# 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.

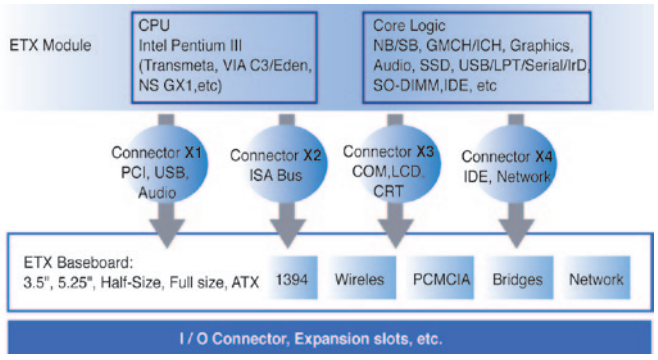
## Basic Concept of IEI FSEA

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.

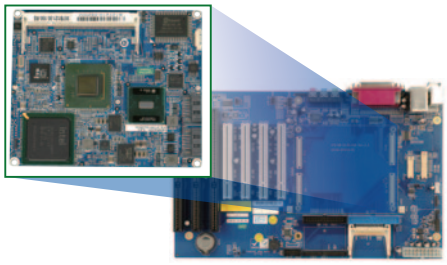
**M (ETX CPU Module) + N (ETX Baseboard) ➔ M x N Products**

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

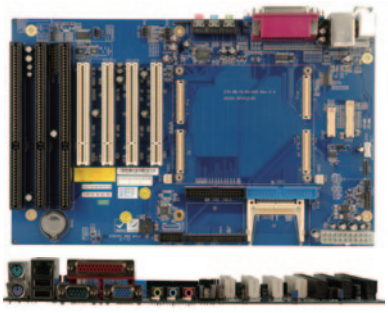



**ETX CPU MODULE**



# IEM-DB-7S-RS-R30

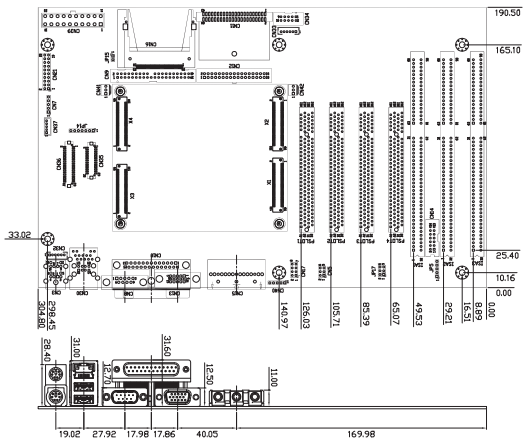
***Full Function ETX Baseboard with VGA/LVDS/TTL, Audio, CF Type II and Digital I/O***



## Specifications

| | |
|---|---|
| **CPU Module Interface** | ETX form factor |
| **LCD Interface** | 1 x 30-pin, 18-bit dual-channel LVDS<br>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 |