ETX IEM Series

ETX, Embedded Technology Extended, is a new architecture for industrial applictions. It fulfills the requirements for embedded technology by a compact module with most PC functions:

ETX divides a complete motherboard system into two parts physically:

– ETX MODULE carries CPU system and core ASICs in a small 4.5 x 4-inch size

– BASEBOARD includes all I/O connectors plus some supplementary functions.

IEM Advantages

ETX is an industry standard System-On-Module (SOM) technology. By choosing integrated CPU and memory module and customized baseboard with I/O functionality, embedded product solutions could be incredibly efficiently and economically.

Benefits

- **Time Advantage!**
  - Complete PC functionality with x86 architecture
  - Cost saving in engineering and developing
  - Time to market in software design and scheduling
- **Design Advantage!**
  - Customized design in reliable connectors
  - Easily upgraded with no need to re-design when components are end-of-life
  - Extremely slim low power fanless design
- **Installation/Size Advantage!**

  Gas-proof connectors and mounting holes enable rugged applications.

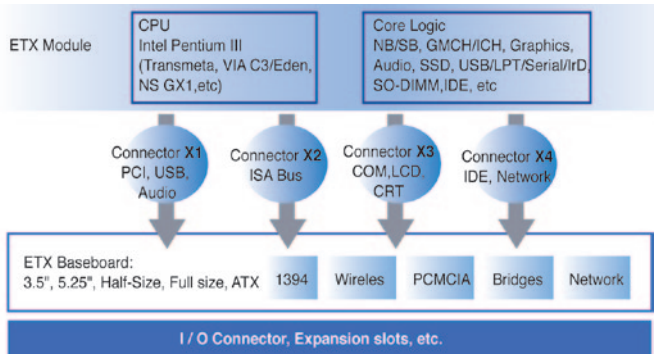
Basic Concept of IEI FSEA

ETX modules are scaleable and interchangeable. Thus with a single baseboard, several products can be launched in the same time by the aid of a wide choice of CPU modules.

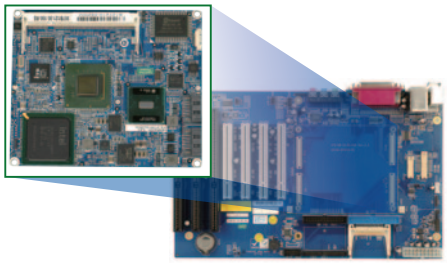
M (ETX CPU Module) + N (ETX Baseboard) ➔ M x N Products

In order to enhance the reliability and flexibility of ETX solutions, IEI moves the Ethernet interface from the CPU module to the baseboard. Testing performance reveals that IEI's innovative design produces outstanding results.

ETX Module Architecture

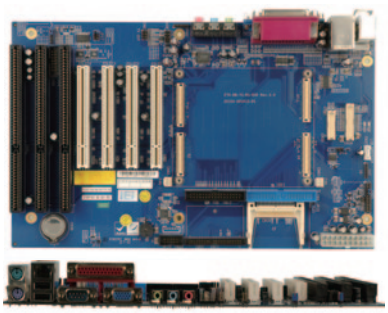


ETX CPU MODULE



IEM-DB-7S-RS-R30

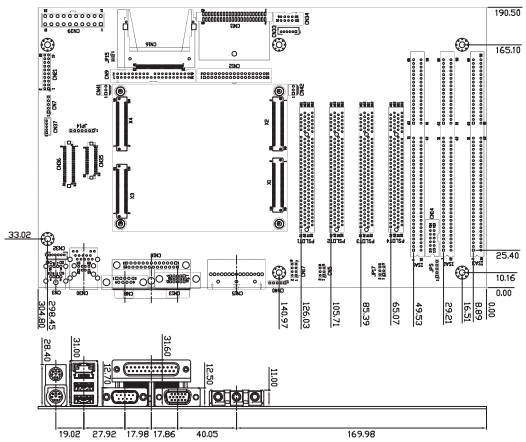
Full Function ETX Baseboard with VGA/LVDS/TTL, Audio, CF Type II and Digital I/O



Specifications

CPU Module Interface	ETX form factor
LCD Interface	1 x 30-pin, 18-bit dual-channel LVDS 1 x 40-pin, 24-bit TTL
Expansion Slot	4 x PCI, 3 x ISA
SSD	CF Type II
Audio	Line-in, Speaker out, Mic-in
Ethernet Connector	1 x RJ-45
RS-232	1
RS-232/422/485	1
KB/MS	2 x PS/2
VGA	1
USB 2.0	4
IDE Connector	2
LPT/FDD	1
Digital I/O	4-bit input, 4-bit output
IR Connector	5-pin header
Power Supply	ATX

Dimensions (mm)



Packing List

1 x IEM-Baseboard single board computer	
1 x RS-232/422/485 cable (P/N: 32200-000063-RS)	
1 x FDD cable (P/N: 32229-000100-100-RS)	1 x Mini jumper pack
1 x HDD cable (P/N: 32225-002000-100-RS)	1 x User manual

Ordering Information

Part No.	Description
IEM-DB-7S-RS-R30	ATX size 7 slots ETX baseboard