Subject: Re: LMS ISA card compatibility
Posted by Adveser on Tue, 30 Nov 2010 14:39:44 GMT
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Wayne Parham wrote on Thu, 17 November 2005 11:28
I told you I was going to do some research and report my findings under your thread. I intend to do that this week; Sorry, I haven't done it yet. But I will.

There are two ways you can go besides using the LinearX supplied converter chassis. One is to use a full-sized motherboard to build a PC. Another is to use industrial control modules. I've used several of those for various projects, and they're essentially just rugged and often miniaturized PC boards. You'll still need a full sized chassis because the LMS takes a full-length slot. But my point is there are other options besides traditional PC motherboards.

Please note that there is more involved than just finding a PC with an ISA slot. The LMS card is incompatible with some slots. My guess is that it needs buss speed to be the same as the old original 4.77Mhz IBM PC. Newer computers often ran the buss faster, and occasionally, some ISA cards wouldn't work with the faster buss speed. So you have to test for electrical compatibility as well as physical compatibility.

Wayne, this is why us Computer Electronics guys slow down the PLL chip's operating frequency in a computer by various means. It is usually done to overclock the entire computer close to it's electrical tolerance instead of OC the CPU.

I've gotten a 700Mhz Celeron running at 100Mhz Bus up to 1100Mhz with a 166Mhz Bus. Slowing down is much easier than speeding up. It's a time consuming task to get something that works, but it can be done.