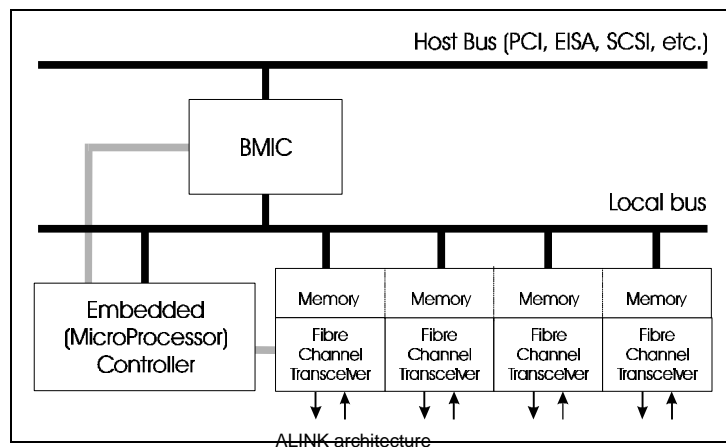**ALTA**
T E C H N O L O G Y

ALINK™ -- A 250 MBIT/SEC MODULAR COMMUNICATIONS DEVICE

Alta's communications research has produced a modular fibre channel communications device which has been trademarked as an ALINK. Each ALINK consists of a Raytheon RCC700 fibre channel transceiver, a microprocessor-controlled DMA engine, and the necessary logic to "bolt on" the ALINK to any bus architecture. The ALINK design has been adapted to EISA and PCI buses, with up to four ALINKS being supported by the DMA engine. Bi-directional data transfers are independent of each other, thus providing up to eight simultaneous data streams per DMA engine.

Error detection and packet re-transmission is accomplished in hardware logic, further improving the highly reliable fibre channel technology.

ALINK architecture

The programmable controller may be booted from an external source or from EEPROM, providing a flexible method for adapting the ALINK to a variety of architectural environments.

PERFORMANCE

Each ALINK is capable of transferring up to 25 MBytes/Second per direction, for a total of 50 MBytes/Second per ALINK. On differentially-driven micro-coax cable, this performance has been verified at distances of over 50 feet with significant performance degradation at 75 feet. Fiber optics extends the distance to thousands of meters. The total available bandwidth (multiple ALINKS, bidirectionally) is limited by the speed of the host bus.

OTHER FEATURES

The programmable embedded controller allows other features to be designed into custom communications devices. Packet routing (for implementation of an ATM protocol) or the implementation of error correction could be implemented in the embedded controller (the extremely reliable transceivers provide error detection signals). Drivers have been created for DIGITAL's Alpha workstations (Digital Unix (OSF-1) and VxWorks).

Please call or contact your nearest Alta representative for more information.