Subject: Re: LMS ISA card compatibility
Posted by Wayne Parham on Tue, 30 Nov 2010 19:11:35 GMT
View Forum Message <> Reply to Message

Yes, but this is really an ISA buss timing issue, not a local buss or processor thing. Most of my career has been designing microprocessor-driven industrial controllers, and back in the days when the PC used the ISA buss, I designed several controllers that plugged into it.

Early microcontrollers made no distinction between local buss and processor buss - everything was on the same buss, nothing but switching logic and a single clock. Examples are the S100 buss and the ISA buss, as well as countless other proprietary busses that were essentially just connections to the microprocessor's address and data busses.

Add-on cards in early microprocessor systems sometimes had problems, especially if the processor was run at faster speeds. It wasn't long before the processor and buss were separated using newer buss architectures so you could run processor and local memory at high speed and slower peripherals could be run on an interface at their own speed. But the early ones weren't as sophisticated, and everything ran at the speed of processor clock.