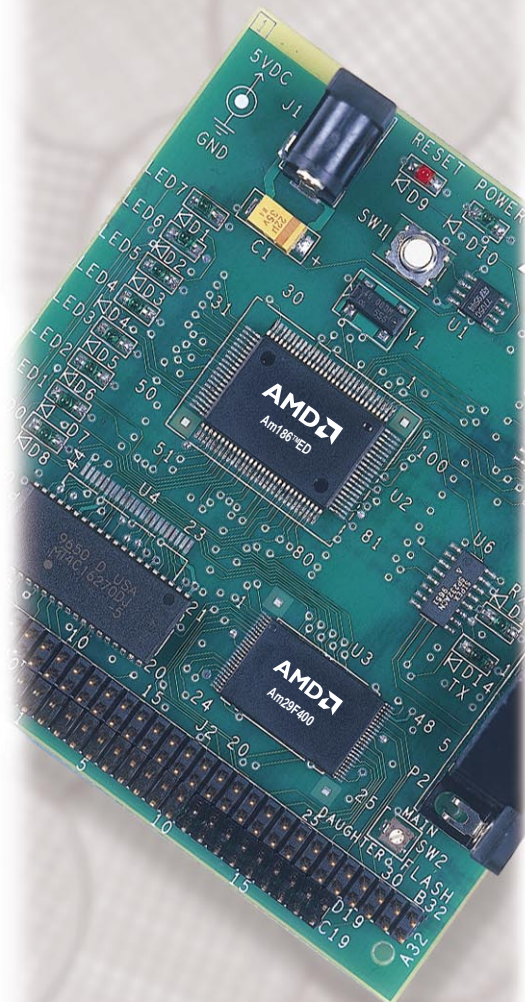




## AMD SD186ED Demonstration Board



## AMD SD186ED Stand-Alone Evaluation Platform

The SD186ED demonstration board provides a complete stand-alone, microcontroller-based evaluation platform in a low-cost, very small form-factor product for those developers working with the Am186™ED microcontroller.

The Am186ED microcontroller is designed to meet the most common requirements of embedded products developed for the office automation, mass storage, communications, industrial, and general embedded markets. The SD186ED board demonstrates the basic processor functionality and features of the Am186ED microcontroller and the simplicity of its system design.

### PRODUCT HIGHLIGHTS

#### Am186ED 40-MHz Microcontroller

- 80C186 compatibility
- Glueless interface to SRAM, FLASH, DRAM and ROM memory systems
- Demultiplexed address/data bus
- DRAM controller
- 32 programmable I/Os
- Two DMA controllers
- Programmable bus sizing

#### Two RS-232 Serial Ports

- Driven by Am186ED microcontroller
- Equipped with DB-9 DCE connectors
- DMA to and from serial ports

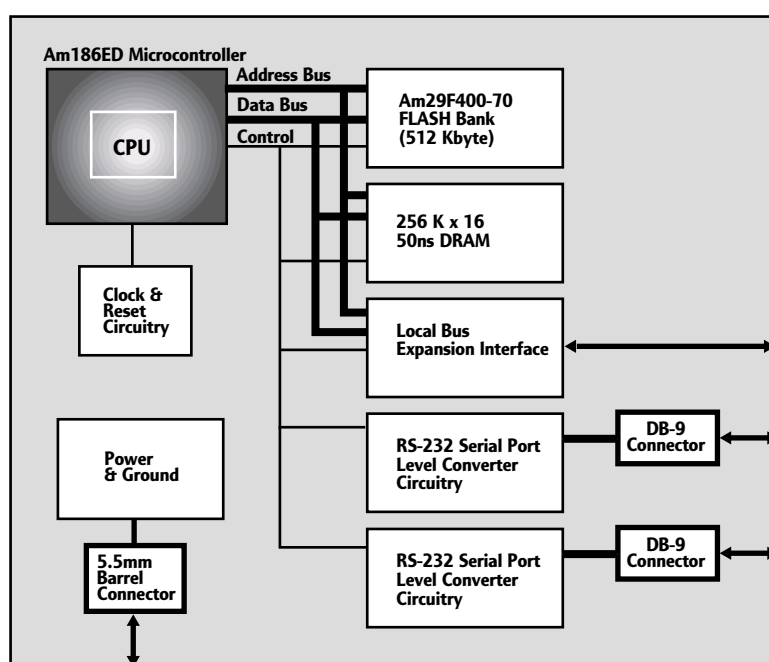
#### Glueless Interface to SRAM, FLASH, and DRAM

- Close to processor to minimize noise and trace reflections
- A single FLASH device providing for 512 Kbytes of memory for boot monitor and application program code
- One DRAM device providing for 512 Kbytes of memory

#### Delivers 5.3 VAX MIPS based on Dhrystone 2.1 using 50-ns DRAM Memories

## PRODUCT DESCRIPTION

The SD186ED demonstration board is a fully functional, stand-alone evaluation platform for the Am186ED microcontroller. The Am186ED microcontroller integrates peripherals such as a DMA controller, memory controller, chip select, dual channel serial controller, programmable I/Os, and timers to increase system functionality while reducing overall cost. The memory controller supports a glueless connection to SRAM, EPROM, FLASH, and DRAM. The Am186ED microcontroller also features an innovative bus design that frees the processor to run at nearly twice the speed of standard 80C186 processors—without an increase in memory speed requirements.



**SD186ED Demonstration Board Block Diagram**  
(Ordering Part # AM186KT/ED1B1004)

### Related Literature:

Am186ED Product Brief	#21309
Am186ED Microcontrollers Data Sheet User Manual	#21336 #21335
E86 Family Comparative Features Chart	#19181



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