Subject: Class T amps - seen this? Posted by DC on Thu, 17 Aug 2006 21:57:16 GMT

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These guys

http://www.tripath.com/

Have developed a new amp circuit called Class T. It allows for extreme efficiency (95% in some cases) and potential for reducing distortions significantly.

Oh, and there is a class T amp out now, with 15 watts a side, that people like the sound of, that costs 30.00 (USD)...!

http://www.si-technologies.com/frontEnd/cm\_productDetail.jsp ?productID=18

Tape Op reviewed it recently and while they didn't throw their other amps in the trash, they did like it. Now, a 30 buck amp that sounds good is cool enough, but what is really cool is a 300.00 amp that kills 2K amps and puts out 1000 watts. This is where the Class T technology seems to be leading.

Yes, this will show up in our industry.

Anybody seen/heard any Class T stuff?

DC

Subject: Re: Class T amps - seen this?
Posted by Aaron Allen on Thu, 17 Aug 2006 22:31:40 GMT
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Got any design spec pics/info? AA

"DC" <dc@spammersinbrooklyn.org> wrote in message news:44e4e63c\$1@linux...
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Subject: Re: Class T amps - seen this?
Posted by DC on Fri, 18 Aug 2006 02:48:02 GMT
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There's quite a bet of techie info on the Tripath site, but it is at the component level.

That's all I know of.

DC

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Subject: Re: Class T amps - seen this?
Posted by Aaron Allen on Fri, 18 Aug 2006 03:45:13 GMT
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My first impression is that there don't have nearly enough rail voltage to make these high output, but that might or might not be indicative of capabilities in the future. Could be that the die is just not stout enough.. could be it's not stout enough.. yet.

Something to watch for.

If I was going to test one of these, it would be the TDA1400 w/o a doubt.

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Subject: Re: Class T amps - seen this?
Posted by DC on Fri, 18 Aug 2006 05:03:06 GMT
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I am not a circuit guy, but couldn't the inherent efficiency of the class T circuit (up to 95%) make up for this? Doesn't it require less voltage on the rails to do the same work?

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Subject: Re: Class T amps - seen this?

Posted by Chris Latham on Fri, 18 Aug 2006 05:24:52 GMT

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I bought a couple of these and use them to power some old minimus 7s for computer sound card playback. Pretty cool, but I haven't put them through their paces to see what they're really capable of.

http://www.digitaladvisor.com/home-theater/sonic-impact-5066 \_reviews.html?source=google&kw=sonic+impact+5066&cmp n=brndshrtrvmp

Subject: Re: Class T amps - seen this?

Posted by Aaron Allen on Fri, 18 Aug 2006 18:21:40 GMT

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Not exactly.. you will still need more voltage to swing the AC current up and down. Effeciency has no affect on that variable... It's about Peak to Peak voltage. Less voltage P2P IME has meant less wattage out.

To support this (possibly dated) information, I have been into a load of car audio amps, and one of the first things they do is step the voltage (through some kind of converter be it a dc to dc or a tesla coil setup) to a more respectable number. There is a cost in efficiency this way, but that's how it works in those designs.

9 - 11 volts makes this amp suspect, however they could be onto something I'm not aware of.... which is why I'd start with that chip and bang on it and test it's thermal output qualities also. Perhaps it's stepping up internally and doesn't need a large rail voltage?

hmmm....

AA

"DC" <DC@spammerstothemoon.com> wrote in message news:44e54a0a\$1@linux...

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Subject: Re: Class T amps - seen this?
Posted by DC on Fri, 18 Aug 2006 18:32:24 GMT
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I'd love to see what you found experimenting around with one of their chips.

BTW, they have a 100 watt (@80hms) amp that runs on 60v rails. Does that sound reasonable?

I bet they'd sample you one...

DC

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Subject: Re: Class T amps - seen this? Posted by DC on Fri, 18 Aug 2006 18:52:13 GMT

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Aaron,

Here's the link for the chip I was talking about

http://www.tripath.com/pb1400.htm

I meant to put it in my post.

DC

Subject: Re: Class T amps - seen this?
Posted by Tony Benson on Fri, 18 Aug 2006 19:44:19 GMT
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This sounds pretty interesting guys! Thanks for the links.

I was an early adaptor of Crown's BCA or class-I power amps. Here's a link to the white page for any geeky types.

http://www.crownaudio.com/pdf/amps/bcapaper.pdf

Tony

```
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