



# COM Express Carrier Board, Type 6, ATX Form Factor

**Part:** Express-BASE6 | **Model:** Type 6 Carrier Board

Get your COM Express project off to a fast start with the Express-BASE6 COM Express carrier board. The Express-BASE6 supports Basic and Compact Type 6 COM Express modules. Standard features include seven PCI Express X1 slots, one PCI Express X16 slot, one PCI Express Mini slot, LPC-based Super I/O and dual BIOS support. The carrier board includes connectors for digital and analog video, USB, Ethernet, SATA, serial and audio interfaces. Specific features are COM Express module dependent.

The Express-BASE6 simplifies software development and prototyping while the target application carrier board is designed. Take advantage of Sealevel's carrier board development services for the fastest time to market. Our extensive library of proven I/O circuits including serial, analog, and digital functionality simplifies the design process and can be easily optimized to meet the specific I/O count, voltage ranges and connector types required for your application.

Turn to Sealevel's custom capabilities for expertise in electrical, mechanical, software, environmental stress screening, project management, and compliance & certification. Call us today to discuss the design capabilities, reliability improvements and design control advantages that a Sealevel COM Express carrier board or system design will bring to your next product.

## Features & Specifications

### COM Express Carrier Board, Type 6, ATX Form Factor

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#### Features

- COM Express Type 6 reference carrier board in standard ATX form factor
- Supports Basic and Compact Type 6 COM Express modules that are compliant with PICMG COM Express Revision 2.0
- Includes seven PCI Express X1 slots, one X16 slot, and one Mini PCI Express slot
- Three Digital Display Interfaces (DDI) supporting DisplayPort, HDMI, and DVI displays
- Integrated Realtek high definition audio codec
- Integrated Winboard Super I/O on LPC bus
- Integrated I2C to GPIO bridge for digital I/O
- Onboard diagnostic LEDs for BIOS post code data and address on LPC bus
- Onboard socket for secondary SPI flash BIOS
- Two 220-pin COM Express Type 6 connectors
- One DB15 for analog VGA display
- One 34-pin header for LVDS
- One 8-pin header for flat-panel control
- Four SATA connectors (module dependent)
- One Gigabit (10/100/1000BaseT) Ethernet RJ45 port
- Up to Eight USB 2.0 ports (Up to four ports can be USB 3.0 if supported by module)
- One DB9M serial port; one 10-pin header for serial interface
- Six 3.5mm connectors for microphone/audio line-in and line-out
- Two 6-pin mini-DIN connectors for keyboard and mouse
- One 20-pin header for LPC bus debug
- One 10-pin header for Smart Battery management communications
- Additional connectors for SMBus, I2C, reset, power LED, HDD LED, buzzer and module control signals
- ATX form factor works with standard ATX power supplies and enclosures

#### Specifications

<b>BIOS</b>	Diagnostic LEDs for BIOS POST data; Onboard socket for secondary SPI flash BIOS
<b>Chipset</b>	Winbond Super I/O on LPC bus
<b>Dimensions</b>	12.0" (L) x 9.6" (W)
<b>Humidity Range</b>	10 – 90% Relative Humidity, Non-Condensing
<b>Power Requirement</b>	Standard ATX Power Supply
<b>Storage Temperature</b>	-55°C to 85°C (-67°F to 185°F)