Microcomputer-based workstations support X.25 protocol

The data communications capabilities of Convergent Technologies' display-based workstations have been extended to include public packet-switching data networks with the introduction of an X.25 Network Gateway. The development is the first full-feature implementation of the X.25 international standard protocol on a commercially available microcomputer-based system, according to the company.

The Network Gateway provides three levels of access to public networks—packet, sequential, and terminal emulative—via an RS-232 port with a synchronous modem. Transmissions speeds are available up to 9600 baud. At the packet level, users can send and receive complete packets of data and can directly monitor the set-up of X.25 virtual circuits. At this level, says Convergent, a programmer can design interfaces to other computer networks, construct server programs, and implement a packet-assembly/disassembly facility. Packet-level commands in the Network Gateway include call setup and clearing commands to establish and clear calls over X.25 virtual circuits, data transfer commands to transfer data over an established virtual circuit, and status and reset commands for monitoring the status of the network and resetting in case of an error.

The sequential access level provides for device-independent input/output and requires no knowledge of the details of the X.25 protocol. This level provides the tools needed to send data to other computer systems in the network. Device-dependent information is available via a configuration file that specifies parameters to control call set-up and clearing.

The terminal emulation level makes Convergent workstations appear as terminals to a computer on any X.25 network. It allows the display of received characters on the workstation CRT or the storing of them in a file for later review or printing. Entire files can be transferred from any workstation to another computer.

Convergent desktop computers operate in stand-alone or network configurations. Using a distributed intelligence architecture, each Convergent workstation provides a 15-inch video display, keyboard, and up to one million bytes of random access memory. Each workstation can be interconnected to both local and geographically dispersed networks.

The Convergent X.25 Network Gateway is immediately available for shipment. It is certified for operation on the Telenet network; certification is pending for Tymnet and Datapac.

Reader Service Number 28

Registers lead AMD's new bus-interface product line

Advanced Micro Devices has introduced the initial six members of its Am29800 family of 8-, 9-, and 10-bit high-performance bus-interface products.

The Am29821 and the Am29822 are buffered, 10-bit-wide versions of the popular '374 function and are designed for 20-bit-wide bus-structure applications. The nine-bit-wide Am29823 and Am29824 buffered registers feature clock enable and clear functions, making them suitable for parity bus interfacing in microprogrammed systems. The Am29825 and the Am29826 are standard eight-bit buffered registers with '823/824 controls, plus multiple enables. The multiple enables allow multiuser control of the interfaces.

Each device in the Am29800 family follows a common pinout pattern—inputs to the left, outputs to the right; this, says AMD, saves the designer layout time and effort, in addition to board space. VCC and ground pins are also standardized within the family.

The 24-pin, 300-mil devices are fabricated using AMD's IMOX ion-implanted oxidized process. Their tpd of 7.5 ns (typical) matches the speed of multiple-JC register configurations currently being used, according to the company. Other features of the Am29800 family include 48 mA commercial IOL and 32 mA military IOL, high-capacitance load capability, and low-capacitance inputs and outputs.

All devices in the Am29800 family of registers are screened to MIL-STD-883 constraints and are guaranteed to meet the 0.2-percent requirement of INT-STD-123.

Pricing of the devices ranges from $4.90 to $5.90 per unit in quantities over 100. Versions in leadless chip carriers are $30 in quantities over 100.

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