



COM Express Module, Type 6, 1.7GHz Intel Core i7

Part: IBR-i7-3517UE | **Model:** i7 COM Express Module

The IBR-i7-3517UE COM Express Type 6 module features an Intel Core i7-3517UE dual-core 1.7GHz processor and supports up to 16GB of 1600MHz DDR3 RAM. The module offers low power consumption (TDP 8W) and can operate fanless over an extended operating temperature range of -40°C to 85°C ambient, while the 2.3mm thick PCB is ideal for high vibration environments. Standard features include integrated Gigabit Ethernet controller, up to seven PCI Express X1 lanes, one PCI Express X16, two SATA III (6Gb/s) interfaces, two SATA II (3Gb/s) interfaces, eight USB 2.0 ports, four USB 3.0 ports, LPC bus, SMBus and I2C bus. The module includes three Digital Display Interfaces (DDI) for DisplayPort, HDMI or DVI displays.

Sealevel specializes in COM Express carrier boards built to your specific application requirements. 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. COM Express development boards are also available to allow software development to begin immediately while the custom carrier board is designed.

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

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Features

- COM Express Basic with Type 6 connector layout
- Includes 1.7GHz (up to 2.8GHz Turbo) Intel Core i7-3517UE dual-core processor
- Maximum 16GB DDR3 1600MHz RAM via dual 204-pin SODIMM slots
- Integrated Mobile Intel QM77 Express chipset
- Integrated Gigabit Ethernet controller
- I/O interfaces can include up to 7x PCI Express X1, PCI Express X16, 2x SATA III (6Gb/s), 2x SATA II (3Gb/s), 8x USB 2.0, 4x USB 3.0, LPC bus, SMBus and I2C bus
- Digital high definition audio integrated into Mobile Intel QM77 chipset with codec support on carrier board
- Intel HD Graphics 4000 integrated on processor, operating at 650-1300MHz, supporting DirectX 11, OpenGL 3.1 and OCL 1.1
- Three Digital Display Interfaces (DDI) supporting DisplayPort, HDMI, and DVI displays
- Analog VGA supported with 300MHz DAC with resolutions up to QXGA (2048x1536)
- Integrated watchdog timer and hardware monitors for supply voltages and CPU temperature
- Embedded BIOS features AMI Aptio EFI with 16MB SPI flash
- Supports ACPI 3.0 power management with Smart Battery Support (LTC4100 and LTC1760)
- Supports Microsoft Windows and Linux operating systems
- Extended temperature operation from -40°C to 85°C ambient

Specifications

BIOS	AMI Aptio EFI with CMOS Backup in 16MB SPI Flash
Chipset	Intel QM77 Express
CPU Type	Intel Core i7
CPU	1.7GHz Intel Core i7-3517UE Dual-Core
Dimensions	4.92" (L) x 3.74" (W)
Humidity Range	10 – 90% Relative Humidity, Non-Condensing
Max RAM	16GB ECC DDR3 1333/1600 MHz via Two 204-pin SODIMM Slots
Max Video	QXGA 2048x1536 @ 60Hz
Operating Temperature	-40°C to 85°C (-40°F to 185°F)
Power Requirement	TDP 8W
Storage Temperature	-55°C to 85°C (-67°F to 185°F)