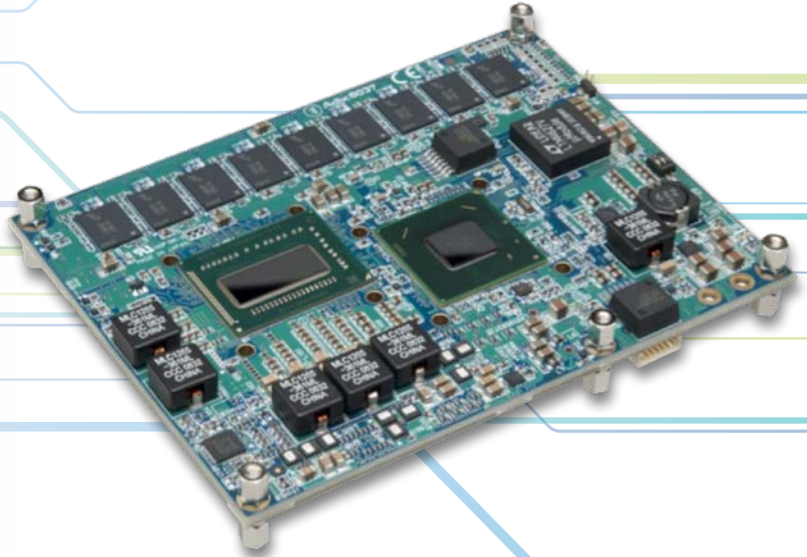


COM Express CPU Module with 3rd Generation Intel Core i7

Adbc8037

- 3rd Generation Intel Core i7
- Type 2/6 pinout
- Faster, Smarter, More Efficient Performance
- Direct Mounted Memory with ECC
- Powerful Graphics with Three DDI Ports
- Wind River Linux and Windows



FEATURES

More CPU and Graphics Performance – The Adbc8037 delivers unparalleled computing power with the 3rd Generation Intel Core i7 processors and the Mobile Intel QM77 Express chipset. With up to four cores and high efficiency, the Adbc8037 offers dramatic performance in graphics/media processing while reducing power consumption requirements.

High Reliability – The Adbc8037 features soldered down CPU and ECC memory, so you can depend on it even in the most demanding applications.

Powerful Graphics – The Adbc8037 provides PCI Express Graphics, VGA and three DDI ports (DisplayPort / HDMI / DVI / SDVO) which are exposed according to the PICMG COM Express Rev2.0, Type 6 pinout.

Feature Rich, High Speed Interfaces – The Adbc8037 delivers a broad range of peripherals, such as one x16 Gen3 PCI Express interface, a total of six lanes of Gen2 PCI Express (configurable), 4 SATA ports (including 2 SATA-600 interfaces), one 10/100/1000 Ethernet interface, two USB 3.0 and two USB 2.0 ports.

The Adbc8037 packs the unparalleled performance and power efficiency of the latest Intel Core i7 processors with the features of the Mobile Intel QM77 Express chipset in a 125x95mm COM Express basic form factor.

The Adbc8037 has been designed to deliver superior performance and reliability, in particular for all those applications where uptime and availability are a must.

Standard configurations support the Intel Core i7-3615QE (2.3GHz, Quad Core) and i7-3517UE (1.7GHz, Dual Core) processors. The Intel Core i7-3612QE (2.1GHz, Quad Core) and i7-3555LE (2.5GHz, Dual Core) configurations are build-to-order options.

With support for up to 8GB soldered DDR3L-1600 ECC memory, the Adbc8037 is ideal to design systems that have to be very resilient to harsh operating conditions.

The pinout of the Adbc8037 can be switched from Type 6 to Type 2, allowing users to employ a single platform across a number of applications with the maximum efficiency.

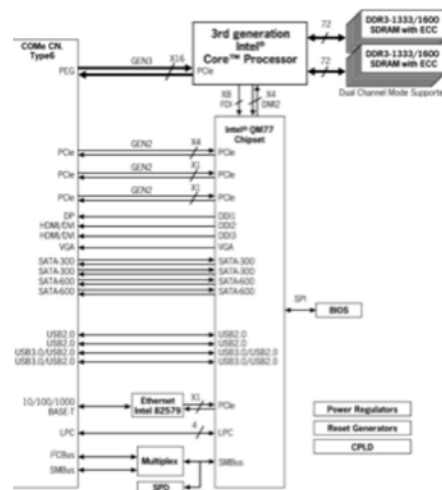
The Adbc8037 supports most major operating systems, including Windows 7, Windows Embedded Standard 7 and Wind River Linux.



System Architecture

PROCESSOR	<ul style="list-style-type: none"> • 3rd Generation Intel Core Processor family <ul style="list-style-type: none"> - SV: Intel Core i7-3615QE(Quad Core / 2.3GHz / 45W) - ULV: Intel Core i7-3517UE(Dual Core / 1.7GHz /17W) - SV: Intel Core i7-3612QE(Quad Core / 2.1GHz /35W) (Build-to-order) - LV: Intel Core i7-3555LE(Dual Core / 2.5GHz /25W) (Build-to-order) • Cache Memory: SV=6MB, LV=4MB, ULV=4MB • Intel Technologies: Intel Turbo Boost Technology, Intel Hyper Threading Technology, • Intel Virtualization Technology, Intel 64 • Chipset: Mobile Intel QM77
MEMORY	<ul style="list-style-type: none"> • SV: Direct-mounted DDR3L-1600 8GB, ECC supported • ULV: Direct-mounted DDR3L-1600 2GB, ECC supported • Build-to-order configuration option: SV & LV: Direct-mounted DDR3L-1600, ECC supported (2GB, 4GB or 8GB) • Boot ROM: SPIFlash 8MB
COM EXPRESS	<ul style="list-style-type: none"> • PICMG COM.0 COM Express Module Base Specification Rev 2.0 • Basic Module size (125mm x 95mm) • Type 6 & Type 2 Pinout (without PCIbus, IDE port)
SYSTEM I/O	<ul style="list-style-type: none"> • PCI Express Graphics (Gen3): one x16 or two x8 (configurable) • PCI Express (Gen2): one x4 or two x2 (configurable) + two x1 • 3x Graphic DDI (DisplayPort / HDMI / DVI) • 1x Graphic VGA • 2x SATA-300 + 2x SATA-600 • 2x USB 2.0 + 2x USB 3.0 • 1x Ethernet 10/100/1000Base-T • 1x LPC • 4x GPI + 4x GPO • 1x SMBus • 1x I2C Bus
POWER	<ul style="list-style-type: none"> • DC 12V (VCC_12V) 12.0V, ±5% • DC 5V (VCC_5VSBY) 5.0V, ±5% • DC 3V (VCC_RTC) 2.0V - 3.0V
MECHANICAL	<ul style="list-style-type: none"> • 125mm (W) x 95mm (L) x 21mm (H) (incl.8mm height for heat spreader and spacers) • Weight: TBD
ENVIRONMENTAL	<ul style="list-style-type: none"> • Operating Temperature: 0°C to +60°C • Storage Temperature: -10°C to +70°C • Humidity: up to 85%RH (no condensation) • RoHS compliant
SOFTWARE	<ul style="list-style-type: none"> • OS: Windows 7, Windows Embedded Standard 7, Wind River Linux • BIOS: Phoenix

Block Diagram



Note: The information in this document is subject to change without notice and should not be construed as a commitment by EUROTECH. While reasonable precautions have been taken, EUROTECH assumes no responsibility for any error that may appear in this document. All trademarks or registered trademarks are the properties of their respective companies.