PBE-1000

ETX Evaluation Board with standard ATX form factor

Labels:
AT Power Connector, ATX Power Connector, CF Socket, COM4, COM3, DIO, Debug port Display, DiskOnChip2000 Socket, IDE1, IDE2, ETX Connector, Front Panel, TV out, LVDS, COM2, K/B and Mouse port, RJ-45, COM1, LPT, VGA, Audio Connector, PCI Slot x4, ISA Slot x 3

Features ⟨CE FCC⟩
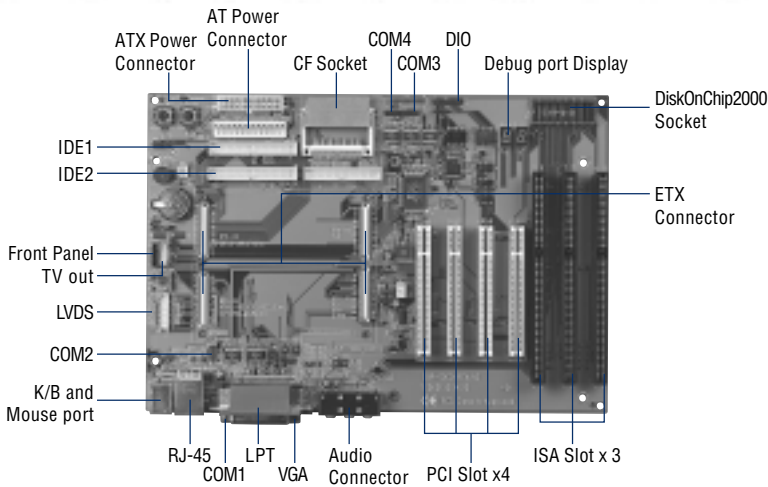
- ❋ **ATX Form Factor**
- ❋ **4 PCI, 3 ISA extensions**
- ❋ **POST Code Diagnostics**
- ❋ **Secondary Multi I/O**
- ❋ **Audio Amplifier**
- ❋ **CompactFlash or DiskOnChip**
- ❋ **AT or ATX power source**
- ❋ **Optional cabling kit**

Specifications

- **Expansion Bus:** Four 32-bit PCI Slots on Board
  Three16-bit ISA Slots on Board
- **Enhanced IDE:** Support 4 IDE Devices with Ultra DMA/100 mode
- **Parallel Port:** SSP, ECP, and EEP mode
- **Serial Port:** 4 COMs
- **KB/Mouse Connector:** Two keyboard/Mouse connector
- **USB Connector:** 4 USB ports
- **Single LAN:** RJ45
- **Audio:** Line In/Out, Speakers
- **Video**: TV Out (NTSC, PAL), TTL, LVDS 32-bit
- **Digital I/O**: 16-bit

POST Code Display

Integrated POST diagnostic function with Dual LED readout that provides detailed debug information on the booting process of the ETX system.

Secondary Super I/O Controller

Secondary I/O controller on the Evaluation board supports
- Secondary parallel port (LPT2)
- Primary Floppy port for connection of up to 2 FDDs
- Additional serial ports (COM3 and COM4), secondary I/O controller supports is integrated in BIOS of ETX modules

Audio Amplifier

An onboard LM4880 provides dual audio power amplification capable of delivering typically 250mW per channel of power to an 8Ohm load.

Flash Disk

- CompactFlash socket supports Type I/II cards
- 32-pin DIP socket supports M-Systems DiskOnChip2000

Environment & Power Consumption

- **Standard AT type**: P9/P8 12-pin connector
- **ATX type**: 20-pin source with 3-pin ATX control
- **Selection**: Through BIOS

Mechanical

- **Weight:** 0.51 kg (1.12 lb)
- **Dimension (L x W):** 305 x 192 mm (12" x 7.6")

What is included onboard?

The evaluation board is designed in a standard ATX form factor and allows addition of commercial available add on cards. It can be used free standing or simply be mounted in a commercial ATX desktop case. The board includes connectors and interfaces for PS/2 Keyboard and Mouse, USB, Serial, Parallel, Ethernet, Sound, Floppy and IDE. It supports the connection of a wide variety of visual devices such as Flat Panel TTL/LVDS displays, CRT displays and has a TV-Out port. Supported storage media include CompactFlash, DiskOnChip and other ATA based devices such as harddisk and CDROM. Power is supplied by means of an AT or an ATX power connector Additional ATX soft switch On/Off and Reset switches are included on board. All evaluation boards come standard with a Dual LED POST function that monitors and gives information about the BIOS when booting the system.

Advantage

Since the board adheres to the standard ATX form factor it allows addition of commercial available add on cards. This way you can extend the functionality of our off the shelve ETX cores to match your application requirements. Thus, the created functional prototype can now be used in a very early project stage for hardware evaluation, software development or debugging of your final application. In the meanwhile development of a custom ETX carrier board that integrates all these additional function takes place in a separate effort. Develop-ment time of custom ETX carrier boards is a minimal effort that takes normally around one or two months. By using the ETX module that starts from a ready available system core and only requires hardware design for additional functionality to maximize your solution in time and cost.

◩ Ordering Information

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ATX form factor ETX evaluation board with POST, secondary I/O, Audio Amplifier and Flash Disk sockets.
Cabling Kit
6910610000010
Complete cabling kit for connection to onboard headers of:
1 x TV-out, 1 x USB, 2 x IDE, 3 x serial ports

ARBOR

Modular Computing