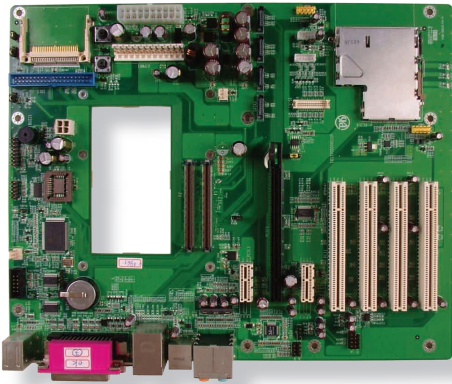




PBE-1700

COM Express Evaluation Board in ATX Form Factor



Features

- **COM Express Evaluation Board**
- 1 x PCIe x16 Lanes, 2 x PCIe x1 Lane, 4 x PCI Slots and 1 x ExpressCard/54 Interface
- Support Analog RGB, LVDS and TV-out
- 4 x SATA, 6 x USB 2.0 Ports, 2 x Serial Ports
- 7.1 Channel HD Audio
- CompactFlash Disk Socket
- AT or ATX Power Supply

System

Storage	4 x Serial ATA connectors
	1 x Ultra ATA 100/66/33 port, support 2 IDE devices
	1 x Floppy disk connector (shared with parallel port)
	1 x CompactFlash Type II Socket

I/O

Serial Port	2 x COM ports (2 x RS-232)
Parallel Port	SPP/EPP/ECP mode
USB Port	6 x USB 2.0 ports
KB/MS	1 x PS/2 Keyboard connector
	1 x PS/2 Mouse connector
Digital I/O	8-bit Digital Input/Output
Expansion Bus	2 x PCIe x1 lane
	1 x PCIe x16 lanes (for Graphic card)
	4 x PCI Slots
	1 x ExpressCard/54 interface

Ethernet

1 x RJ-45 Ethernet connector with LED

Audio

CODEC/Interface	Realtek ALC888 7.1 Channel HD Audio CODEC, Mic-in/Line-in/Line-out
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Display

Graphics Interface	Analog RGB, LVDS, TV-out connector (depend on CPU module)
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Mechanical & Environmental

Power Requirement	AT or ATX power connector
Operating Temp.	0 ~ 60°C (32 ~ 140°F)
Operating Humidity	0 ~ 90% (non-condensing)
Dimensions (L x W)	305 x 244 mm (12" x 9.6")

What is COM Express?

COM Express, board-to-board connectors consist of two rows of 220 pins each. Row AB, which is required, provides pins for PCI Express, SATA, LVDS, LCD channel, LPC bus, system and power management, VGA, LAN, and power and ground interfaces. Row CD, which is optional, provides SDVO and legacy PCI and IDE signals next to additional PCI Express, Ethernet and power and ground signals.

What's included onboard?

The evaluation board is designed in a standard ATX form factor and allows the addition of commercially 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 disk and IDE devices. It supports the connection of a wide variety of visual devices such as Flat Panel LVDS displays, Analog RGB displays and has a TV-out port. Supported storage media include CompactFlash, Disk On Chip and other ATA-based devices such as hard disk and CD-ROM. Power is supplied by means of an AT or an ATX power connector. Additional ATX On/Off soft switches 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 standard ATX form-factor board also uses the ETX® standard, commercially available cards can be added. This way you can extend the functionality of off-the-shelf ETX® cores to match your application requirements. Functional prototypes can now be used in a very early project stage for hardware evaluation. Software development of a custom ETX® carrier board that integrates all these additional function takes place in a separate effort. Development 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 readily available system core, hardware design time and cost is minimized as your attention can be focused on parts of the system unique to your application.

Ordering Information

PBE-1700	COM Express evaluation board in ATX form factor
CBK-04-1700-00	Cable kit
	1 x SATA cable
	1 x COM port cable
	1 x FDD cable
	1 x IDE cable

All specifications are subject to change without notice.

Computer on Module

Compact Board

Slot Board

Industrial Motherboard

Wide Temperature

SBC Daughterboard Power Connector Mounting Kit

Rugged Tablet PC

Medical PC

Industrial Panel PC/Monitor

Box PC

Industrial Chassis /Backplane/ Power supply