

# Express-BASE

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



### 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
Dimensions	Supports Type 2 modules in Basic or Compact form factor 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
Secondary BIOS	Allows single step BIOS execution Onboard sockets for secondary LPC & SPI flash

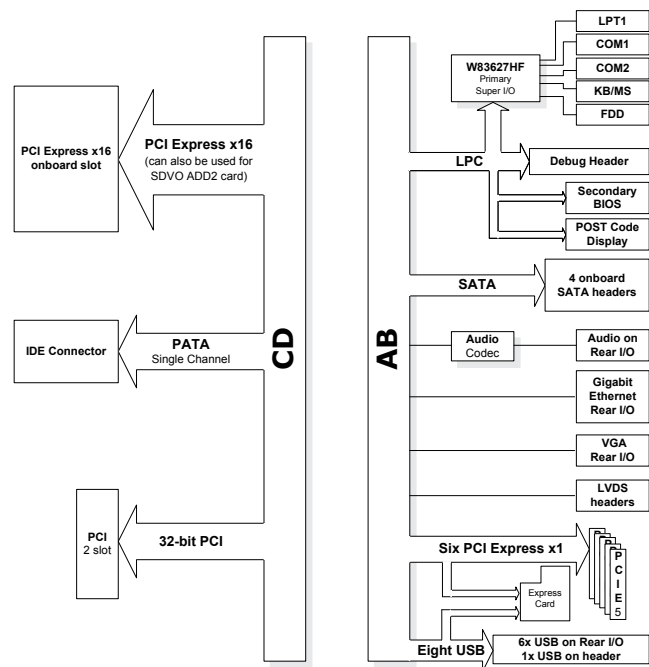
#### Active Components

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, I <sup>2</sup> C, 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 **COM** + **Express**

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](http://www.adlinktech.com)