Super 16™ Slave
The Cost Effective, 16-Bit 8 MHz Multi-User Single Board Slave Processor

Advanced Digital Corporation's (ADC) SUPER 16 is a powerful, high speed single board slave processor designed to operate in an S-100 bus environment. It is a complete computer and contians an 8 MHz, INTEL 80186 CPU, 256 Kbytes of RAM, 4 Serial ports, and runs under the TurboDOS* and NETWORK/OS* multi-user operating systems.

When used with the SUPER SIX™ or SUPER 186™ Master CPU boards, the SUPER 16 Slave provides a simple and cost effective method of adding users to an 8 or 16-Bit, S-100 based system. Any number of users may be added, limited only by the number of slots on the motherboard.

Each SUPER 16 Slave board provides its user with a dedicated CPU, I/O ports, and on-board RAM. Each Slave is linked to the Master, and thus to the disk I/O, Thru the S-100 bus. The addition of multiple users does not have a detrimental affect on the system performance because only the disk access is shared. Each user functions as though he has his own computer.

Features
- Operates with both 8 and 16-Bit Master CPUs
- IBEE 696, S-100 Bus Compatibility
- Intel 80186, 16-Bit, 8 MHz CPU
- 256 KB of on-board RAM, expandable to 1 MByte
- 4 Serial ports (RS-232, RS-422)
- Master-to-Slave 8-Bit/16-Bit memory-to-memory
- communication
- I/O status port fast response
- 4K/32K Bytes of EPROM
- Programmable Baud rate generator
- Synchronous/Asynchronous communications
- Real time clock
- Runs on TurboDOS and NETWORK/OS Operating Systems compatible with MS DOS™
- 1 year, 100% parts/labor, return to factory warranty

⊕ **ADVANCED DIGITAL CORPORATION**

Super 16™ Slave

The Cost Effective 16-Bit 8 MHz S-100 Multi-User Single Board Slave Processor

Advanced Digital's SUPER 16 Single Board Slave Processor is designed for use with S-100 based 8-Bit or 16-Bit Master CPUs. When multiple slave co-exist within the same system, computing power is a dedicated CPU (80186) to each user, with disk I/O linked through the S-100 bus to the Master Processor.

CPU :

The SUPER 16 Slave utilizes an INTEL 80186 16-Bit, 8 MHz microprocessor as the CPU. **Advanced Digital's** Proprietary on-board logic increases the speed between Slave and Master processor.

Memory :

The Super 16 Slave uses dynamic RAMs with no waitstates. It is available with 256 KB, 512 KB, or 1 Mbytes of dual ported, memory mapped RAM. An advanced state-of-the-art memory windowing technique allows unlimited memory boundry access. The data transfer speed of the SUPER 16 Slave is limited by that of the Master processor. If used with an ADC SUPER SIX or SUPER 186 Master, high speed DMA transfers will result.

Serial Ports :

Two Z-80™ DARTS are used to accommodate 4 Serial ports. Optionally, two Z-80 SIOs can be used for synchronous operation. A PSNET/I Serial Port Adapter is required for RS-232. A PSNET/WORK is needed for RS-422 communications.

DMA :

Two DMA channels (integral in the 80186 chip) are available for custom implementation.

Counters/Timers :

Three counters/timers are available. Two are external and can be used for synchronous communications via jumper selection. The third is internal and is used with the real time clock.

Operating Systems :

The Super 16 Slave operates with TurboDOS and NETWORK/OS operating systems.

ADVANCED DIGITAL CORPORATION