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CAEN presents its latest in VME control, a PCI->VME bridge via optical link: V2718 & A2818. This solution, in conjunction with an earlier introduced USB->VME bridge V1718, completes the new CAEN line of VME bridges for PC-based control.

The Optical Link is definitely a smart way to manage VME crates, providing reliability, fast readout rates and attractive price-to-quality ratio. The newest bridge proposed by CAEN offers an advanced solution exploiting the high speed of PCI and optical link technologies and permitting daisy chain of up to eight crates controllable from a single PC.

The solution consists of three parts:

- a PCI card (A2818) to be installed on your PC
- a VME module (model V2718)
- an optical fiber.

For multi-crate control, you just need to add one more module V2718 for each additional crate and connect them in daisy chain via optical fibers. In that way, you build a CONet (Chainable Optical Network), which interfaces the single PCI card A2818 to each VME module V2718.

The PCI->VME bridge does not contain a CPU, no operating system runs on it, no boot is required. It is simply ready at power-ON.

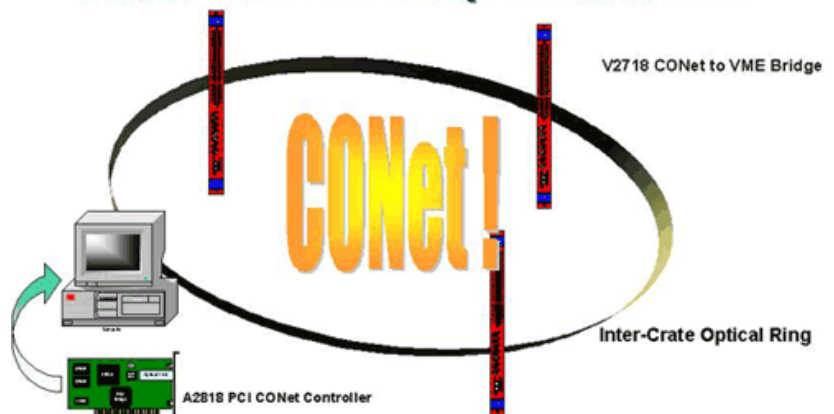
V2718 is a 6U 1-unit wide module and can perform all the cycles foreseen by the VME64 bus (except those intended for 3U boards). It features an 88-LED Data-way display, which allows monitoring the VME bus activity in detail.

The front panel also hosts 5 outputs and 2 inputs on LEMO 00 connectors, which accept both NIM and TTL signals and are freely programmable for functions like: monitor of DS, AS, DTACK, BERR; VME Location Monitor; I/O register, timer & pulse generator, scaler, coincidence, etc.

The data rate on the CONet is about 50 MB/s. Thanks to the 128KB memory buffer; the activity on the VME bus is not slowed down by the transfer rate on the CONet when several V2718s share the same network.

The bridge is provided with drivers, which support the use with the most common PC platform (Windows 98/2000/XP and Linux). CAEN also provides libraries in C, Visual Basic and LabView. Moreover, a very simple and user-friendly example program in C, Visual Basic and LabView will be provided as well.

CONet – Chainable Optical Network



Future firmware upgrade is possible via the optical link. The VME64X mechanics version of the module (VX2718) is available too.

CAEN Aerospace is developing, in the framework of a European Space Agency R&D contract, a **Central Payload Power Supply system** conceived for Highly Integrated Payload Suites on future inter-planetary exploration missions where reduced mass, size and power consumption are key factors.

► 9th EPAC - July 5-9, 2004 - Lucerne Culture & Congress Centre (KKL) ▼

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