Subject: Some PCIe questions
Posted by Deej [4] on Wed, 31 Jan 2007 18:05:57 GMT
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This is a multi-part message in MIME format.

------=_NextPart_000_003A_01C74527.C8E28D00
Content-Type: text/plain;
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Content-Transfer-Encoding: quoted-printable

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I also hear that the PCIe bus doesn't share any bandwidth at all with =
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Taken from a post on another forum:

PCIe guarantees a certain amount of undivided=20
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.....the stated conclusion from the other forum.....

The bottom line is that a PCIe device with hard real time requirements=20
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stable audio input and output.

.....so there is morepotential to poperate a native system at lower =
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C'mon folks, step up to the mic and talk to me here.

;o)

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</HEAD>
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------=_NextPart_000_003A_01C74527.C8E28D00--

Subject: Re: Some PCIe questions
Posted by Chris Ludwig on Thu, 01 Feb 2007 02:34:48 GMT
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Hey Deej,

DJ wrote:

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Yes all current PCI chipsets from Intel and AMD do this to some extant.
The 975 and 500x series Xeons ones seem to do a better job of it than
the 965 but I'm not sure if it because the south bridge connectivity or
other factors in the chipset design. There are also devices like this
that will keep your PCI free for your wacky needs.
http://www.gefanucembedded.com/products/774
This compatible with RME cards and UADs.

> .and of course, something like this gets the hampsters jumping on the
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> eliminating any possibility of problems down the road with a graphics
> card.

Yes the PCI buss holds many of the devices on the south bridge, i.e,
firewire, usb, and many 3rd party sata controllers on the majority of
motherboard.

IRQ sharing still have to happen there are a limited number and will at

some point share. Sharing should not be an issue if you are using current well designed hardware. Devies still use IRQs on the PCIe buss also. PCI-e video cards work great. The issues seen with PCI-e video cards was only seen now discontinued chipsets, Intell 915, 925 and Nvidia Nforce 4 and the new AMR version.

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> latencies???

It is already possible on the regular PCI and PCI-x buss on current motherboards. Becuase of OS/code level and to some extent hardware you will not see substanually lower latencies than you see now. What you will see is the possibility of high I/O and other funtionality per card.

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--
Chris Ludwig
ADK
chrisl@adkproaudio.com <mailto:chrisl@adkproaudio.com>
www.adkproaudio.com <http://www.adkproaudio.com/>
(859) 635-5762

Subject: Re: Some PCIe questions
Posted by Deej [4] on Thu, 01 Feb 2007 03:11:16 GMT
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Thanks Chris,

> Yes the PCI buss holds many of the devices on the south bridge, i.e,
> firewire, usb, and many 3rd party sata controllers on the majority of
> motherboard.

So there is traffic there after all. Makes sense. I'm just wondering if, since the PCIe bus is handling the audio/DSP I/O, if the mobo resources might be best used with the video card on the PCI bus. Maybe the PCIe bandwidth/architecture is so efficient that this IRQ sharing **** being an issue will abate in the future.

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I called these guys today. they quoted me $2075.00 for one. I also talked to UA tech support about this chassis. It is 64 bit compatible and there are two busses. slots 1-4 share a buss and 5-7 share a bus. this would seem to be a no brainer for my situation. I could hang my 4 x UAD-1 cards on the first 4 slots, my HDSP's on the last three and "in theory" be able to take advantage of the wider PCI bandwidth. The tests that UA did with these chassis rated the 7 slot 64 bit Magma as performing poorly. That's a shame as these are popping up on EBay now for around $1k

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I'm wondering if my GA-K8NS Ultra 939 fits into this category of mobos. It's extremely quick with an AMD 64 4800 x 2. RME and UA both did a mighty fine job with those new drivers. When Cubase 4 becomes 64 bit, I'm gonna format myself a new HD and give it a go. I'd like to be able to max out my 4G RAM potential. I'm not sure if it will be Vista or XP 64 though. There's a lot of buzz about Vista being audio friendly, but it looks to me like that's going to be if you use the new Windows driver. Might be a great situation for Sonar users, but since RME and Cubase are ASIO heavy, it would seem that these whizbang advantages might not apply.

;o)
Deej

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news:45c15231$1@linux...
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