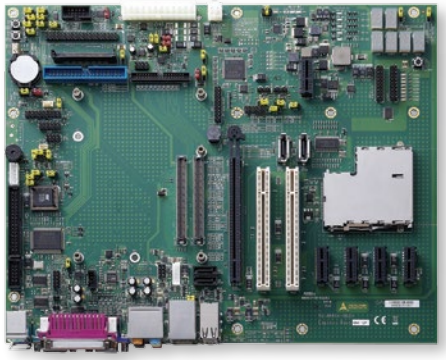
# Express-BASE

## COM Express® Type 2 Reference Carrier Board in ATX Form Factor

Type 2



### Features

- Five PCI Express x1 slots
- PCI Express x16 Graphics slot / SDVO slot
- Two legacy 32-bit PCI slots
- Dual LPC BIOS, single step execution
- LPC Super I/O (enable/disable)
- CF card or Express-Card
- Integrated POST code display
- ATX / AT or Battery Powered

## Specifications

### Form Factor

| | |
|---|---|
| Core Module Interface | PICMG® COM Express® Revision 2.0 |
| | Supports Type 2 modules in Basic or Compact form factor |
| Dimensions | 305 mm x 244 mm (AT/ATX) |
| Expansion Busses | Two 32-bit PCI v2.3 slots |
| | Five PCI Express x1 slots |
| | One PCI Express x16 / SDVO slot |
| | LPC bus header |

### BIOS / Debug

| | |
|---|---|
| POST LEDs | Onboard diagnostics for BIOS POST code data and address on LPC bus |
| | Allows single step BIOS execution |
| Secondary BIOS | Onboard sockets for secondary LPC & SPI flash |

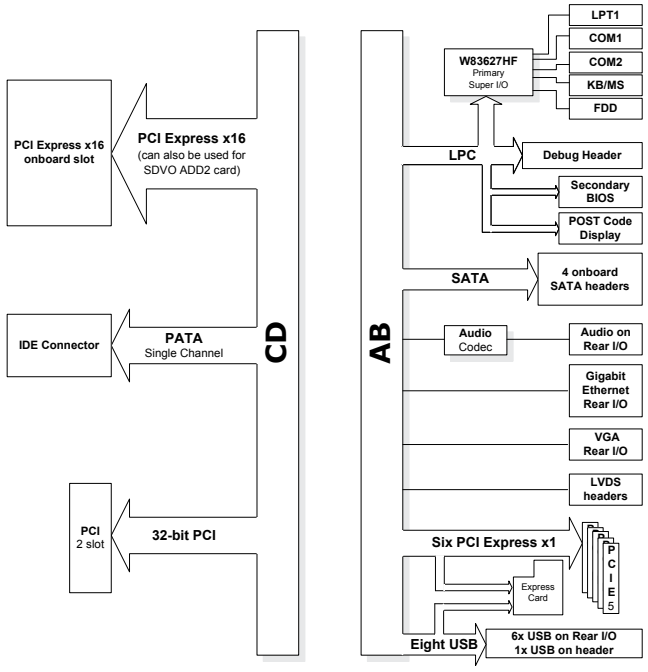
### Active Components

| | |
|---|---|
| Audio | ALC880 High Definition Audio Codec |
| Super I/O | Winbond WF83627HG on LPC |

### Connectors

| | |
|---|---|
| COM Express® | Two x 220-pin (Type 2) |
| VGA | DB15 on Rear I/O panel for VGA displays |
| LVDS | Two onboard headers supporting dual channel LVDS |
| Audio | Mic/Line-in/Speakers on rear I/O panel, Mic/Line-in on header, S/PDIF on header |
| PATA IDE | One 40-pin header |
| SATA IDE | Four SATA connectors |
| ExpressCard | One socket onboard |
| LAN | 10/100/1000BASE-T compatible RJ45 on rear I/O panel |
| USB 2.0 | Four + two on rear I/O panel, two on header and one through Mini Express Card |
| Serial Port | One DB-9 on rear I/O panel, one header onboard |
| Parallel Port | One DB-25 on rear I/O panel |
| FDD | 34-pin header |
| Smart Battery | One header for Smart Battery management communications (connects to ADLINK BattMan board) |
| KB/Mouse | Two 6-pin mini DIN (on rear I/O panel) |
| Digital I/O | 8-pin header |
| Feature Connectors | SMBus, I²C, module control signals, flat panel control signals |
| Miscellaneous | Reset, Power LED, HDD LED, Buzzer |
| Power | Standard ATX connector |
| Switches | Onboard RESET button and ATX mini switch |

## Functional Diagram




## Ordering Information

### Carrier

| Model Number | Description/Configuration |
|---|---|
| **Express-BASE** | COM Express® Reference Carrier Board in ATX form factor |

### COM Express Carrier Design Guide

Provides detailed information on designing your own custom carrier board for COM Express modules.

Download from the Express-BASE product webpage at *www.adlinktech.com*