

Alacron provides high speed SAN/LAN connections through a combination of PMC and VME interfaces. These boards can be used to build gigabit-per-second System Area Networks (SAN), allowing several computers to work as a system cluster. Individual computers containing the LAN/VME interface can be linked using the VME LAN Switch Module.

SAN/PCI interfaces in the PMC form factor for gigabit-per-second Local Area Networks

Many of the newest 6U VME Single-Board Computers (SBCs) accept PCI devices in a standard form factor called "PMC" — the PCI Mezzanine Card (IEEE P1386.1). These PMC versions of the Myrinet/PCI interface are functionally identical to the M2M-PCI32 PCI-short-card version except that they adhere to the (single-width) PMC form factor. The small, very flexible, Myrinet-SAN cables that plug into Myrinet-SAN ports are ideal for in-chassis connections on the front-panel side of VME systems. 6U VME SBCs can be clustered using a 6U-VME-form-factor Myrinet-SAN switch.

Supported software

Linux and Solaris 2.5 for Pentium PCs, Myrinet control program, Myrinet API library and development tools. The device drivers and Myrinet Control Program are distributed in source form, and

have been adapted by customers to other platforms and operating systems.

Specifications

PCI-bus Interface

32-bit, 33MHz, supports all burst modes and write-invalidate, master or slave. Raw DMA performance @33MHz with large blocks is approximately 120 MB/s peer mode, or to/from system memory on platforms with good PCI implementations.

Interface memory

M2M-PMC32: 512KB, 128Kx4B. M2M-PMC32A: 256KB, 64Kx4B. This memory operates at double the PCI-clock rate. At a 33MHz PCI clock rate, 264 MB/s of memory bandwidth is available to support the Myrinet channels, DMA and processor.

Interface processor

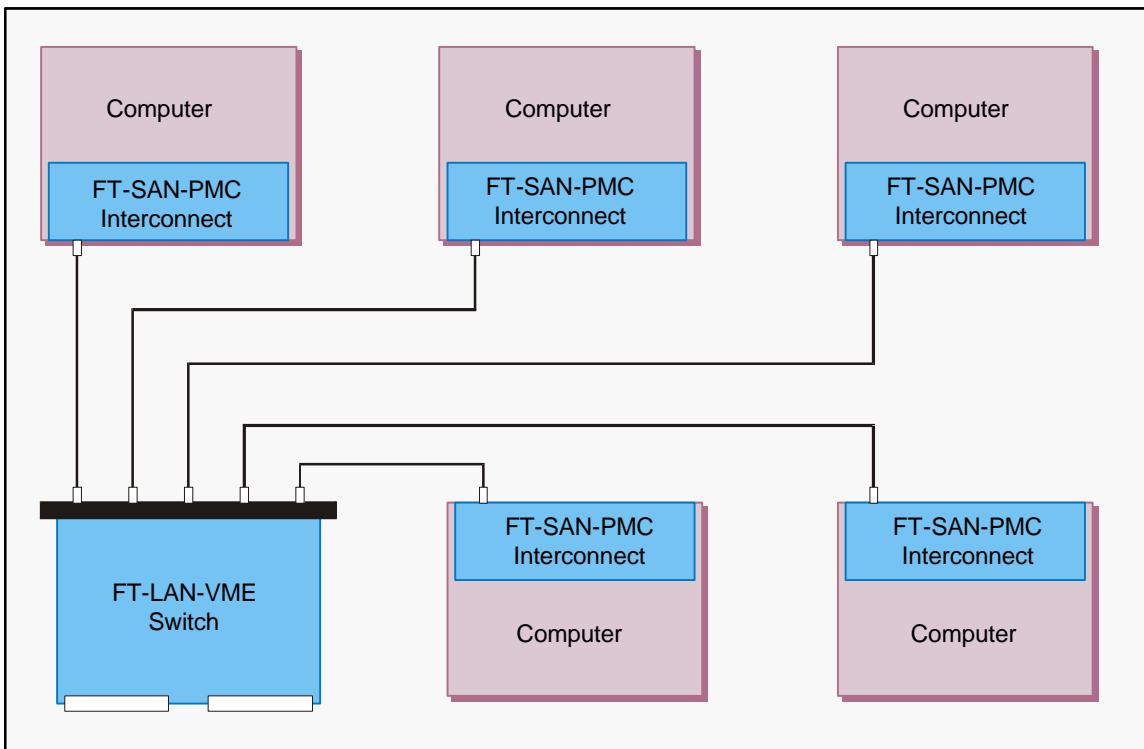
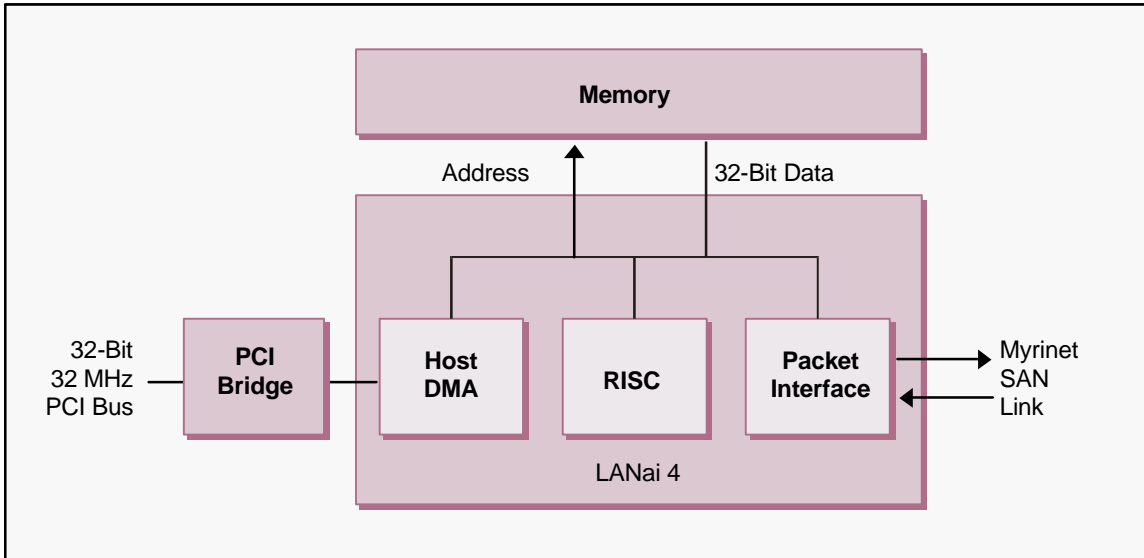
The Myricom LANai chip's RISC operating at 33MHz, the PCI clock rate.

Myrinet-SAN port

1.28+1.28 Gb/s on the A link; B link unused.

Physical characteristics

Single-width PMC board, ~4 Watts.



Typical SAN/LAN Configuration