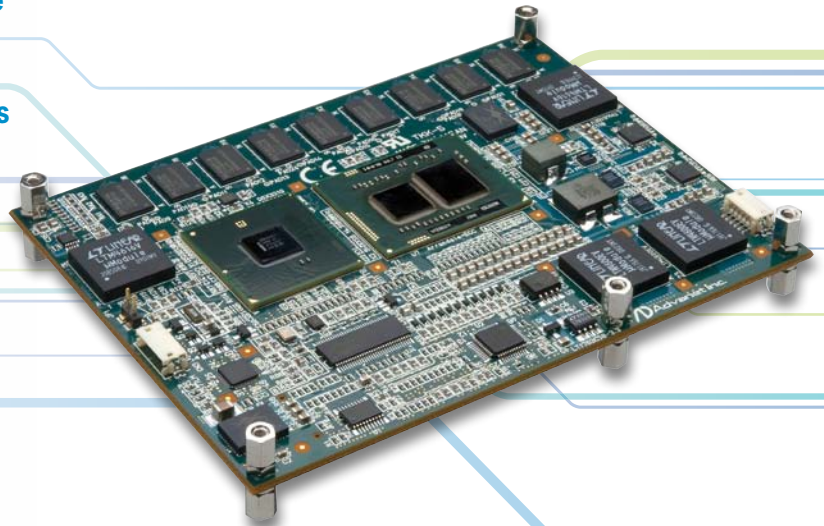


Adbc8031

- Intel® Core™ i7 processor with dual capability for faster performance and high-end computing
- AES and ECC support ideal for mission-critical applications requiring extensive security and reliability
- Power management with low power consumption and ultra-low power states for each core
- Flexibility and choice in operating environment with support for Windows XP, Windows 7, Windows Embedded Standard, and Wind River Linux support
- Long lifecycle support



FEATURES

CPU – High performance Intel® Core i7 processors with speeds up to 2.53GHz combined with Mobile Intel QM57 Express Chipset

INTEL ADVANCED TECHNOLOGY – Active Management Technology 6.0, Hyper-threading, Turbo Boost, Virtualization, Trusted Execution Technology, 64-bit architecture.

FORM FACTOR – Basic COM Express (Type 2) form factor at 125 x 95 mm.

MEMORY – DDR3 SDRAM (memory down) at 800MHz up to 4GB with ECC support.

CONNECTIVITY & I/O – Gigabit Ethernet, USB 2.0, SATA, PCIe, PCI Bus, LPC, I2C, and more.

MULTIMEDIA – LVDS, SDVO, and support for PCI Express Graphics.

OPERATING SYSTEM – Pre-loaded Windows XP, Windows Embedded Standard, Windows 7, or Wind River Linux.

Adbc8031 is a COM Express CPU module based on the Intel Core i7 620 processor series and the Mobile Intel QM57 Express chipset that delivers high performance processing functions and high-end graphics. The Adbc8031 is targeted for applications such as automotive, controls, gaming, digital signage, and more.

The Core i7-620 processor series is based on Intel's 32nm architecture and offers dual core capability along with hyper-threading technology. By leveraging these features, the Adbc8031 can run up to four processes concurrently for extensive data crunching capabilities while maintaining a low power consumption profile. In addition, because it is equipped with an Advanced Encryption Standard (AES) engine and Error Correction Code (ECC), the Adbc8031 offers security and reliability including the ability to detect and correct errors in memory transactions for mission-critical applications. The Adbc8031 also supports SPI-Flash, Gigabit Ethernet, USB 2.0, PCI Express, and more.

For operating environments, Adbc8031 supports Windows 7, Windows XP, Windows Embedded Standard, as well as Wind River Linux, giving OEMs a comprehensive choice of development environments to choose from.

Eurotech offers a standard carrier board design as well as the capability to support custom carrier boards for OEMs looking for the most flexibility in their development efforts.



System Architecture

PROCESSOR	<ul style="list-style-type: none"> • Intel® Core™ i7 610E @ 2.53GHz • Intel® Core™ i7 620LE @ 2.0GHz • Intel® Core™ i7 620UE @ 1.06GHz • Intel® Core™ i5 520E @ 2.4 GHz • Intel® Celeron P4505 @ 1.86 GHz • Mobile Intel® QM57 Express Chipset
MEMORY	<ul style="list-style-type: none"> • DDR3 SDRAM (memory down) at 800MHz up to 4GB • ECC support
BOOT ROM	SPI-Flash at 8MB
SERIAL EEPROM	I2C EEPROM at 2KB
OPERATING SYSTEM	<ul style="list-style-type: none"> • Wind River Linux • Windows 7 • Windows Embedded Standard • Windows XP • Other RTOS (contact for details)
SERIAL ATA	4x SATA 1.0a
NETWORK	1x 10/100/1000 BASE-T Ethernet
USB	8x USB 2.0 ports
I2C	1x I2C interface
LPC	LPC Interface
SM BUS	SM Bus interface
GRAPHICS	<ul style="list-style-type: none"> • 1x LVDS • 1x SVDO • 1x VGA
PCI EXPRESS GRAPHICS	1x PCIe Graphics port (x16 lane) also usable as 2x PCIe ports (x8 lane)
PCI EXPRESS	4x ports (x1 lane) also usable as 1x port (x4 lane)
PCI BUS	1x 32bit, 33MHz bus with VIO at 3.3V
BIOS	Insyde BIOS
POWER	<ul style="list-style-type: none"> • 12VDC ± 5% • 5VDC_SBY ± 5% • 3V_RTC (2.4 – 3.3V) from battery
PHYSICAL	<ul style="list-style-type: none"> • Dimensions: 125 x 95 mm • PICMG COM.0 COM Express Module Base Spec Rev 1.0 (Type 2) • Operating temperature: 0°C to +60°C
THERMAL SOLUTION	<p>The following types of thermal solutions are available:</p> <ul style="list-style-type: none"> • Heat spreader (COM Express Module Base Spec) • Passive heat sink • Active heat sink
ORDER CODES	Contact factory

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