PCI-749-VE2

Intel[®] Pentium[®] 4, 845GV, single board computer Next generation Intel Pentium 4 processing, onboard Intel Extreme Graphics controller, dual 10/100Mbit LAN and a miniPCI socket make the PCI-749-VE2 one of the best performing PICMG SBCs on the market.

High performance full-sized PICMG SBC

The PCI-749-VE2 full-sized SBC features a 64-bit Intel® Pentium® 4 processor with ondie 512k L2 pipelined burst cache (full CPU core speed). It supports two DIMM sockets with up to 2GB of DDR memory, which can transmit data and signals up to 40% faster than traditional SDRAM. The IDE interface supports high performance PCI Ultra DMA33/66/100 IDE interfaces. The ICH4 chipset supports the AC'97 audio CODEC offering onboard mic-in/line-in/line-out/ speaker-out connectors. The onboard Intel 82562ET 10/100Base-TX and Intel 82551QM 10/100Base-T Ethernet LAN controllers are the latest in 10/100Mbs LAN architecture. The Intel 82540EM 10/ 100/1000Base-T(X) Gigabit LAN controller is optional. The PCI-749-VE2 also offers standard MiniPCI and CompactFlash™ Type I/II sockets for further system expansion and up to four USB 2.0 connectors.

- Intel Pentium 4 processor with 512k L2 cache supporting 3.06GHz processors with hyperthreading and 400/533 FSB
- Ultra DMA 33/66/100 IDE support
- Onboard Intel 82845GV VGA controller with CRT and optional DVI interface
- > AC'97 2.0 audio CODEC
- CompactFlash disk socket (Type I/II) and standard miniPCI expansion socket
- Dual Ethernet LAN support Intel 82562ET 10/100Base-TX (PHY) + 82551QM 10/100Mbps or 82540EM 10/100/1000Base-T(X) Gigabit Ethernet controller (optional)
- ISA 64mA high drive capacity for server and multiple ISA platforms



PCI-749-VE2 - Technical Specifications

CPU

• Intel® mPGA478 Pentium® 4 0.13 micron processors with hyperthreading up to 3.06GHz

Processor Socket

• Flip-Chip Pin Grid Array (FC-PGA2) socket (478-pin)

CPU FSB Speed Support

• 400/533MHz

Cache

• 512k L2

I/O Chipset

• Intel 82801DB multi-I/O • iTE IT888F as the second multi-I/0

System Memory

• Two 184-pin latching DDR, up to 2GB

IDE

• Two UDMA 33/66/100 IDE interfaces

FDD

· Supports two floppy disk drives

Serial Port

- Dual onboard COM ports
- One RS-232 port
- One RS-232/422/485 port by jumper selection

Parallel Port

• One parallel port - supports SPP, ECP and EPP modes

Keyboard/Mouse

• PS/2 connector supports keyboard and mouse

USB

· Four USB ports

IrDA

• One IrDA pin header

VGA

- Chipset
- Intel 82845GV north bridge integrated AGP4X graphics core, supporting CRT/ DVI (optional)
- **Display Memory** • Up to 64MB

Resolution Type

• 1280 x 1024 x 8bpp

Ethernet LAN Interface

- Intel 82562ET 10/100Base-TX controller
- 32-bit Intel 82551QM 10/100Mbps controller
- Intel 82540EM 10/100/1000Base-T(X) Gigabit LAN controller (optional)

Onboard Audio Interface

• AD1881 AC'97 codec • Supports mic-in, line-in, speaker-out, CD audio-in

ISA High Drive

• ISA 64mA high drive capacity

BIOS

• Award BIOS

Onboard Expansion Socket

- MiniPCI socket • CompactFlash Type I/II socket
- **Power Requirements**
- Supply voltage: standard ATX power

Operating Environment

Dimensions (W x H x D)

Temperature • 0 ° to 60 °C (32 ° to 140 °F) Humidity • 5 to 95% RNC Storage Temperature

• -25 ° to 65 °C (-13 ° to 149 °F)

• 13.3 x 4.8-inch (337.82 x 121.92mm)

Supervisory 64-level Watchdog timer

OS Support

DOS, Windows[®]98/2000/NT/XP, Linux[®]

Support

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

Ordering Information

- PCI-749-VE2
- Socket 478 Intel Pentium 4 processor-based PICMG SBC with VGA and 10/100Mbit Ethernet. Processor sold separately.Please contact a Sales Engineer for the Gigabit LAN controller option.
- · Please consult a Sales Engineer for backplane compatibility.



Corporate Offices US / Canada 6260 Sequence Drive San Diego, CA 92121-4371 (858) 677-0877 Tel. (858) 677-0898 Fax sales@us.kontron.com



Europe, Middle East and Africa Oskar-von-Miller-Straße 1 D-85386 Eching/Münich Germany Tel. +49 81-65 77 0 +49 81-65 77 219 Fax sales@de.kontron.com



Asia Pacific 6F No 9, Lane 235, Pao Chiao Road Hsin Tien 231, Taipei, Taiwan Tel. +886 2 2910 3532 +886 2 2910 3482 Fax sales@tw.kontron.com



kontron