Re: Hands on PCI interface ...

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From: Nico Coesel (*nico_at_puntnl.niks*)
Date: 02/04/05

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Date: Fri, 04 Feb 2005 16:25:30 GMT
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Jonathan Kirwan <jkirwan@easystreet.com> wrote:

>On 3 Feb 2005 15:12:33 −0800, aiiadict@gmail.com wrote:
>
>>Modern computer with PCI only, need to plug in an ISA card.
>
>The southbridge or PCI−ISA bridge chip can only exist with "side−band" channels
>to the main chipset. There is only one of these possible, and then only if the
>rest of the chipset supports the southbridge concept. The side−band channels do
>not exist as signals on the PCI bus, so I don't believe that it would be
>possible to do a PCI board that provides full ISA −− more particularly, support
>for ISA DMA. You might be able to get by with some specialized FPGA or ASIC for
>the purposes of a reduced ISA feature set connecting to the PCI (no DMA and with
>subtractive decoding for the ISA address space.)
>
>I haven't heard of such a thing, though.

I think it is possible if the ISA card can use 1 interrupt or share
interrupts. You'll need some intelligence to convert ISA DMA to PCI
bus mastering (which is more or less the same, only the addresses are
generated at a different spot). The amount of I/O and memory addresses
can be preset on the PCI card so substractive addressing isn't needed.

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Reply to nico@nctdevpuntnl (punt=.)
Bedrijven en winkels vindt U op www.adresboekje.nl
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