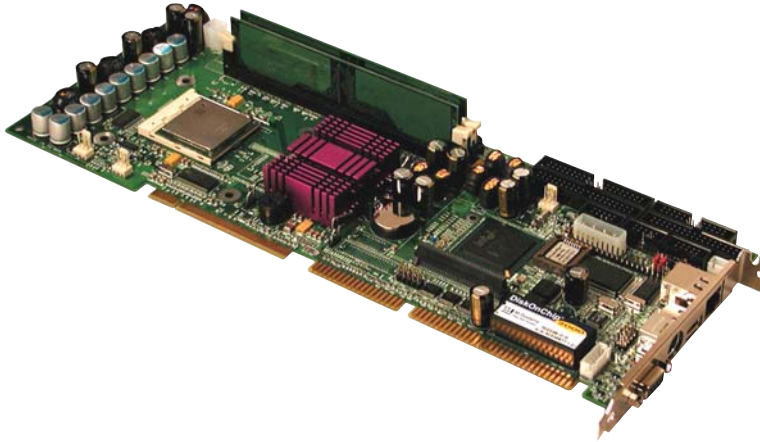


PCI/ISA Single Board Computer

LBC9216



- Intel® Celeron® processor or Intel® Pentium® 4 processor with a top speed of 3.06Ghz and 512/128KB L2 Cache
- Intel® 845GV Chipset with 400/533MHz FSB
- Up to 2GB DDR200/266 SDRAM
- Integrated Video
- 10/100 Base-TX Ethernet
- Dual Channel Ultra ATA/100 EIDE
- Optional Ultra160 SCSI or LAN
- USB, Serial, and Parallel Ports

Diversified Technology's LBC9216 Intel® Pentium® 4 processor-based PICMG® PCI/ISA compliant passive backplane single board computer addresses wide ranging, high performance, long-life applied computing applications.

Low cost by design, the LBC9216 features an Intel® Pentium® 4 processor or socket-478 Intel® Celeron® processor with 512 or 128KB full core speed L2 cache, Intel® 845GV chipset with 400/533MHz front side bus, and up to 2GB DDR200/266 DIMMs on two sockets. Onboard are an integrated high performance graphics controller, a 10Base-T/100Base-TX Ethernet auto-negotiating controller, dual channel PCI Ultra ATA/100 IDE interface, as well as Universal Serial Bus (USB 2.0) ports, serial/parallel ports, floppy drive interface, IrDA interface, and AC'97 audio. An Ultra160 SCSI or second 10/100-TX Ethernet daughter card is optional. The ENET daughter card may be a single 10/100/1000 Base-T or dual 10/100/1000 Base-T.

The LBC9216 is compliant with PCI local bus specification V2.1 (supports 4 master PCI slots) and PICMG® 1.0 Rev 2.0 (32-bit/33MHz PCI and 16-bit ISA). A PCI to ISA bridge supports ISA bus mastering, up to 20-slot drive capability and a DiskOnChip solid state disk.

The Award BIOS, in field upgradeable Flash ROM, supports software video/Ethernet enable/disable, serial/parallel port re-mapping/disable, keyboard disable, and PnP compliant onboard ISA interrupts. Other features include a hardware monitor (voltages, temperature, and fan), programmable watchdog timer, general purpose I/O, and a 2 year limited warranty.

Scaleable CPU/memory processing performance. Extensible I/O. Diversified Technology's LBC9216 PCI/ISA industrial PC is the power choice for application developers addressing high performance broadcast/media, wireline and wireless datacom/telecom, messaging, IVR/CTI, industrial control & automation, instrumentation, medical/imaging, and COTS defense/aerospace markets.



 **Diversified
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SPECIFICATIONS

CPU / Cache

- Intel Pentium 4 processor at 2.4 to 3.06GHz with 512KB on-die L2 Advanced Transfer cache
- Intel socket-478 Celeron processor at 2.0GHz with 128KB on-die L2 Advanced Transfer cache
- Both processors include a 12KB level one Execution Trace Cache & 8KB L1 data cache
- Intel 845GV chipset

Bus Interface

- 400/533MHz Front Side Bus; 33MHz PCI Busses; 8.33MHz ISA Bus
- Supports four 32-bit/33MHz slots
- High drive ISA buffers, up to 20 slots

Memory

- Two 184-pin latching DIMM sockets
- Up to 2GB using 64/128/256/512 x 64 with non-ECC DDR200/266 (2.5V)

Data Path

- 32-bit / 400/533MHz on CPU and memory bus
- 32-bit/33MHz on off-board PCI bus;
- 32-bit/33MHz on onboard PCI bus
- 16-bit on ISA bus

Flash Memory

- 4Mb (512KB) Flash ROM for BIOS field upgrade

I/O

- USB Ports: three, 2.0 compliant (two via 10-pin header, one Type A on face plate)
- PS/2 mouse and keyboard (6-pin mini-DIN on faceplate)
- External keyboard (5-pin header)
- Serial Ports: one RS-232 and one configurable RS-232/422/485 (16C550) with 16 byte FIFO as COM1-2 with BIOS selectable IRQs and addressing, (two male 10-pin shrouded headers)
- Parallel Port: one bi-directional with all IEEE 1284 protocols supported and BIOS selectable IRQs and addressing, (male 26-pin shrouded header)
- Floppy Disk: support for two drives (360 KB to 2.88 MB), (male 34-pin shrouded header)
- EIDE: PCI Ultra ATA/100, support for four drives (master/slave configuration); PIO Mode 4, Bus Master IDE or DMA mode transfers up to 100MB/s, (two male 40-pin shrouded headers)
- Ethernet: 10Base-T/100Base-TX (Intel 82562), (shielded RJ-45 on face plate with link and activity LEDs)
- SSD: DiskOnChip (32-pin DIP socket)
- IrDA port (6-pin header shared with one serial port)
- PCI Expansion (68-pin socket) : opt. Ultra160 SCSI or 10/100Base-TX card

Video/Audio

- Integrated AGP 4X CRT controller, (female DB-15 on face plate)
- Supports CRTs with resolution up to 2048 x 1536 @ 60Hz refresh

Video/Audio (cont'd)

- AC '97 with MIC/Line In/Line Out (9-pin)
- Audio CD-in (4-pin header)

Clock / Calendar

- Real-time clock with 256 byte battery backup CMOS RAM

Misc.

- Speaker (4-pin), reset (2-pin), HD activity LED (2-pin), Power LED & keyboard lock (5-pin)
- Wake-on-LAN (3-pin header)
- GPIO (10-pin header)
- ATX power control (4-pin) with Modem Ring-On and Wake-On-Land, ATX power button interface (2-pin), 12V CPU Power (4-pin), stand-alone power (4-pin)
- CPU/Power/System fans (three 3-pin)

BIOS

- PCI 2.1 compliant field upgradeable Award BIOS with PC98 support
- Boot from LAN (PXE 2.0)
- Support DMI, PnP, SMBus communication
- Software enable/disable onboard video, Ethernet
- Diskless, keyboardless, and videless operation extensions
- APM, ACPI (full-on Stop Grant Suspend to RAM, Suspend to Disk, soft-off)

Supervisory

- Programmable watchdog timer drives NMI or system reset
- Hardware system monitor (voltages, CPU temperature, fan speed)

OS/Driver Compatibility

- Windows®98/SE/ME/XE/2000/NT; Red Hat Linux®

Mechanical

- 13.30 in. x 4.80 in. x 2.38* in. at CPU / fan (338 mm x 122 mm x 60 mm)
- *1.65 in. with optional low profile fan for 1U chassis
- Conforms to IEEE P996 PC/AT bus, PCI Rev. 2.2, and PICMG 1.0 Rev. 2.0 standards

Power Requirements

Max Power Dissipation	80W
ICC typ.*	+5V 1.7A
	+12V 1.6A
	-5V 0mA
	-12V 0mA

*Measured with 3.06GHz CPU, 256MB SDRAM

Environmental

Operating

- Min Temperature: 0°C / 32°F
- Max Temperature:

3.06GHz	35°C / 95°F
2.4 & 2.8GHz	40°C / 104°F
2.0GHz	50°C / 122°F
- Humidity (RNC): 5 to 95% @ 40°C / 104°F
- Altitude: 3048m / 10,000ft @ 28°C / 82°F
- Vibration: 1G 5-500Hz

Storage and Transit

- Temperature: -40° to 70°C / -40° to 158°F
- Humidity (RNC): 5 to 95% @ 40°C / 104°F
- Altitude: 15,240m / 50,000ft
- Shock: 30" free fall
- Vibration: 0.5G 5-50Hz, 3G 50-500Hz

Reliability

- MTBF: >100,000 hours @ 20°C / 68°F (Telecordia)
- 2 year limited warranty
- USB and keyboard/mouse voltage protected by self-resetting fuses

Regulatory Compliance

- Safety: UL/cUL 60950-1:2003; EN/IEC 60950-1:2001;
- EMC Class A: FCC 47 CFR part 15-B, CISPR22:1997/EN55022:1998, EN55024:1998

Ordering Information

LBC9216/2000

PCI/ISA SBC with 2.0GHz/400MHz Celeron processor with 128KB L2 cache

LBC9216/2400

PCI/ISA SBC with 2.4GHz/533MHz Pentium 4 processor with 512KB L2 cache

LBC9216/2800

PCI/ISA SBC with 2.8GHz/533MHz Pentium 4 processor with 512KB L2 cache

LBC9216/3060

PCI/ISA SBC with 3.06GHz/533MHz Pentium 4 processor with 512KB L2 cache

All cables included

Options

- DDR200/266 DIMMs
- SDC-160 SCSI Daughter card
- EDC-10/100 Ethernet daughter card
- Multimedia kit with MIC, LineIn, LineOut and single-port USB connectors
- EDC-1000-1 Ethernet Daughter Card Single 10 Base-T/100 Base-TX/1000 Base-T
- EDC-1000-2 Ethernet Daughter Card Dual 10 Base-T/100 Base-TX/1000 Base-T



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