IfM9VgnDISksfCS9XS5d4v6Xt6/BvjvjqQ+HHNKGt
zEUXosUZZ7128HWWID3vRiygh4/xCVRiPeVvYhs88T1fdwDyB+bjLzP03Tjy
j3Kxey9bpF4+n4en8RIUXDph5QxGmdY7BJ5SBqmrkHRCJHX3PPkm7y5JeOZ1
aiETmgSPLIOVIG4Xo0htGfmAenfq8lPmeiMtWMp24jZeuOMZORYeHAdX0sHw
282aR//R6DI9SQ2h0zYPUGvLrigl8O223jJ1g+fz9EPiL54j6chWIF+n6jFu
D4WfFR1dSRHtdFK6p9nHw/Pfh0rAfocYNMRWWQyYupGi0C0yc8ho82R7pQ0e
PJFjKcGUvHb3Zo+x4JmjTi2h0y/ixKtbYBQS8lPfduczFDnk6PXjxjHrLLUp
KDNrJlzx4pAWdApMQdXXJlnUvKTZ1dLE87szuj1RiKGodJ9ZAQ15eK9Hfo8Y
yZKkLFNpZzBi1VEnX0c/UxiT0mXimhHyjQMF6nlSdGBoyb8UD3tKCRBfC6wb
M9keUvu1XHd4uqhCVx22O8moyzjz7Le+OpeSWGUfaOz1xFmoi3UkKkN3HCY
ihX3O0emnMVI7fc9OHpYYTY1J5kfiZlg5oYJHgU9WLpxj83J8XSeWMBciA88
us3aYoklMLLA9VEgxlG9C3nxnNjscjV58xyHQ6EtlKw1uohsEI9HLIIJ0p6
8XSiB3E2XpgbFtU5bLBmY2Hmx8AgU5RlrcYlo9sdC+Z18juG0E7Qb/1MUhn
gZT5yR4vVE3LaPCnlMSCTIVZe3ENsjLn2PSupHoZZbyYrPxR8peQB9OdGM5D
ggf8p8wvRmUaSOg1YT2Qw0FMWWosB3dMQDr7n1emyHWEu3H9L5nT4zKNGXWr
1wO6PqDkOGNyuoJlEwMegLR6SgZSuRemBJFyNu8XMIPOw9PLaYy0BejpyckT
i+2OHpkHmnE4pjKpMuQaNYHcAe/d015DhCYOQgGt3mAegaFy9SoTwhRFakN
BicN8TG6thTix5T6Q3HQavdE6a93kx9FHcCSdPsvamAhkwRKW0WLPuQCTRCK
GN92kcPLn6mOE666Jlh0yoin5vrcPoy9/D6X7XkNyAFDkNZ4x6rHuHg9FgZZ
53SZTla88J/ENa9gcpX9Gpj5xDp1c98NwjLh2jB40Cd9e1+vwioj3PyHTgnN
H2l+xxDRzYqPN/FJcBPTxoBw/FJXMRD24I8JGmbRGqYi5EumMcrEVuLCHLMV
El8/J8T6WUVB8ycbJpqByyNIETq2fBmMS6IVj1NvTDVxxgxt2ixg7MD2R6nH
Dyk6vJhinpoxySNGnLkF//S9QHTR0iTTy9LGW3zd3rEXyrU7iYiXxPk9X05
Fnl9iTinxCUaeiMnj/h5lNe1+pgbiH5jHH08teL9J0x3QCWoehvSjRoEBTG+
XZgk+xwIEF1Mq4DEebloxIOHqAlh8PLLzP0vVHHt9r8h1mQCe3uWNFq4Ztvt
gyrV1E17eHjgfVzV9mLwSWP+6e12aWP+R6WGNDCeS7XbmGnk2ZGchTzDnRyk

aJHd0ga1L0ShHNuWbVT6P4XjvdP5PI79z2dH1HpAxloD3ZXB4ItisD1JcsS1
4DIP2rsug15e5xMjjsAEtbBTYWmAzlp4MsSjBcaB+0+kXm6jEJx9oaiMkYoR
FRDYhGPGj58OsOMbSLLvHHPOLkaHg2OpC8nVQxjPseXN1k+l6PbDpoQ9rzT
gMeYSkND3/haoblghHP8VmXtfThjERQ0URhHV1jISFx4Y2Dk6zCZQuPI4eGO
OeeO6cqp9kjTV4z0AJNk0ewamIB0Oc5AYy+z3fQBtxxYY4xtiNHWlpyyhcp8
GnW2Dqwp871sKkSjDVCRRer8QiLA7lwjHQjtEO66mbaHJPNtiYDgnn/C8yZmj
SAHrJmDXHV66IIV6OZLcT2QBSQ0McpCB0jgMZDf3YU9bolVCz3dcEPTzDHL4
Z+X/AJT044x2Rrwr1GISju4l1eU4IlgGMbJGB12I6lgh5MeTz75m7Gr22Dw5b
KgFy6rXEQAb0PlidbQwp5OHJPLJlQCn1Mdml3c1qkRHZsBAICgVwlToGgkJP
AF6pQIGmqfa0yTTACQ0fL6iMsc94G4F9VxyxJjQdIM8jFMAy3d+wejp8kYR2
1WrzjFzdiQZIIY3HR6GA9Vg2ZnW76s9R5g+iYjPCo8h87NEx54ajLPO6eN5h
736bF8L4HTx/n2+/HTHfsZYqPB6qXqdSB7X18QfDgfU6p+hwhj0LubQjotVA
l2EaiiUfIB4lyU4c44D58o6EvqdQNXgmGg5NiYx26u5AQTPSIY0SSURDpwGK
LQd3TeY0x1OP0pboGi448hhxygkyLYJJ/9P1ojW+zuK0YiARq1Ednznc15qk
zFpJPB5aZPL6vFtkJh9PopeV5upgZQNcufR9ZGHLd5G0HsEkaolmETqOzwZ
fxCMtMfmPhBzMs2Qdo32j58jswdWTro4wSaHvfNI1uXqpAYQTem4+TG9GL8L
E5bpX/r8z3TwQwRBAs+1PSSnksHUZpGM5af4PLF87rPw44ZiR1lfrsU7hdU
8XVwGUMIQMUz5rJKovJ0pG4vp9T00gONHgh0pidwLyjBnod04O7c5nOBbmTK
l1eejMkvFUk07QbHICSa1c5GU2ximTQGpfQx/h9ak/J6qsHN2R5/qbRq6wzb
tHq6jpsQjq8uPp55fLijZCdEyk/U9boz6kaHZ7gBVM9B+HzwxrJofY+iMUyc
O1VwYdIOBxGBA4Zit9CUdwp4SNujWoInJFHu8/VRMoEB6L15ZnESFMRo8bDI
x4xxcn08JEo3VX2eLJD0Mm4CwXbHPLM2BQdMyjSPxz4fVFB2AvQtaAOZKef6
WafkkQA9uKHpgRHZN20E2AkUoSRYQNGFFDd8l1XcA8nUdUIS2d2ag66rVmThh
yk3E/J2JbBDxesN5Xmu4SN09HWaZD4vJjkLMTwQ9KEscdlbltuAFvQyc5Grc
dHSUADogRooHoHNjl0v+lxnEjJHf5RpX9LqM9GsUAD/ynHOZ7gZ8lr0Mo9/o
jeMe93nESiQeKfP6DOD/AC+/xPpEAinztYnVHBHoZR+39z2QjtiBd0u6vic8
nURjEkG2ag33OGXql4+S8Z6rJW+tHAZCZGRjduulK9bHMTFxOjqHyelmcc6l
9rs+qOGNQJL4RYPCF4YUoFHsW0E6oAFoo2fBrnVfegCvBFdmgvCB53WQoWB3
cYdPuIN3F9OcBMUeHzZAxyenDQO0zLDjkMOQ2aijq8YyRE48Oc8ezTI7cEPU
xUezoyeNgFZbPg+rlyCOM+583JhOPJuGniEZupgccrJBrhoOT8OG/qSfAP0+
KFB+c/A47pzk/U4xoA5sVGpGiyjrENkLL4vk5Ked1HJeGYt7eoB+95iGkOaU
WDF3yEAOGOW+R9jUCoxJaoAV3SNTQU6aO4MmcgB70xincAwZE8IH/9T2ISDp
73mkdhBLvCW4W+c7mgstcs3YpYmtCiFSiKovky/DTkzg15H1h7Why2Sqa4ul
jAUAAP8AC6RglmgNFjQoh1D1WJglZNFJoaoX7WkARTzTj4vYaeXqASDXLzs
jSZ5fUzjRfGhkMpG+Bw+vPp5yjtEdfa+ZLpfSIV6lw9IN11KGP1pbHow9NDE
aPHa3mwGcc+wDs+zHosnUVvFBZdYRb2lnNL05ioHUcNHHnykDGKH2iX1cP4f
ixa1Z8S9YAD14nKTzYfhcCd2TU+D6EMUCyqlACZSrQKLPLqIU885yEqA0bM
thot86sYJETzz54V5np4cM2UCJDI9oOOWgsoFka8JBtF6vM6kmlJopqlCnyo
DdcuUpXw0CJNSKICh2YAR8LbAs25Ysgma9jqgG0BJLILQEInLLiGSJBHLrbB
mBygcEJmJ2nkPbGW4PBlqc9wPHd22Ei4jVsmYObR8RveOz4s5WT4vvROUS25
BcTo+L+JdIYT3QLuoZhbcD8XqzgakHeOUS45dmTaMvMkVuHhbmISLTDGe6l
FO2Walnuge22IacseHJmklkPX0/TmfAoPqYcEcQ05Y7ESPOIAdPngR3GrvLr
ZXWON05daN+aERyuH/wfKYy4k4NG0ozzESOG7h5vJjnVGnsI1IMtkdS4yx5c
txkAGohPUyFCI7pjIzAhj0ocu37LE1fldgLYx4UyQckemmZCUy996vNLq4A0
8855MpOu2IWpTvy544xZYh1YJAOI8PBA7z/N1rhrJLdmjegHdQJPVfk+xPZw
j1EfFzOeUjoNPa5gsnVym3mhmvykau0ZW5xKXuvTupvsgUoLQOpGry5eIGQ7
gaL1qApByY+iiD5tXtEQBQSGnUmYPO63BY3Ds+P1ELxSfpZx3Cjw+D1mL0yY
9i7qyNGX4DCoSPtfpsYfC/Cl+njrxJfYGeMTy5eoR1ckllyS4jqRucMnX443

ZpFMs/LyyNC3nzdTuPkBkXHHDJ1PllLaG7EMOq6uMTVpwZqiJeLtL8KAN8sj
HsHuSB0RHclJ3F5YdTrtk9IAAnq7M6Ezge5UDTV6BCw80wbQP/9k=

---=_linux46186f4a--

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?
Posted by [Rich Lamanna](#) on Sun, 08 Apr 2007 04:59:37 GMT
[View Forum Message](#) <> [Reply to Message](#)

Gotcha, we'll see what happens when I stick the new rectumfier in there.
Maybe I'll get lucky :-)

Thanks,
Rich

"Neil" <IOUOIU@OIU.om> wrote in message news:4617eff2\$1@linux...

>
> Yes, it could've just gone kablooeey, affecting no other
> components, but what a bridge rectifier does is to turn the
> various cycles of AC current into steady & polarized DC. If
> that thing went kablooeey and created an open circuit in the
> process, than it's possible no other components were affected;
> if it kablooeed into a short, then whatever components that are
> next in line after it got a nice dose of AC, which may have
> caused a subsequent kablooeation of those parts as well.
>
> Just 'cause they don't "look" bad, doesn't mean they ain't.
>
> Neil
>
>
> "Rich Lamanna" <richard.lamanna@verizon.net> wrote:
> >
> >
> >Neil, Edna, couldn't the rectifier just have gone Kablooeey? As you say =
> >it could be symptomatic of another problem but if you read my last post,
> =
> >I may have been overloading the thing. Looking at the circuit board =
> >carefully, I see no other browned or burned resistors, etc. Maybe I'll =
> >send it in, but I might try to fix it myself as it will be only a couple
> =
> >of bucks if it doesn't work. The unit was bought used from another owner
> =
> >a few years ago, on ebay, and I'm not sure if it is still under =
> >warrantee. I'll have to look into this. I probably know just enough to =
> >get this wrong, but wish me luck. I know..... I'll soon be hearing, =

> > "I told you so"! :-)
> >
> > Thanks,
> > Rich
> >
> > "Rich Lamanna" <richard.lamanna@verizon.net> wrote in message =
> > news:46178cc2\$1@linux...
> > Hello, Easter greetings by the way. Hey the other day I smelled smoke
> =
> > and heard a crinkling sound in the back of my preamp rack and later =
> > discovered the cause was my Presonus M80's power supply which is now =
> > deep fried. Well I took the supply apart and found that this dark grey =
> > thing on the cuircuit board, I think it's a diode ->I, melted right off =
> > of the board. Any one know what this is? I can't get a picture just yet
> =
> > up on the net but I'll try and describe it.
> >
> > It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the bottom which
> =
> > solder to the cuicut board, dark grey colored and is coded:
> >
> > -->| RS*202L
> > RU A 90=20
> > + AC -
> >
> > Anyone of you electronics wizards know where the heck I can find one =
> > of these?
> >
> > You guys are great,
> > Thanks
> > Rich
> >
> > PS. By the way I broke down and got a Myspace site now. Check it out.
> > =
>
> > http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofile&friend=
> > id=3D172230696
> >
> >
> >
> >
> ><!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
> ><HTML><HEAD>
> ><META http-equiv=3DContent-Type content=3D"text/html; =
> > charset=3Diso-8859-1">
> ><META content=3D"MSHTML 6.00.2800.1555" name=3DGENERATOR>
> ><STYLE></STYLE>
> ></HEAD>

```
> ><BODY bgColor=3D#ffffff>
> ><DIV>
> ><DIV><FONT size=3D2>Neil, Edna, couldn't the rectifier just have gone =
> >Kablooey? As=20
> >you say it could be symptomatic of another problem but if you read my =
> >last post,=20
> >I may have been overloading the thing. Looking at the circuit board=20
> >carefully, I see no other browned or burned resistors, etc. Maybe =
> >I'll send=20
> >it in, but I might try to fix it myself as it will be only a couple =
> >of=20
> >bucks if it doesn't work. The unit was bought used from another owner a
> =
> >few=20
> >years ago, on ebay, and I'm not sure if it is still under warrantee. =
> >I'll have=20
> >to look into this. I probably know just enough to get this wrong, but =
> >wish me=20
> >luck. I know..... I'll soon be hearing, "I told you so"! =
> >:-)</FONT></DIV>
> ><DIV><FONT size=3D2></FONT> </DIV>
> ><DIV><FONT size=3D2>Thanks,</FONT></DIV>
> ><DIV><FONT size=3D2>Rich</FONT><BR></DIV></DIV>
> ><BLOCKQUOTE dir=3Dltr=20
> >style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: 5px; =
> >BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
> > <DIV>"Rich Lamanna" <<A=20
> > =
> >
> >href=3D"mailto:richard.lamanna@verizon.net">richard.lamanna@verizon.net</=
> >A>>=20
> > wrote in message <A=20
> > href=3D"news:46178cc2$1@linux">news:46178cc2$1@linux</A>...</DIV>
> > <DIV><FONT size=3D2>Hello, Easter greetings by the way. Hey the =
> >other day I=20
> > smelled smoke and heard a crinkling sound in the back of my =
> >preamp=20
> > rack and later discovered the cause was my Presonus M80's power supply
> =
> >which=20
> > is now deep fried. Well I took the supply apart and found that this =
> >dark grey=20
> > thing on the cuircuit board, I think it's a diode ->I, melted right =
> >off of=20
> > the board. Any one know what this is? I can't get a picture just yet =
> >up on the=20
> > net but I'll try and describe it.</FONT></DIV>
> > <DIV><FONT size=3D2></FONT> </DIV>
```

> > <DIV>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins
> =
> >on the=20
> > bottom which solder to the cuicut board, dark grey colored and is =
> >
> > coded:</DIV>
> > <DIV> </DIV>
> > <DIV>-->| RS*202L</DIV>
> > <DIV>RU A 90 </DIV>
> > <DIV>+ AC -</DIV>
> > <DIV> </DIV>
> > <DIV>Anyone of you electronics wizards know where =
> >the heck l=20
> > can find one of these?</DIV>
> > <DIV> </DIV>
> > <DIV>You guys are great,</DIV>
> > <DIV>Thanks</DIV>
> > <DIV>Rich</DIV>
> > <DIV> </DIV>
> > <DIV>PS. By the way I broke down and got a Myspace site
> =
> >now.=20
> > Check it out.</DIV>
> > <DIV><A=20
> > =
>
>href=3D" http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofil=
> >e&friendid=3D172230696">http://profile.myspace.com/index.cfm?fuseacti=
> >on=3Duser.viewprofile&friendid=3D172230696 </DIV>
> > <DIV>

</DIV></BLOCKQUOTE></BODY></HTML>
> >
> >
>

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?
Posted by [Rich Lamanna](#) on Sun, 08 Apr 2007 05:00:36 GMT
[View Forum Message](#) <> [Reply to Message](#)

This is a multi-part message in MIME format.

-----=_NextPart_000_0021_01C77970.EF64B0C0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

Edna, yes the power supply can run on its own, doesn't need to be =
plugged in for it to function. I have it disconnected at the moment. Why =

do you ask?

Rich

"Edna" <edna@texomaonline.com> wrote in message news:4617f977@linux...
Its possible, but not likely, especially if its not a new unit, which =
would be more likely to have a defective component. Something caused a =
current overload through it to burn it up. But apparently not a direct =
short which would have blown the fuse as well. I've seen many leaky =
filter caps do this - these are the large caps that filter the ripple =
voltage or small ac component off the DC. A blown voltage regulator is =
another likely suspect, as far as the PS itself. Can the PS run by =
itself w/o being connected to the M80? =20

Rich Lamanna" <richard.lamanna@verizon.net> wrote in message =
news:4617ee9b\$1@linux...

Neil, Edna, couldn't the rectifier just have gone Kablooeey? As you =
say it could be symptomatic of another problem but if you read my last =
post, I may have been overloading the thing. Looking at the circuit =
board carefully, I see no other browned or burned resistors, etc. Maybe =
I'll send it in, but I might try to fix it myself as it will be only a =
couple of bucks if it doesn't work. The unit was bought used from =
another owner a few years ago, on ebay, and I'm not sure if it is still =
under warrantee. I'll have to look into this. I probably know just =
enough to get this wrong, but wish me luck. I know..... I'll soon be =
hearing, "I told you so"! :-)

Thanks,
Rich

"Rich Lamanna" <richard.lamanna@verizon.net> wrote in message =
news:46178cc2\$1@linux...

Hello, Easter greetings by the way. Hey the other day I smelled =
smoke and heard a crinkling sound in the back of my preamp rack and =
later discovered the cause was my Presonus M80's power supply which is =
now deep fried. Well I took the supply apart and found that this dark =
grey thing on the cuircuit board, I think it's a diode ->I, melted right =
off of the board. Any one know what this is? I can't get a picture just =
yet up on the net but I'll try and describe it.

It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the bottom =
which solder to the cuicut board, dark grey colored and is coded:

-->| RS*202L
RU A 90=20
+ AC -

Anyone of you electronics wizards know where the heck I can find =

one of these?

You guys are great,
Thanks
Rich

PS. By the way I broke down and got a Myspace site now. Check it =
out.

=
<http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewprofile&friend=id=3D172230696>

-----=_NextPart_000_0021_01C77970.EF64B0C0
Content-Type: text/html;
charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
<HTML><HEAD>
<META http-equiv=3DContent-Type content=3D"text/html"; =
charset=3Diso-8859-1">
<META content=3D"MSHTML 6.00.2800.1555" name=3DGENERATOR>
<STYLE></STYLE>
</HEAD>
<BODY bgColor=3D#ffffff>
<DIV><FONT size=3D2>Edna, yes the power supply can run on its own, =
doesn't need to=20
be plugged in for it to function. I have it disconnected at the moment. =
Why do=20
you ask?</FONT></DIV>
<DIV><FONT size=3D2></FONT>&nbsp;</DIV>
<DIV><FONT size=3D2>Rich</FONT><BR></DIV>
<BLOCKQUOTE dir=3Dltr=20
style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: 5px; =
BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
  <DIV>"Edna" &lt;<A=20
  href=3D"mailto:edna@texomaonline.com">edna@texomaonline.com</A>&gt; =
wrote in=20
  message <A =
href=3D"news:4617f977@linux">news:4617f977@linux</A>...</DIV>
  <DIV><FONT face=3DArial size=3D2>Its possible, but not likely, =
especially if its=20
  not a new unit, which would be more likely to have a defective=20
  component.&nbsp;   Something caused a current overload through it to =
burn it=20
  up.&nbsp;   But apparently not a direct short which would have blown the =
```

well. I've seen many leaky filter caps do this - these are the caps that filter the ripple voltage or small ac component off the DC. A blown voltage regulator is another likely suspect, as far as the PS itself. Can the PS run by itself w/o being connected to the M80?

Richard Lamanna <richard.lamanna@verizon.net>

wrote in message <[news:4617ee9b\\$1@linux](news:4617ee9b$1@linux)>...>

Neil, Edna, couldn't the rectifier just have gone Kablooeey? As you say it could be symptomatic of another problem but if you read my last post, I may have been overloading the thing. Looking at the circuit board carefully, I see no other browned or burned resistors, etc. Maybe I'll send it in, but I might try to fix it myself as it will be only a couple of bucks if it doesn't work. The unit was bought used from another owner a few years ago, on ebay, and I'm not sure if it is still under warrantee. I'll have to look into this. I probably know just enough to get this wrong, but wish me luck. I know..... I'll soon be hearing, "I told you so"! :-)

Thanks,

Rich

Rich Lamanna <richard.lamanna@verizon.net>

wrote in message <A=20
href=3D"news:46178cc2\$1@linux">news:46178cc2\$1@linux...</DIV>
<DIV>Hello, Easter greetings by the way. Hey =
the other=20
day I smelled smoke and heard a crinkling sound in the =
back of=20
my preamp rack and later discovered the cause was my Presonus =
M80's power=20
supply which is now deep fried. Well I took the supply apart and =
found=20
that this dark grey thing on the cuircuit board, I think it's a =
diode=20
>l, melted right off of the board. Any one know what this is? =
I can't=20
get a picture just yet up on the net but I'll try and describe=20
it.</DIV>
<DIV> </DIV>
<DIV>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 =
pins on the=20
bottom which solder to the cuircuit board, dark grey colored =
and is=20
coded:</DIV>
<DIV> </DIV>
<DIV>-->l RS*202L</DIV>
<DIV>RU A 90 </DIV>
<DIV>+ AC -</DIV>
<DIV> </DIV>
<DIV>Anyone of you electronics wizards know =
where the=20
heck I can find one of these?</DIV>
<DIV> </DIV>
<DIV>You guys are great,</DIV>
<DIV>Thanks</DIV>
<DIV>Rich</DIV>
<DIV> </DIV>
<DIV>PS. By the way I broke down and got a Myspace =
site now.=20
Check it out.</DIV>
<DIV><A=20
=
href=3D" http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofil=
e&friendid=3D172230696">http://profile.myspace.com/index.cfm?fuseacti=
on=3Duser.viewprofile&friendid=3D172230696</DIV>
<DIV>
<FONT=20
size=3D2>
</DIV></BLOCKQUOTE></BLOCKQUOTE></BLOCKQUOTE
></BODY><=
</HTML>

-----=_NextPart_000_0021_01C77970.EF64B0C0--

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?

Posted by [Edna Sloan](#) on Sun, 08 Apr 2007 17:03:16 GMT

[View Forum Message](#) <> [Reply to Message](#)

This is a multi-part message in MIME format.

-----=_NextPart_000_0020_01C779D5.E490D380

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: quoted-printable

Because you could mess with the PS w/o affecting the M80. I assume you = have experience with soldering and component removal on PCBs, and I am = assuming the circuit board is only single or double sided. If not, in = either case, I would let a tech do it. Its easy to damage a PCB, and if = its multilayered you cant do much anyway.

Having said that, If you replace just the rectifier, the only load on = it would be from the PS components. I would suggest also replacing the = filter cap(s) on that supply line, since it is the prime suspect in the = PS. (You may need a schematic here). If after this, the rectifier = starts getting too hot again the problem is likely a VR(s) on that line. =

<richard.lamanna@verizon.net> wrote in message news:46186a35@linux...

Edna, yes the power supply can run on its own, doesn't need to be = plugged in for it to function. I have it disconnected at the moment. Why = do you ask?

Rich

"Edna" <edna@texomaonline.com> wrote in message = news:4617f977@linux...

Its possible, but not likely, especially if its not a new unit, = which would be more likely to have a defective component. Something = caused a current overload through it to burn it up. But apparently not = a direct short which would have blown the fuse as well. I've seen many = leaky filter caps do this - these are the large caps that filter the = ripple voltage or small ac component off the DC. A blown voltage = regulator is another likely suspect, as far as the PS itself. Can the = PS run by itself w/o being connected to the M80? =20

ich Lamanna" <richard.lamanna@verizon.net> wrote in message = news:4617ee9b\$1@linux...

Neil, Edna, couldn't the rectifier just have gone Kablooeey? As you =

say it could be symptomatic of another problem but if you read my last =
post, I may have been overloading the thing. Looking at the circuit =
board carefully, I see no other browned or burned resistors, etc. Maybe =
I'll send it in, but I might try to fix it myself as it will be only a =
couple of bucks if it doesn't work. The unit was bought used from =
another owner a few years ago, on ebay, and I'm not sure if it is still =
under warrantee. I'll have to look into this. I probably know just =
enough to get this wrong, but wish me luck. I know..... I'll soon be =
hearing, "I told you so"! :-)

Thanks,
Rich

"Rich Lamanna" <richard.lamanna@verizon.net> wrote in message =
news:46178cc2\$1@linux...

Hello, Easter greetings by the way. Hey the other day I smelled =
smoke and heard a crinkling sound in the back of my preamp rack and =
later discovered the cause was my Presonus M80's power supply which is =
now deep fried. Well I took the supply apart and found that this dark =
grey thing on the cuircuit board, I think it's a diode ->I, melted right =
off of the board. Any one know what this is? I can't get a picture just =
yet up on the net but I'll try and describe it.

It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the bottom =
which solder to the cuicut board, dark grey colored and is coded:

-->| RS*202L
RU A 90=20
+ AC -

Anyone of you electronics wizards know where the heck I can find =
one of these?

You guys are great,
Thanks
Rich

PS. By the way I broke down and got a Myspace site now. Check it =
out.

=

[http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofile&friend=
id=3D172230696](http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofile&friend=id=3D172230696)

-----=_NextPart_000_0020_01C779D5.E490D380
Content-Type: text/html;
charset="iso-8859-1"

Content-Transfer-Encoding: quoted-printable

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
<HTML><HEAD>
<META http-equiv=3DContent-Type content=3D"text/html; =
charset=3Diso-8859-1">
<META content=3D"MSHTML 6.00.2900.2180" name=3DGENERATOR>
<STYLE></STYLE>
</HEAD>
<BODY bgColor=3D#ffffff>
<DIV><FONT face=3DArial size=3D2><FONT face=3D"Times New Roman" =
size=3D3>Because you=20
could mess with the PS w/o affecting the M80.&nbsp; I assume you have =
experience=20
with soldering and component removal on PCBs,&nbsp;and I&nbsp;am =
assuming the=20
circuit board is only single or double sided.&nbsp; If not, in either=20
case,&nbsp;I would let a tech do it.&nbsp; Its easy&nbsp;to damage a =
PCB, and if=20
its multilayered you cant do much anyway.</FONT></FONT></DIV>
<DIV><FONT face=3DArial size=3D2><FONT face=3D"Times New Roman"=20
size=3D3></FONT></FONT>&nbsp;</DIV>
<DIV><FONT face=3DArial size=3D2><FONT face=3D"Times New Roman" =
size=3D3>Having said=20
that, &nbsp;<FONT face=3DArial size=3D2>I</FONT></FONT>f you replace =
just the=20
rectifier<FONT face=3D"Times New Roman" size=3D3>, the only load on it =
would be from=20
the PS components.&nbsp; I would suggest also replacing the filter =
cap(s) on=20
that supply line, since it is the prime suspect in the PS.&nbsp; (You =
may need a=20
schematic here).&nbsp; If after this, &nbsp;the rectifier starts=20
getting&nbsp;too hot again the problem is likely a VR(s) on that=20
line.&nbsp;</FONT></FONT></DIV>
<DIV><FONT face=3DArial size=3D2><FONT face=3D"Times New Roman"=20
size=3D3></FONT></FONT>&nbsp;</DIV>
<DIV><FONT face=3DArial size=3D2><FONT face=3D"Times New Roman" =
size=3D3>&nbsp;&nbsp;=20
</FONT></FONT>&lt;<A=20
href=3D"mailto:richard.lamanna@verizon.net">richard.lamanna@verizon.net</=
A>&gt;=20
wrote in message <A =
href=3D"news:46186a35@linux">news:46186a35@linux</A>...</DIV>
<BLOCKQUOTE dir=3Dltr=20
style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: 5px; =
BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
<DIV><FONT size=3D2>Edna, yes the power supply can run on its own, =
```


resistors,=20

etc. Maybe I'll send it in, but I might try to fix it myself as it =
will=20

be only a couple of bucks if it doesn't work. The unit was =
bought=20

used from another owner a few years ago, on ebay, and I'm not sure =
if it=20

is still under warrantee. I'll have to look into this. I probably =
know=20

just enough to get this wrong, but wish me luck. I know..... =
I'll soon=20

be hearing, "I told you so"! :-)</DIV>

<DIV> </DIV>

<DIV>Thanks,</DIV>

<DIV>Rich
</DIV></DIV>

<BLOCKQUOTE dir=3Dltr=20

style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: 5px; =
BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">

<DIV>"Rich Lamanna" <<A=20

=

href=3D"mailto:richard.lamanna@verizon.net">richard.lamanna@verizon.net</=
A>>=20

wrote in message <A=20

=

href=3D"news:46178cc2\$1 @linux">news:46178cc2\$1 @linux...</DIV>

<DIV>Hello, Easter greetings by the way. Hey =
the other=20

day I smelled smoke and heard a crinkling sound in the =
back of=20

my preamp rack and later discovered the cause was my Presonus =
M80's=20

power supply which is now deep fried. Well I took the supply =
apart and=20

found that this dark grey thing on the cuircuit board, I think =
it's a=20

diode ->l, melted right off of the board. Any one know what =
this is?=20

I can't get a picture just yet up on the net but I'll try and =
describe=20

it.</DIV>

<DIV> </DIV>

<DIV>It's appx. 3/4" by 1/2" by 1/4" thick, has 4 =
pins on=20

the bottom which solder to the cuircuit board, dark grey =
colored and=20

is coded:</DIV>

<DIV> </DIV>

<DIV>-->l RS*202L</DIV>

<DIV>RU A 90 </DIV>
<DIV>+ AC -</DIV>
<DIV> </DIV>
<DIV>Anyone of you electronics wizards know =
where the=20
heck I can find one of these?</DIV>
<DIV> </DIV>
<DIV>You guys are great,</DIV>
<DIV>Thanks</DIV>
<DIV>Rich</DIV>
<DIV> </DIV>
<DIV>PS. By the way I broke down and got a =
Myspace site=20
now. Check it out.</DIV>
<DIV><A=20
=
href=3D" http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofil=
e&friendid=3D172230696">http://profile.myspace.com/index.cfm?fuseacti=
on=3Duser.viewprofile&friendid=3D172230696</DIV>
<DIV>
<FONT=20
size=3D2>
</DIV></BLOCKQUOTE></BLOCKQUOTE></BLOCKQUOTE
></BLOCKQUOTE></=
FONT></BODY></HTML>

-----=_NextPart_000_0020_01C779D5.E490D380--

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?
Posted by [Rich Lamanna](#) on Mon, 09 Apr 2007 11:50:15 GMT
[View Forum Message](#) <> [Reply to Message](#)

This is a multi-part message in MIME format.

-----=_NextPart_000_002D_01C77A73.54283F60

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: quoted-printable

Thanks Edna for the help. Will keep you all posted. Anyone know where I =
can order this rectifier online? It might just be easier for me to order =
it as I may not be able to get to the parts place until this weekend.

Rich

"Edna" <edna@texomaonline.com> wrote in message news:46192160@linux...
Because you could mess with the PS w/o affecting the M80. I assume =
you have experience with soldering and component removal on PCBs, and I =
am assuming the circuit board is only single or double sided. If not, =

in either case, I would let a tech do it. Its easy to damage a PCB, and =
if its multilayered you cant do much anyway.

Having said that, If you replace just the rectifier, the only load on =
it would be from the PS components. I would suggest also replacing the =
filter cap(s) on that supply line, since it is the prime suspect in the =
PS. (You may need a schematic here). If after this, the rectifier =
starts getting too hot again the problem is likely a VR(s) on that line. =

<richard.lamanna@verizon.net> wrote in message =
news:46186a35@linux...

Edna, yes the power supply can run on its own, doesn't need to be =
plugged in for it to function. I have it disconnected at the moment. Why =
do you ask?

Rich

"Edna" <edna@texomaonline.com> wrote in message =
news:4617f977@linux...

Its possible, but not likely, especially if its not a new unit, =
which would be more likely to have a defective component. Something =
caused a current overload through it to burn it up. But apparently not =
a direct short which would have blown the fuse as well. I've seen many =
leaky filter caps do this - these are the large caps that filter the =
ripple voltage or small ac component off the DC. A blown voltage =
regulator is another likely suspect, as far as the PS itself. Can the =
PS run by itself w/o being connected to the M80? =20

ich Lamanna" <richard.lamanna@verizon.net> wrote in message =
news:4617ee9b\$1@linux...

Neil, Edna, couldn't the rectifier just have gone Kablooeey? As =
you say it could be symptomatic of another problem but if you read my =
last post, I may have been overloading the thing. Looking at the circuit =
board carefully, I see no other browned or burned resistors, etc. Maybe =
I'll send it in, but I might try to fix it myself as it will be only a =
couple of bucks if it doesn't work. The unit was bought used from =
another owner a few years ago, on ebay, and I'm not sure if it is still =
under warrantee. I'll have to look into this. I probably know just =
enough to get this wrong, but wish me luck. I know..... I'll soon be =
hearing, "I told you so"! :-)

Thanks,
Rich

"Rich Lamanna" <richard.lamanna@verizon.net> wrote in message =
news:46178cc2\$1@linux...

Hello, Easter greetings by the way. Hey the other day I =

smelled smoke and heard a crinkling sound in the back of my preamp rack = and later discovered the cause was my Presonus M80's power supply which = is now deep fried. Well I took the supply apart and found that this dark = grey thing on the cuircuit board, I think it's a diode ->l, melted right = off of the board. Any one know what this is? I can't get a picture just = yet up on the net but I'll try and describe it.

It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the = bottom which solder to the cuicut board, dark grey colored and is coded:

-->| RS*202L
RU A 90=20
+ AC -

Anyone of you electronics wizards know where the heck I can = find one of these?

You guys are great,
Thanks
Rich

PS. By the way I broke down and got a Myspace site now. Check = it out.

=

http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp_rofile&friend=id=3D172230696

-----=_NextPart_000_002D_01C77A73.54283F60

Content-Type: text/html;

charset="iso-8859-1"

Content-Transfer-Encoding: quoted-printable

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<HTML><HEAD>

<META http-equiv=3DContent-Type content=3D"text/html; =

charset=3Diso-8859-1">

<META content=3D"MSHTML 6.00.2800.1555" name=3DGENERATOR>

<STYLE></STYLE>

</HEAD>

<BODY bgColor=3D#ffffff>

<DIV>Thanks Edna for the help. Will keep you all posted. =

Anyone=20

know where I can order this rectifier online? It might just be easier =

for me to=20

order it as I may not be able to get to the parts place until this=20

weekend.</DIV>

```
<DIV><FONT size=3D2></FONT>&nbsp;</DIV>
<DIV><FONT size=3D2>Rich</FONT></DIV>
<DIV>&nbsp;</DIV>
<BLOCKQUOTE dir=3Dltr=20
style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: 5px; =
BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
  <DIV>"Edna" &lt;<A=20
    href=3D"mailto:edna@texomaonline.com">edna@texomaonline.com</A>&gt; =
wrote in=20
  message <A =
href=3D"news:46192160@linux">news:46192160@linux</A>...</DIV>
  <DIV><FONT face=3DArial size=3D2><FONT face=3D"Times New Roman" =
size=3D3>Because you=20
    could mess with the PS w/o affecting the M80.&nbsp;  I assume you have=20
    experience with soldering and component removal on PCBs,&nbsp; and =
l&nbsp; am=20
    assuming the circuit board is only single or double sided.&nbsp;  If =
not, in=20
    either case,&nbsp; I would let a tech do it.&nbsp;  Its easy&nbsp; to =
damage a=20
    PCB, and if its multilayered you cant do much =
anyway.</FONT></FONT></DIV>
  <DIV><FONT face=3DArial size=3D2><FONT face=3D"Times New Roman"=20
size=3D3></FONT></FONT>&nbsp;</DIV>
  <DIV><FONT face=3DArial size=3D2><FONT face=3D"Times New Roman" =
size=3D3>Having said=20
    that, &nbsp;<FONT face=3DArial size=3D2>I</FONT></FONT>f you replace =
just the=20
    rectifier<FONT face=3D"Times New Roman" size=3D3>, the only load on it =
would be=20
    from the PS components.&nbsp;  I would suggest also replacing the =
filter cap(s)=20
    on that supply line, since it is the prime suspect in the PS.&nbsp;  =
(You may=20
    need a schematic here).&nbsp;  If after this, &nbsp; the rectifier =
starts=20
    getting&nbsp; too hot again the problem is likely a VR(s) on that=20
    line.&nbsp;</FONT></FONT></DIV>
  <DIV><FONT face=3DArial size=3D2><FONT face=3D"Times New Roman"=20
size=3D3></FONT></FONT>&nbsp;</DIV>
  <DIV><FONT face=3DArial size=3D2><FONT face=3D"Times New Roman" =
size=3D3>&nbsp;&nbsp;=20
    </FONT></FONT>&lt;<A=20
    =
href=3D"mailto:richard.lamanna@verizon.net">richard.lamanna@verizon.net</=
A>&gt;=20
    wrote in message <A=20
href=3D"news:46186a35@linux">news:46186a35@linux</A>...</DIV>
```


<BLOCKQUOTE dir=3Dltr=20 style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: 5px; = BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
<DIV>Edna, yes the power supply can run on its own, = doesn't=20 need to be plugged in for it to function. I have it disconnected at = the=20 moment. Why do you ask?</DIV>
<DIV> </DIV>
<DIV>Rich
</DIV>
<BLOCKQUOTE dir=3Dltr=20 style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: 5px; = BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
<DIV>"Edna" <<A=20 = href=3D"mailto:edna@texomaonline.com">edna@texomaonline.com> = wrote in=20 message <A = href=3D"news:4617f977@linux">news:4617f977@linux...</DIV>
<DIV>Its possible, but not likely, = especially if=20 its not a new unit, which would be more likely to have a defective = component. <div> Something caused a current overload through it to = burn it=20 up. <div> But apparently not a direct short which would have blown = the=20 fuse as well. <div> I've seen many leaky filter caps do this - = these are=20 the large caps that filter the ripple voltage or small ac = component off=20 the DC. <div> A blown voltage regulator is another likely suspect, = as far=20 as the PS itself. <div> Can the PS run by itself w/o being = connected to=20 the M80? </DIV>
<DIV> </DIV>
<DIV>ich Lamanna" <<A=20 = href=3D"mailto:richard.lamanna@verizon.net">richard.lamanna@verizon.net</ = A>>=20 wrote in message <A=20 href=3D"news:4617ee9b\$1@linux">news:4617ee9b\$1@linux...</DIV>
<BLOCKQUOTE dir=3Dltr=20 style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: 5px; = BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
<DIV>
<DIV>Neil, Edna, couldn't the rectifier just have =

gone=20

Kablooey? As you say it could be symptomatic of another problem =
but if=20

you read my last post, I may have been overloading the thing. =
Looking at=20

the circuit board carefully, I see no other browned or =
burned=20

resistors, etc. Maybe I'll send it in, but I might try to fix it =
myself=20

as it will be only a couple of bucks if it doesn't work. =
The unit=20

was bought used from another owner a few years ago, on ebay, and =
I'm not=20

sure if it is still under warrantee. I'll have to look into =
this. I=20

probably know just enough to get this wrong, but wish me luck. I =

know..... I'll soon be hearing, "I told you so"! =
:-)</DIV>

<DIV> </DIV>

<DIV>Thanks,</DIV>

<DIV>Rich
</DIV></DIV>

<BLOCKQUOTE dir=3Dltr=20

style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: =
5px; BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">

<DIV>"Rich Lamanna" <<A=20

=

href=3D"mailto:richard.lamanna@verizon.net">richard.lamanna@verizon.net</=
A>>=20

wrote in message <A=20

=

href=3D"news:46178cc2\$1 @linux">news:46178cc2\$1 @linux...</DIV>

<DIV>Hello, Easter greetings by the way. =

Hey the=20

other day I smelled smoke and heard a crinkling =
sound in the=20

back of my preamp rack and later discovered the cause was my =
Presonus=20

M80's power supply which is now deep fried. Well I took the =
supply=20

apart and found that this dark grey thing on the cuircuit =
board, I=20

think it's a diode ->I, melted right off of the board. Any =
one know=20

what this is? I can't get a picture just yet up on the net but =
I'll=20

try and describe it.</DIV>

<DIV> </DIV>

<DIV>It's appx. 3/4" by 1/2" by 1/4" thick, has =
4 pins on=20
the bottom which solder to the cuicut board, dark grey =
colored=20

and is coded:</DIV>

<DIV> </DIV>

<DIV>-->| RS*202L</DIV>

<DIV>RU A 90 </DIV>

<DIV>+ AC -</DIV>

<DIV> </DIV>

<DIV>Anyone of you electronics =
wizards know where=20

the heck I can find one of these?</DIV>

<DIV> </DIV>

<DIV>You guys are great,</DIV>

<DIV>Thanks</DIV>

<DIV>Rich</DIV>

<DIV> </DIV>

<DIV>PS. By the way I broke down and got a =
Myspace site=20

now. Check it out.</DIV>

<DIV><A=20

=

href=3D" http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofil=
e&friendid=3D172230696">http://profile.myspace.com/index.cfm?fuseacti=
on=3Duser.viewprofile&friendid=3D172230696</DIV>

<DIV>
<FONT=20

=

size=3D2>
</DIV></BLOCKQUOTE></BLOCKQUOTE></BLOCKQUOTE
></BLOCKQUOTE></=

BLOCKQUOTE></BODY></HTML>

-----=_NextPart_000_002D_01C77A73.54283F60--

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?
Posted by [Aaron Allen](#) on Mon, 09 Apr 2007 13:48:48 GMT
[View Forum Message](#) <> [Reply to Message](#)

This is a multi-part message in MIME format.

-----=_NextPart_000_0028_01C77A83.E3E77610

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: quoted-printable

www.partsexpress.com=20

www.mcmelectronics.com=20

www.digikey.com=20
www.radioshack.com

"Rich Lamanna" <richard.lamanna@verizon.net> wrote in message =
news:461a1baf@linux...

Thanks Edna for the help. Will keep you all posted. Anyone know where =
I can order this rectifier online? It might just be easier for me to =
order it as I may not be able to get to the parts place until this =
weekend.

Rich

"Edna" <edna@texomaonline.com> wrote in message =
news:46192160@linux...

Because you could mess with the PS w/o affecting the M80. I assume =
you have experience with soldering and component removal on PCBs, and I =
am assuming the circuit board is only single or double sided. If not, =
in either case, I would let a tech do it. Its easy to damage a PCB, and =
if its multilayered you cant do much anyway.

Having said that, If you replace just the rectifier, the only load =
on it would be from the PS components. I would suggest also replacing =
the filter cap(s) on that supply line, since it is the prime suspect in =
the PS. (You may need a schematic here). If after this, the rectifier =
starts getting too hot again the problem is likely a VR(s) on that line. =

<richard.lamanna@verizon.net> wrote in message =
news:46186a35@linux...

Edna, yes the power supply can run on its own, doesn't need to be =
plugged in for it to function. I have it disconnected at the moment. Why =
do you ask?

Rich

"Edna" <edna@texomaonline.com> wrote in message =
news:4617f977@linux...

Its possible, but not likely, especially if its not a new unit, =
which would be more likely to have a defective component. Something =
caused a current overload through it to burn it up. But apparently not =
a direct short which would have blown the fuse as well. I've seen many =
leaky filter caps do this - these are the large caps that filter the =
ripple voltage or small ac component off the DC. A blown voltage =
regulator is another likely suspect, as far as the PS itself. Can the =
PS run by itself w/o being connected to the M80? =20

ich Lamanna" <richard.lamanna@verizon.net> wrote in message =

news:4617ee9b\$1@linux...

Neil, Edna, couldn't the rectifier just have gone Kablooey? As you say it could be symptomatic of another problem but if you read my last post, I may have been overloading the thing. Looking at the circuit board carefully, I see no other browned or burned resistors, etc. Maybe I'll send it in, but I might try to fix it myself as it will be only a couple of bucks if it doesn't work. The unit was bought used from another owner a few years ago, on ebay, and I'm not sure if it is still under warrantee. I'll have to look into this. I probably know just enough to get this wrong, but wish me luck. I know..... I'll soon be hearing, "I told you so"! :-)

Thanks,
Rich

"Rich Lamanna" <richard.lamanna@verizon.net> wrote in message news:46178cc2\$1@linux...

Hello, Easter greetings by the way. Hey the other day I smelled smoke and heard a crinkling sound in the back of my preamp rack and later discovered the cause was my Presonus M80's power supply which is now deep fried. Well I took the supply apart and found that this dark grey thing on the cuircuit board, I think it's a diode ->|, melted right off of the board. Any one know what this is? I can't get a picture just yet up on the net but I'll try and describe it.

It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the bottom which solder to the cuicut board, dark grey colored and is coded:

-->| RS*202L
RU A 90=20
+ AC -

Anyone of you electronics wizards know where the heck I can find one of these?

You guys are great,
Thanks
Rich

PS. By the way I broke down and got a Myspace site now. Check it out.

=

http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp_rofile&friend=id=3D172230696

-----=_NextPart_000_0028_01C77A83.E3E77610

Content-Type: text/html;
charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
<HTML><HEAD>
<META http-equiv=3DContent-Type content=3D"text/html; =
charset=3Diso-8859-1">
<META content=3D"MSHTML 6.00.6000.16414" name=3DGENERATOR>
<STYLE></STYLE>
</HEAD>
<BODY bgColor=3D#ffffff>
<DIV><FONT face=3DArial size=3D2><A=20
href=3D"http://www.partsexpress.com">www.partsexpress.com</A>&nbsp;</FONT=
></DIV>
<DIV><FONT face=3DArial size=3D2>&nbsp;<A=20
href=3D"http://www.mcmelectronics.com">www.mcmelectronics.com</A>&nbsp;</=
FONT></DIV>
<DIV><FONT face=3DArial size=3D2>&nbsp;<A=20
href=3D"http://www.digikey.com">www.digikey.com</A> </FONT></DIV>
<DIV><A href=3D"http://www.radioshack.com">www.radioshack.com</A></DIV>
<DIV>&nbsp;</DIV>
<DIV>&nbsp;</DIV>
<BLOCKQUOTE dir=3Dltr=20
style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: 5px; =
BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
  <DIV>"Rich Lamanna" &lt;<A=20
  =
href=3D"mailto:richard.lamanna@verizon.net">richard.lamanna@verizon.net</=
A>&gt;=20
  wrote in message <A=20
href=3D"news:461a1baf@linux">news:461a1baf@linux</A>...</DIV>
  <DIV><FONT size=3D2>Thanks Edna for the help. Will keep you all =
posted. Anyone=20
  know where I can order this rectifier online? It might just be easier =
for me=20
  to order it as I may not be able to get to the parts place until this=20
weekend.</FONT></DIV>
  <DIV><FONT size=3D2></FONT>&nbsp;</DIV>
  <DIV><FONT size=3D2>Rich</FONT></DIV>
  <DIV>&nbsp;</DIV>
  <BLOCKQUOTE dir=3Dltr=20
  style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: 5px; =
BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
    <DIV>"Edna" &lt;<A=20
    href=3D"mailto:edna@texomaonline.com">edna@texomaonline.com</A>&gt; =
wrote in=20
    message <A =
```

news:46192160@linux...</DIV>
<DIV>Because you could mess with the PS w/o affecting the M80. I assume you have experience with soldering and component removal on PCBs, and I assume the circuit board is only single or double sided. If not, in either case, I would let a tech do it. Its easy to damage a PCB, and if its multilayered you cant do much anyway.</DIV>
<DIV> </DIV>
<DIV>Having said that, I if you replace just the rectifier, the only load on it would be from the PS components. I would suggest also replacing the filter cap(s) on that supply line, since it is the prime suspect in the PS. (You may need a schematic here). If after this, the rectifier starts getting too hot again the problem is likely a VR(s) on that line.</DIV>
<DIV> </DIV>
<DIV> <richard.lamanna@verizon.net> wrote in message news:46186a35@linux...</DIV>
<BLOCKQUOTE dir="ltr" style="padding-right: 0px; padding-left: 5px; margin-left: 5px; border-left: 2px solid #000000; margin-right: 0px">
<DIV>Edna, yes the power supply can run on its own, doesn't need to be plugged in for it to function. I have it disconnected at the moment. Why do you ask?</DIV>
<DIV> </DIV>

<DIV>Rich
</DIV>
<BLOCKQUOTE dir=3Dltr=20
style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: 5px; =
BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
<DIV>"Edna" <<A=20
=
href=3D"mailto:edna@texomaonline.com">edna@texomaonline.com> =
wrote=20
in message <A=20
href=3D"news:4617f977@linux">news:4617f977@linux...</DIV>
<DIV>Its possible, but not likely, =
especially if=20
its not a new unit, which would be more likely to have a =
defective=20
component. Something caused a current overload through it =
to burn=20
it up. But apparently not a direct short which would have =
blown=20
the fuse as well. I've seen many leaky filter caps do this =
- these=20
are the large caps that filter the ripple voltage or small ac =
component=20
off the DC. A blown voltage regulator is another likely =
suspect,=20
as far as the PS itself. Can the PS run by itself w/o =
being=20
connected to the M80? </DIV>
<DIV> </DIV>
<DIV>ich Lamanna" <<A=20
=
href=3D"mailto:richard.lamanna@verizon.net">richard.lamanna@verizon.net</=
A>>=20
wrote in message <A=20
=
href=3D"news:4617ee9b\$1@linux">news:4617ee9b\$1@linux...</DIV>
<BLOCKQUOTE dir=3Dltr=20
style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: =
5px; BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
<DIV>
<DIV>Neil, Edna, couldn't the rectifier just =
have gone=20
Kablooey? As you say it could be symptomatic of another =
problem but if=20
you read my last post, I may have been overloading the thing. =
Looking=20
at the circuit board carefully, I see no other browned or =
burned=20
resistors, etc. Maybe I'll send it in, but I might try to fix =

it=20

myself as it will be only a couple of bucks if it doesn't =
work.=20

The unit was bought used from another owner a few years ago, =
on ebay,=20

and I'm not sure if it is still under warrantee. I'll have to =
look=20

into this. I probably know just enough to get this wrong, but =
wish me=20

luck. I know..... I'll soon be hearing, "I told you so"!=20
:-)/FONT></DIV>

<DIV> </DIV>

<DIV>Thanks,</DIV>

<DIV>Rich
</DIV></DIV>

<BLOCKQUOTE dir=3Dltr=20

style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: =
5px; BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">

<DIV>"Rich Lamanna" <<A=20

=

href=3D"mailto:richard.lamanna@verizon.net">richard.lamanna@verizon.net</=
A>>=20

wrote in message <A=20

=

href=3D"news:46178cc2\$1 @linux">news:46178cc2\$1 @linux...</DIV>

<DIV>Hello, Easter greetings by the way. =

Hey the=20

other day I smelled smoke and heard a crinkling =
sound in=20

the back of my preamp rack and later discovered the cause =
was my=20

Presonus M80's power supply which is now deep fried. Well I =
took the=20

supply apart and found that this dark grey thing on the =
cuircuit=20

board, I think it's a diode ->l, melted right off of the =
board.=20

Any one know what this is? I can't get a picture just yet up =
on the=20

net but I'll try and describe it.</DIV>

<DIV> </DIV>

<DIV>It's appx. 3/4" by 1/2" by 1/4" thick, =
has 4 pins=20

on the bottom which solder to the cuicut board, dark =
grey=20

colored and is coded:</DIV>

<DIV> </DIV>

<DIV>-->l RS*202L</DIV>

<DIV>RU A 90 </DIV>

<DIV>+ AC -</DIV>
<DIV> </DIV>
<DIV>Anyone of you electronics =
wizards </DIV>
the heck I can find one of these?</DIV>
<DIV> </DIV>
<DIV>You guys are great,</DIV>
<DIV>Thanks</DIV>
<DIV>Rich</DIV>
<DIV> </DIV>
<DIV>PS. By the way I broke down and got a =
Myspace site=20
now. Check it out.</DIV>
<DIV><A=20
=
href=3D" http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofil=
e&friendid=3D172230696">http://profile.myspace.com/index.cfm?fuseacti=
on=3Duser.viewprofile&friendid=3D172230696</DIV>
<DIV>
<FONT=20
=
size=3D2>
</DIV></BLOCKQUOTE></BLOCKQUOTE></BLOCKQUOTE
></BLOCKQUOTE></=
BLOCKQUOTE></BLOCKQUOTE></BODY></HTML>

-----=_NextPart_000_0028_01C77A83.E3E77610--

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?
Posted by [EK Sound](#) on Mon, 09 Apr 2007 16:16:22 GMT
[View Forum Message](#) <> [Reply to Message](#)

I replace them frequently on different pieces of gear. Usually, the diodes short out and take out the fuse. You can simply replace the unit with the same type/rating. If you are concerned about heat (which is generally what kills these in the first place) you could epoxy an aluminum heat sink to the tops of the bridges to help dissipate the heat.

I have replaced literally hundreds of these things and have never seen any collateral damage from them blowing... but I definitely haven't "seen it all"..

David.

Rich Lamanna wrote:

> Neil, Edna, couldn't the rectifier just have gone Kablooeey? As you say
> it could be symptomatic of another problem but if you read my last post,
> I may have been overloading the thing. Looking at the circuit board

> carefully, I see no other browned or burned resistors, etc. Maybe I'll
> send it in, but I might try to fix it myself as it will be only a couple
> of bucks if it doesn't work. The unit was bought used from another owner
> a few years ago, on ebay, and I'm not sure if it is still under
> warrantee. I'll have to look into this. I probably know just enough to
> get this wrong, but wish me luck. I know..... I'll soon be hearing,
> "I told you so"! :-)
>
> Thanks,
> Rich
>
> "Rich Lamanna" <richard.lamanna@verizon.net
> <mailto:richard.lamanna@verizon.net>> wrote in message
> news:46178cc2\$1@linux...
> Hello, Easter greetings by the way. Hey the other day I smelled
> smoke and heard a crinkling sound in the back of my preamp rack and
> later discovered the cause was my Presonus M80's power supply which
> is now deep fried. Well I took the supply apart and found that this
> dark grey thing on the cuircuit board, I think it's a diode ->I,
> melted right off of the board. Any one know what this is? I can't
> get a picture just yet up on the net but I'll try and describe it.
>
> It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the bottom
> which solder to the cuicut board, dark grey colored and is coded:
>
> -->| RS*202L
> RU A 90
> + AC -
>
> Anyone of you electronics wizards know where the heck I can find one
> of these?
>
> You guys are great,
> Thanks
> Rich
>
> PS. By the way I broke down and got a Myspace site now. Check it out.
> http://profile.myspace.com/index.cfm?fuseaction=user.viewpro_file&friendid=172230696
> < http://profile.myspace.com/index.cfm?fuseaction=user.viewpro_file&friendid=172230696>
>
>

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?
Posted by [Rich Lamanna](#) on Thu, 12 Apr 2007 00:34:06 GMT
[View Forum Message](#) <> [Reply to Message](#)

Thanks, Dave, have nothing to loose here. I had to order the rectifier, they

didn't have it in stock. Will keep you all posted.

Rich

"EK Sound" <askme@nospam.com> wrote in message news:461a679f@linux...

> I replace them frequently on different pieces of gear. Usually, the
> diodes short out and take out the fuse. You can simply replace the
> unit with the same type/rating. If you are concerned about heat
> (which is generally what kills these in the first place) you could
> epoxy an aluminum heat sink to the tops of the bridges to help
> dissipate the heat.

>
> I have replaced literally hundreds of these things and have never seen
> any collateral damage from them blowing... but I definitely haven't
> "seen it all"..

>
> David.

>
> Rich Lamanna wrote:

> > Neil, Edna, couldn't the rectifier just have gone Kablooey? As you say
> > it could be symptomatic of another problem but if you read my last post,
> > I may have been overloading the thing. Looking at the circuit board
> > carefully, I see no other browned or burned resistors, etc. Maybe I'll
> > send it in, but I might try to fix it myself as it will be only a couple
> > of bucks if it doesn't work. The unit was bought used from another owner
> > a few years ago, on ebay, and I'm not sure if it is still under
> > warrantee. I'll have to look into this. I probably know just enough to
> > get this wrong, but wish me luck. I know..... I'll soon be hearing,
> > "I told you so"! :-)

> >
> > Thanks,
> > Rich

> >
> > "Rich Lamanna" <richard.lamanna@verizon.net
> > <mailto:richard.lamanna@verizon.net>> wrote in message
> > news:46178cc2\$1@linux...
> > Hello, Easter greetings by the way. Hey the other day I smelled
> > smoke and heard a crinkling sound in the back of my preamp rack and
> > later discovered the cause was my Presonus M80's power supply which
> > is now deep fried. Well I took the supply apart and found that this
> > dark grey thing on the cuircuit board, I think it's a diode ->I,
> > melted right off of the board. Any one know what this is? I can't
> > get a picture just yet up on the net but I'll try and describe it.

> >
> > It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the bottom
> > which solder to the cuicut board, dark grey colored and is coded:

> >
> > -->| RS*202L

>> RU A 90
>> + AC -
>>
>> Anyone of you electronics wizards know where the heck I can find one
>> of these?
>>
>> You guys are great,
>> Thanks
>> Rich
>>
>> PS. By the way I broke down and got a Myspace site now. Check it
out.
>>
http://profile.myspace.com/index.cfm?fuseaction=user.viewpro file&friendid=172230696
>>
< http://profile.myspace.com/index.cfm?fuseaction=user.viewpro file&friendid=1
72230696>
>>
>>

Subject: Re: What's this thing that smoldered in my Presonus M80 power supply?
Posted by [Rich Lamanna](#) on Thu, 12 Apr 2007 00:34:51 GMT
[View Forum Message](#) <> [Reply to Message](#)

This is a multi-part message in MIME format.

-----=_NextPart_000_0016_01C77C70.795BF700
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

Thanks Aaron, the rectifier should be here next week.

Rich

"Aaron Allen" <know-spam@not_here.dude> wrote in message =
news:461a4585@linux...
www.partsexpress.com=20
www.mcmelectronics.com=20
www.digikey.com=20
www.radioshack.com

"Rich Lamanna" <richard.lamanna@verizon.net> wrote in message =
news:461a1baf@linux...

Thanks Edna for the help. Will keep you all posted. Anyone know =
where I can order this rectifier online? It might just be easier for me =

to order it as I may not be able to get to the parts place until this = weekend.

Rich

"Edna" <edna@texomaonline.com> wrote in message = news:46192160@linux...

Because you could mess with the PS w/o affecting the M80. I = assume you have experience with soldering and component removal on PCBs, = and I am assuming the circuit board is only single or double sided. If = not, in either case, I would let a tech do it. Its easy to damage a = PCB, and if its multilayered you cant do much anyway.

Having said that, If you replace just the rectifier, the only = load on it would be from the PS components. I would suggest also = replacing the filter cap(s) on that supply line, since it is the prime = suspect in the PS. (You may need a schematic here). If after this, = the rectifier starts getting too hot again the problem is likely a VR(s) = on that line.=20

<richard.lamanna@verizon.net> wrote in message = news:46186a35@linux...

Edna, yes the power supply can run on its own, doesn't need to = be plugged in for it to function. I have it disconnected at the moment. = Why do you ask?

Rich

"Edna" <edna@texomaonline.com> wrote in message = news:4617f977@linux...

Its possible, but not likely, especially if its not a new = unit, which would be more likely to have a defective component. = Something caused a current overload through it to burn it up. But = apparently not a direct short which would have blown the fuse as well. = I've seen many leaky filter caps do this - these are the large caps that = filter the ripple voltage or small ac component off the DC. A blown = voltage regulator is another likely suspect, as far as the PS itself. = Can the PS run by itself w/o being connected to the M80? =20

ich Lamanna" <richard.lamanna@verizon.net> wrote in message = news:4617ee9b\$1@linux...

Neil, Edna, couldn't the rectifier just have gone Kablooeey? = As you say it could be symptomatic of another problem but if you read my = last post, I may have been overloading the thing. Looking at the circuit = board carefully, I see no other browned or burned resistors, etc. Maybe = I'll send it in, but I might try to fix it myself as it will be only a = couple of bucks if it doesn't work. The unit was bought used from = another owner a few years ago, on ebay, and I'm not sure if it is still =

under warrantee. I'll have to look into this. I probably know just =
enough to get this wrong, but wish me luck. I know..... I'll soon be =
hearing, "I told you so"! :-)

Thanks,
Rich

"Rich Lamanna" <richard.lamanna@verizon.net> wrote in =
message news:46178cc2\$1@linux...

Hello, Easter greetings by the way. Hey the other day I =
smelled smoke and heard a crinkling sound in the back of my preamp rack =
and later discovered the cause was my Presonus M80's power supply which =
is now deep fried. Well I took the supply apart and found that this dark =
grey thing on the cuircuit board, I think it's a diode ->|, melted right =
off of the board. Any one know what this is? I can't get a picture just =
yet up on the net but I'll try and describe it.

It's appx. 3/4" by 1/2" by 1/4" thick, has 4 pins on the =
bottom which solder to the cuicut board, dark grey colored and is coded:

-->| RS*202L
RU A 90=20
+ AC -

Anyone of you electronics wizards know where the heck I =
can find one of these?

You guys are great,
Thanks
Rich

PS. By the way I broke down and got a Myspace site now. =
Check it out.

=
[http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofile&friend=
id=3D172230696](http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofile&friend=id=3D172230696)

-----=_NextPart_000_0016_01C77C70.795BF700

Content-Type: text/html;
charset="iso-8859-1"

Content-Transfer-Encoding: quoted-printable

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
<HTML><HEAD>
<META http-equiv=3DContent-Type content=3D"text/html"; =
charset=3Diso-8859-1">

```
<META content=3D"MSHTML 6.00.2800.1555" name=3DGENERATOR>
<STYLE></STYLE>
</HEAD>
<BODY bgColor=3D#ffffff>
<DIV><FONT size=3D2>Thanks Aaron, the rectifier should be here next=20
week.</FONT></DIV>
<DIV><FONT size=3D2></FONT>&nbsp;</DIV>
<DIV><FONT size=3D2>Rich</FONT><BR></DIV>
<BLOCKQUOTE dir=3Dltr=20
style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: 5px; =
BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
  <DIV>"Aaron Allen" &lt;<A=20
  =
href=3D"mailto:know-spam@not_here.dude">know-spam@not_here.dude</A>&gt; =
wrote in=20
  message <A =
href=3D"news:461a4585@linux">news:461a4585@linux</A>...</DIV>
  <DIV><FONT face=3DArial size=3D2><A=20
  =
href=3D"http://www.partsexpress.com">www.partsexpress.com</A>&nbsp;</FONT=
></DIV>
  <DIV><FONT face=3DArial size=3D2>&nbsp;<A=20
  =
href=3D"http://www.mcmelectronics.com">www.mcmelectronics.com</A>&nbsp;</=
FONT></DIV>
  <DIV><FONT face=3DArial size=3D2>&nbsp;<A=20
  href=3D"http://www.digikey.com">www.digikey.com</A> </FONT></DIV>
  <DIV><A =
href=3D"http://www.radioshack.com">www.radioshack.com</A></DIV>
  <DIV>&nbsp;</DIV>
  <DIV>&nbsp;</DIV>
  <BLOCKQUOTE dir=3Dltr=20
  style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: 5px; =
  BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
    <DIV>"Rich Lamanna" &lt;<A=20
    =
href=3D"mailto:richard.lamanna@verizon.net">richard.lamanna@verizon.net</=
A>&gt;=20
    wrote in message <A=20
    href=3D"news:461a1baf@linux">news:461a1baf@linux</A>...</DIV>
    <DIV><FONT size=3D2>Thanks Edna for the help. Will keep you all =
    posted. Anyone=20
    know where I can order this rectifier online? It might just be =
    easier for me=20
    to order it as I may not be able to get to the parts place until =
    this=20
    weekend.</FONT></DIV>
    <DIV><FONT size=3D2></FONT>&nbsp;</DIV>
```


<DIV>Rich</DIV>
<DIV> </DIV>
<BLOCKQUOTE dir=3Dltr=20
style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: 5px; =
BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
<DIV>"Edna" <<A=20
=
href=3D"mailto:edna@texomaonline.com">edna@texomaonline.com> =
wrote in=20
message <A =
href=3D"news:46192160@linux">news:46192160@linux...</DIV>
<DIV><FONT face=3D"Times New Roman" =
size=3D3>Because=20
you could mess with the PS w/o affecting the M80. I assume =
you have=20
experience with soldering and component removal on PCBs, and=20
I am assuming the circuit board is only single or double =
sided. =20
If not, in either case, I would let a tech do it. Its=20
easy to damage a PCB, and if its multilayered you cant do =
much=20
anyway.</DIV>
<DIV><FONT face=3D"Times New Roman"=20
size=3D3> </DIV>
<DIV><FONT face=3D"Times New Roman" =
size=3D3>Having=20
said that, If you =
replace just=20
the rectifier, the only =
load on it=20
would be from the PS components. I would suggest also =
replacing the=20
filter cap(s) on that supply line, since it is the prime suspect =
in the=20
PS. (You may need a schematic here). If after this, =
 the=20
rectifier starts getting too hot again the problem is likely =
a VR(s)=20
on that line. </DIV>
<DIV><FONT face=3D"Times New Roman"=20
size=3D3> </DIV>
<DIV><FONT face=3D"Times New Roman"=20
size=3D3> <<A=20
=
href=3D"mailto:richard.lamanna@verizon.net">richard.lamanna@verizon.net</=
A>>=20
wrote in message <A=20
href=3D"news:46186a35@linux">news:46186a35@linux...</DIV>

<BLOCKQUOTE dir=3Dltr=20 style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: 5px; BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
<DIV>Edna, yes the power supply can run on its own, doesn't=20 need to be plugged in for it to function. I have it disconnected = at the=20 moment. Why do you ask?</DIV>
<DIV> </DIV>
<DIV>Rich
</DIV>
<BLOCKQUOTE dir=3Dltr=20 style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: = 5px; BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
<DIV>"Edna" <<A=20 = href=3D"mailto:edna@texomaonline.com">edna@texomaonline.com>=20 wrote in message <A=20 href=3D"news:4617f977@linux">news:4617f977@linux...</DIV>
<DIV>Its possible, but not likely, = especially=20 if its not a new unit, which would be more likely to have a = defective=20 component. Something caused a current overload through = it to=20 burn it up. But apparently not a direct short which = would have=20 blown the fuse as well. I've seen many leaky filter caps = do this=20 - these are the large caps that filter the ripple voltage or = small ac=20 component off the DC. A blown voltage regulator is = another=20 likely suspect, as far as the PS itself. Can the PS run = by=20 itself w/o being connected to the = M80? </DIV>
<DIV> </DIV>
<DIV>ich Lamanna" <<A=20 = href=3D"mailto:richard.lamanna@verizon.net">richard.lamanna@verizon.net>=20 wrote in message <A=20 = href=3D"news:4617ee9b\$1@linux">news:4617ee9b\$1@linux...</DIV>
<BLOCKQUOTE dir=3Dltr=20 style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: = 5px; BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
<DIV>

<DIV>Neil, Edna, couldn't the rectifier just =
have gone=20
Kablooey? As you say it could be symptomatic of another =
problem but=20
if you read my last post, I may have been overloading the =
thing.=20
Looking at the circuit board carefully, I see no other =
browned=20
or burned resistors, etc. Maybe I'll send it in, but I might =
try to=20
fix it myself as it will be only a couple of bucks if =
it=20
doesn't work. The unit was bought used from another owner a =
few=20
years ago, on ebay, and I'm not sure if it is still under =
warranty.=20
I'll have to look into this. I probably know just enough to =
get this=20
wrong, but wish me luck. I know..... I'll soon be =
hearing, "I=20
told you so"! :-)</DIV>
<DIV> </DIV>
<DIV>Thanks,</DIV>
<DIV>Rich
</DIV></DIV>
<BLOCKQUOTE dir=3Dltr=20
style=3D"PADDING-RIGHT: 0px; PADDING-LEFT: 5px; MARGIN-LEFT: =
5px; BORDER-LEFT: #000000 2px solid; MARGIN-RIGHT: 0px">
<DIV>"Rich Lamanna" <<A=20
=
href=3D"mailto:richard.lamanna@verizon.net">richard.lamanna@verizon.net</=
A>>=20
wrote in message <A=20
=
href=3D"news:46178cc2\$1@linux">news:46178cc2\$1@linux...</DIV>
<DIV>Hello, Easter greetings by the =
way. Hey the=20
other day I smelled smoke and heard a crinkling =
sound in=20
the back of my preamp rack and later discovered the cause =
was my=20
Presonus M80's power supply which is now deep fried. Well =
I took=20
the supply apart and found that this dark grey thing on =
the=20
circuit board, I think it's a diode ->, melted right =
off of=20
the board. Any one know what this is? I can't get a =
picture just=20

yet up on the net but I'll try and describe =
it.</DIV>
<DIV> </DIV>
<DIV>It's appx. 3/4" by 1/2" by 1/4" thick, =
has 4=20
pins on the bottom which solder to the cuicut board, =
dark=20
grey colored and is coded:</DIV>
<DIV> </DIV>
<DIV>-->| RS*202L</DIV>
<DIV>RU A 90 </DIV>
<DIV>+ AC -</DIV>
<DIV> </DIV>
<DIV>Anyone of you electronics =
wizards know=20
where the heck I can find one of these?</DIV>
<DIV> </DIV>
<DIV>You guys are great,</DIV>
<DIV>Thanks</DIV>
<DIV>Rich</DIV>
<DIV> </DIV>
<DIV>PS. By the way I broke down and got a =
Myspace=20
site now. Check it out.</DIV>
<DIV><A=20
=
href=3D" http://profile.myspace.com/index.cfm?fuseaction=3Duser.viewp rofil=
e&friendid=3D172230696">http://profile.myspace.com/index.cfm?fuseacti=
on=3Duser.viewprofile&friendid=3D172230696</DIV>
<DIV>
<FONT=20
=
size=3D2>
</DIV></BLOCKQUOTE></BLOCKQUOTE></BLOCKQUOTE
></BLOCKQUOTE></=
BLOCKQUOTE></BLOCKQUOTE></BLOCKQUOTE></BODY></HTML >

-----=_NextPart_000_0016_01C77C70.795BF700--
