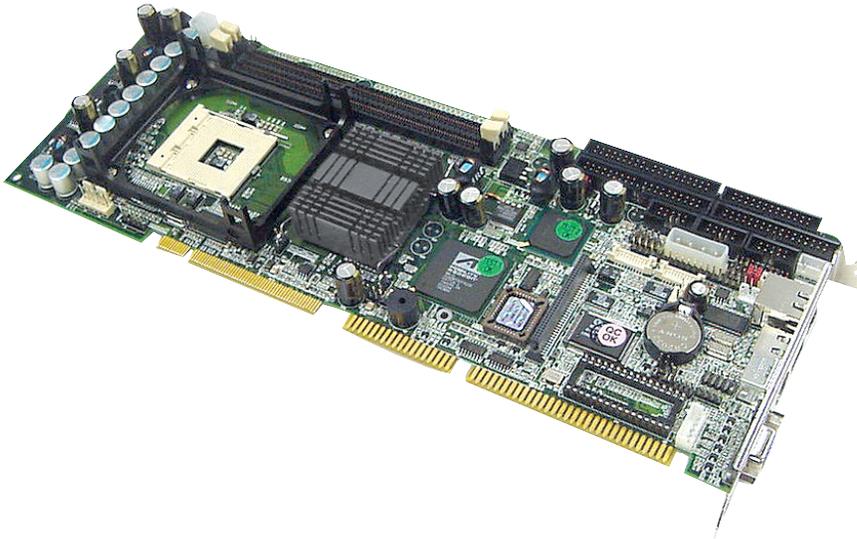


➤ SBC-845D-VEA

➤ Intel® Pentium® 4, 845D, Single Board Computer



➤ High performance full-size SBC

Kontron's SBC-845D-VEA single board computer is the ultimate high performance Pentium 4 applied computing platform.

The Intel 845D chipset supports Pentium 4 processors up to 2GHz with a 400MHz Front Side Bus (FSB). A 533MHz FSB version of the SBC-845D-VEA will be available soon.

This full-size PICMG single board computer combines the latest generation 478-pin processor technology with up to 2GB of DDR SDRAM, an onboard ATI® M6 3D 4x AGP graphics controller with 16MB of DDR

SDRAM and an ICH2 integrated Fast Ethernet controller. Additional features include three USB ports, a floppy controller, two serial ports, a parallel port, PS/2 keyboard & mouse, a hardware monitor and an IrDA interface.

The proprietary 32-bit PCI extension connector accommodates additional devices like Ultra160 SCSI and audio in a compact form factor. This feature is the best and most flexible daughterboard solution for increasing functionality in a limited space environment.

- Next generation Pentium 4 processing, onboard VGA/LAN interfaces and a PCI extension connector for additional devices make the SBC-845D-VEA single board computer one of the best performing PICMG SBCs on the market.

- Intel 845D based PICMG SBC with VGA and Ethernet
- Optional SCSI 160 and audio through a module
- Supports mPGA478 socket Pentium 4
- FSB speed 400MHz
- Supports 200MHz DDR SDRAM memory up to 2GB with ECC support
- ATI® M6 3D graphic controller (16MB display cache, AGPx4, 16MB DDR SDRAM)
- Supports CRT and dual channel LVDS/TMDS for panel display
- ICH2 integrated Fast Ethernet controller
- Compliant with PCI bus spec V2.1

► SBC-845D-VEA - Technical Specifications

CPU

- Supports mPGA478 socket Pentium 4 processor up to 2GHz
- FSB speed 400MHz

Dimensions (D x H)

- 13.3 x 4.8-inch (338 x 122mm) full-size SBC

Chipset

- Intel 845 (DDR version)
- Intel GMCH and ICH2

Bus Interface

- Front Side Bus (400MHz)

Cache

- L2 integrated

Memory

- Two 184-pin DIMM sockets
- Supports 200/266MHz DDR SDRAM up to 2GB
- 64/128/256/512MB DRAM technology
- ECC support
- 2.5V DDR SDRAM support

FLASH Memory

- 4Mb EPROM

I/O

IDE Interface

- Supports two enhanced IDE channels up to four HDDs with PIO mode 4, Ultra DMA/33/66/100 and bus master feature

FDC, I/O

- Supports 360k, 720k, 1.2MB, 1.44MB and 2.88MB floppy disk interface up to two drivers
- Supports two serial ports for UART
- Parallel port support SPP/EPP/ECP
- Supports three USB ports (one on bracket, two with pin header)
- Supports one IrDA (share one serial port)

Hardware Monitoring

- Supports CPU voltage, temperature and FAN monitoring

Watchdog Timer

- Supports watchdog timer

ATI Mobility M6 Graphics Controller

- AGP 2.0
- 2D graphics up to 1600 x 1200 x 8-bit x 85MHz
- Full 2D H/W acceleration
- 100MHz SDRAM interface
- Support for 1MB x 16 SDRAM
- 3D hyper pipelined architecture
- Motion video acceleration
- Supports LVDS panel display (BIOS default supports three modes including: 1024 x 768 x 16bpp, 1024 x 768 x 32bpp and 800 x 600 x 16bpp)
- Supports TMDS for 2nd display

Onboard PCI-to-ISA Bridge (National PC87200 PCI-to-ISA Chipset)

- Supports ISA bus mastering
- Supports standard ISA slot
- 64mA high driving
- Support M-system DOC

One Onboard Ethernet (One ICH2 Integrated MAC Controller with External 10/100Mb phy)

- Supports 10/100Base-TX
- One RJ45 phone jack
- Supports two LEDs to indicator LAN access and link status on RJ45 jack

Real Time Clock/Calendar (RTC)

- Compatible for seven years of data retention to support real Y2K
- An external Li battery

Wake On LAN & Modem Ring On

- Supports ATX function with 4-pin header connect to back plane

Keyboard and PS/2 Mouse Interface

- Supports one mini-DIN 6-pin connector for keyboard & mouse, one 5-pin header connector for external keyboard connection

ISA64 High ISA-Bus Driving Capability

- Support 64mA high driving capability for ISA-bus slots on back plane

Power Good

- Onboard power good generator with 200 to 300ms reset duration

CPU Cooling Fan

- Supports one 3-pin header with wafer

Bracket

- Support one RJ45 connectors (LAN)
- One VGA connector
- One USB port
- One PS/2 keyboard/mouse connector (mini DIN)

BIOS

- Award BIOS with PC'98 support
- 4Mbit FLASH ROM (Intel FWH) for easy upgrade
- Supports DMI, Plug-n-Play, green function and ACPI (default support)
- ACPI support suspend to RAM, USB wake up

Power Requirement

- +12V (CPU) @ 2.7A
- +12V (system) @ 0.6A
- +5V @ 3.7A

Environmental

Operating Temperature

- 0 ° to 60 °C (32 ° to 140 °F)

Humidity

- 5 to 95% (RHNC)

Non-Operating Temperature

- -20 ° to 80 °C (-4 ° to 176 °F)

EMI

- CE certified
- FCC certified

OS Support

- Linux®, DOS, Windows®95/98/2000/NT/Me/XP

Support

- Superior pre- and post sales technical support
- 2-year limited warranty

Ordering Guide

SBC-845D-VEA

- Socket 478 Pentium 4 processor-based PICMG SBC with VGA and 10/100Mbps Ethernet (processor sold separately)

Accessories

815E-U160

- Adaptec AIC-7892 Ultra-160 SCSI daughter card

845D-AUDIO

- Audio daughter card with TV-out

* Please consult a Sales Engineer for backplane compatibility

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