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Find the *Acromag / Xembedded / Xycom XCOM-6400-104-LF* at our website: *Click HERE*

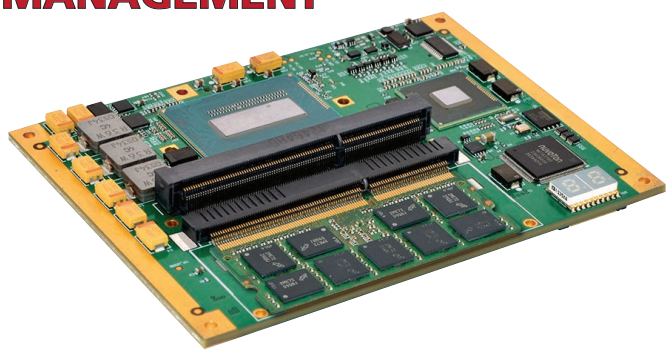
COM Express

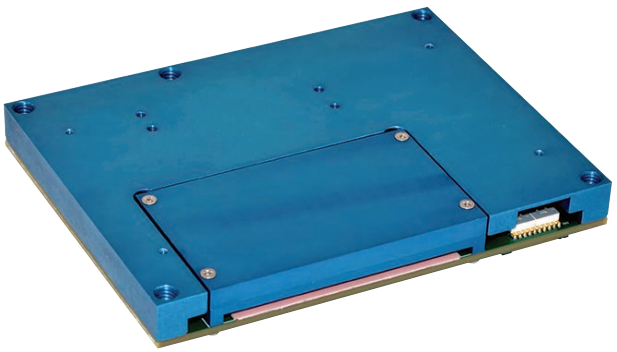
MADE IN USA

XCOM-6400 Rugged COM Express Type 6 Module

2 YEAR WARRANTY

POWER MANAGEMENT





4th Generation Intel® Core™ i7 or i5 CPU ◆ Programmable CPU ◆ Type 6 interconnects ◆ Ruggedized

Description

Acromag's XCOM-6400 is a basic size platform (95 x 125mm) processor module with Type 6 interconnects. Several models are available with the 4th generation (Haswell) Intel Core i7 or i5 CPUs. Designed for industrial and defense applications, the XCOM-6400 has an extra rigid PCB and extended temperature support.

The 4th generation of Intel's i5 and i7 processors delivers many enhanced capabilities for media, graphics, security, and power management. Huge performance improvements were made for floating-point-intensive computations which are critical for digital signal and image processing applications such as radar and sonar. Enhanced graphics enable smoother playback of high-quality images for digital signage or displays. Better power efficiency reduces heat and allows smaller, lighter designs with more portability.

Cutting-edge technology features programmable power limits, allowing the user to "dial-down" the maximum power consumption of the CPU in systems where power is a concern.

This module sets a new standard for shock and vibration by implementing a SODIMM hold down mechanism. Soldering down the memory is no longer necessary.

The XCOM-6400 also provides a heat sink capability not available on traditional COM Express designs. Conduction-cooled rails set a new standard for carrier cards.

Key Features & Benefits

- Intel 4th Gen (Haswell) multi-core processor: Core i7 CPU for high performance (47W) or Core i5 CPU for low power (25W)
- Programmable CPU power for heat sensitive applications
- Intel 8-Series QM87 PCH chipset (formerly Lynx Point)
- Up to 16GB of high-speed DDR3L memory with SODIMM lock-down mechanism (permits user removal or upgrades)
- Advanced heat management technologies with heat spreader plates, conduction-cooled rails, and optional fan
- Up to -40 to 85°C extended operating range
- PEG/ General Purpose PCIe x16 (bifurcation/trifurcation supported)
- 7 ports of PCIe x1 (gangable into ports of greater width)
- SPI bus
- LPC bus
- SMBus (system)
- I^2C (user)
- VGA Interface
- 3x Digital Display Interface
- eDP Interface (x2)
- HDA Audio Interface
- Gigabit Ethernet Medium Dependent Interface (MDI)
- 4 USB 3.0/2.0 Ports
- 4 USB 2.0 only Ports
- 4 SATA III Ports (6 Gb/s)
- 4 General Purpose Outputs
- 4 General Purpose Inputs
- Post code display (Port 80)

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COM Express

XCOM-6400 Rugged COM Express Type 6 Module

Performance Specifications

COM Express

Form Factor
Basic form factor (95 x 125mm). 8mm stack height. Type 6 pinouts.

PICMG Compliance
Complies with PICMG COM.0.

Processor and Memory

Processor
Intel Core™ i7 or i5 processor
(4th generation, codename Haswell). The CPU allows programming a lower power limit in the BIOS setup allowing use in applications where less power is available or heat removal is an issue.

i7-4700EQ: 2.4GHz, quad core, 6Mb cache, 47W.

i5-4402E: 1.6GHz, dual core, 3Mb cache, 25W.

Chipset
Intel 8-Series QM87 PCH chipset
(codename Lynx Point).

Intel DH82QM87 Platform Controller Hub.

Memory
Up to 16GB total of 1600 DDR3L ECC memory.

Interfaces

Graphics
Intel integrated graphics processor.
3x digital display interface (DVI or DisplayPort).
eDP interface (x2)

Audio
HDA audio interface

LAN Port
Gigabit Ethernet Medium Dependent Interface (MDI)

Serial ATA Interface

4 SATA III Ports (6 Gb/s)

PCIe Interface
PEG / general-purpose PCIe x16
(bifurcation/trifurcation supported).

PCIe x1 (gangable into ports of greater width).

USB Interface
4 USB 3.0/2.0 ports
4 USB 2.0 ports.

Other Interfaces
SPI bus.

LPC bus.

SMBus (system).

I^2C (user).

I/O
4 general-purpose outputs,
4 general-purpose inputs.

Environmental

Operating temperature
Standard temperature models: 0 to 70°C.
Extended temperature models: -40 to 85°C.
NOTE: CPU internal temperature cannot exceed 100°C.

Storage temperature
-55 to 100°C.

Relative humidity
90% at 60°C non-condensing.

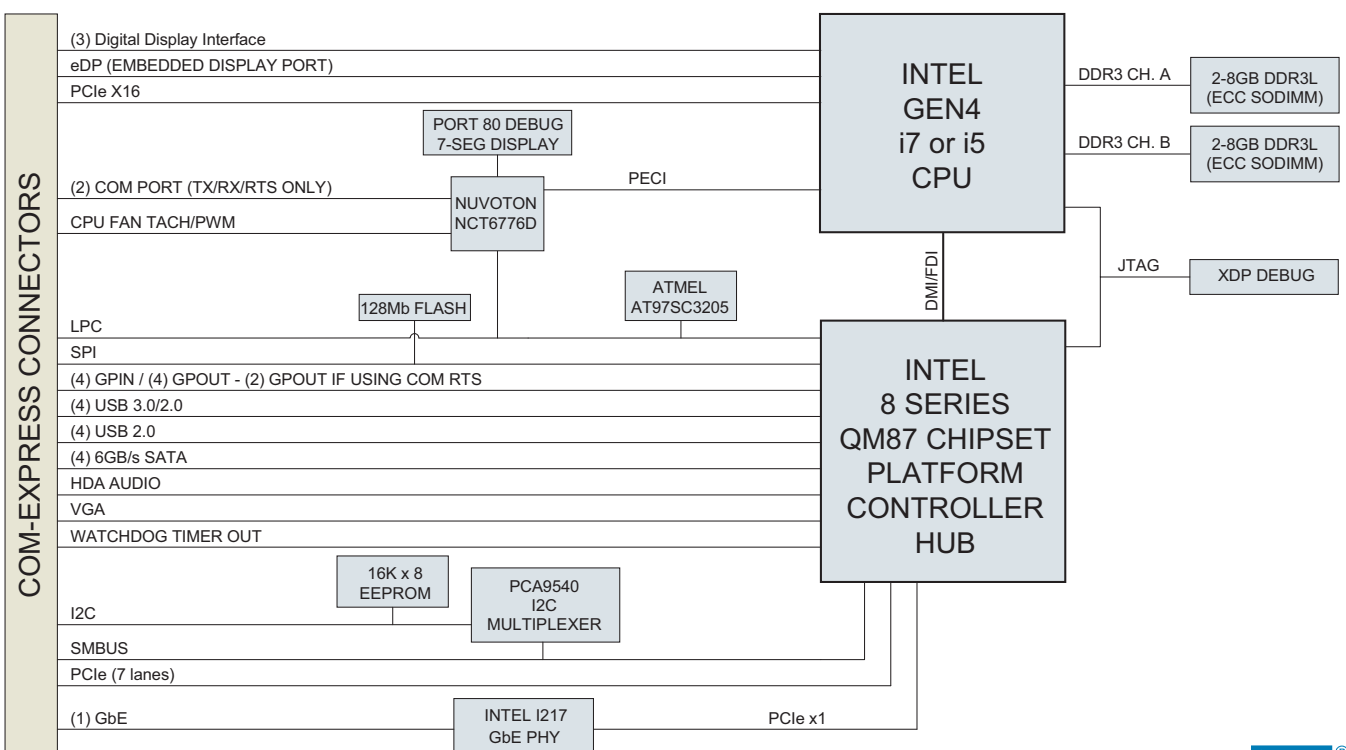
Ruggedization
Thicker PCB.

High shock and vibration SODIMM hold-down mechanism and heat sink.

Shock
50g peak-to-peak, 11ms duration,
MIL-STD-810G Method 516.6B.

Vibration
5 g_{RMS}, 8-500 Hz, each axis,
MIL-STD-810G Method 514.6.

Power Inputs from carrier board:
12V (+/- 5%): 36W typical, 61W max
5V_SBY* (+/- 5%): 0.5W typical, 1W max
*Optional. Please see the manual for full power requirement information.



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COM Express

XCOM-6400 Rugged COM Express Type 6 Module

Ordering Information

■ COM Express Module

XCOM-6400-104-LF
i7, 2.4GHz, quad core processor with 6Mb cache and 4GB memory.

XCOM-6400-104E-LF
Same as XCOM-6400-104-LF plus extended operating temperature.

XCOM-6400-108-LF
i7, 2.4GHz, quad core processor with 6Mb cache and 8GB memory.

XCOM-6400-108E-LF
Same as XCOM-6400-108-LF plus extended operating temperature.

XCOM-6400-116-LF
i7, 2.4GHz, quad core processor with 6Mb cache and 16GB memory.

XCOM-6400-116E-LF
Same as XCOM-6400-116-LF plus extended operating temperature.

XCOM-6400-304-LF
i5, 1.6GHz, dual core processor with 3Mb cache and 4GB memory.

XCOM-6400-304E-LF
Same as XCOM-6400-304-LF plus extended operating temperature.

XCOM-6400-308-LF
i5, 1.6GHz, dual core processor with 3Mb cache and 8GB memory.

XCOM-6400-308E-LF
Same as XCOM-6400-308-LF plus extended operating temperature.

XCOM-6400-316-LF
i5, 1.6GHz, dual core processor with 3Mb cache and 16GB memory.

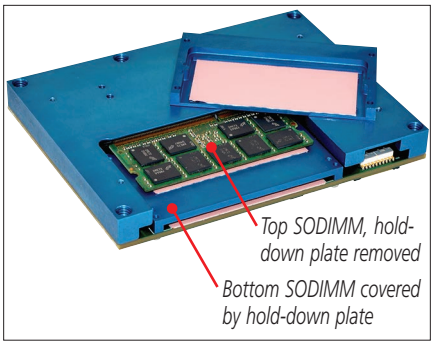
XCOM-6400-316E-LF
Same as XCOM-6400-316-LF plus extended operating temperature.

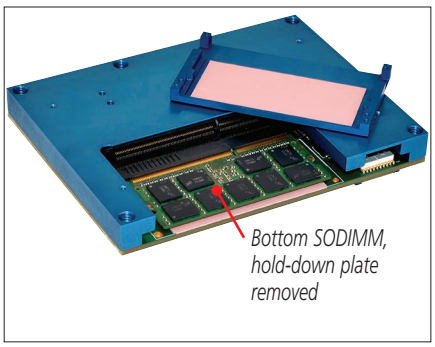
Note: Please contact factory for lead solder options

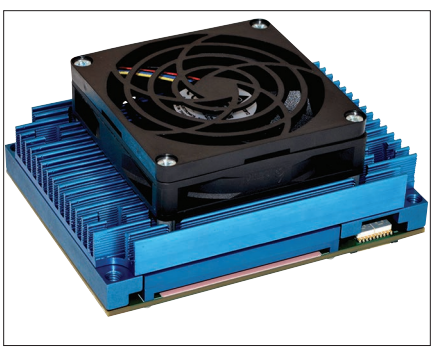
■ Accessories

For more information, see www.acromag.com.

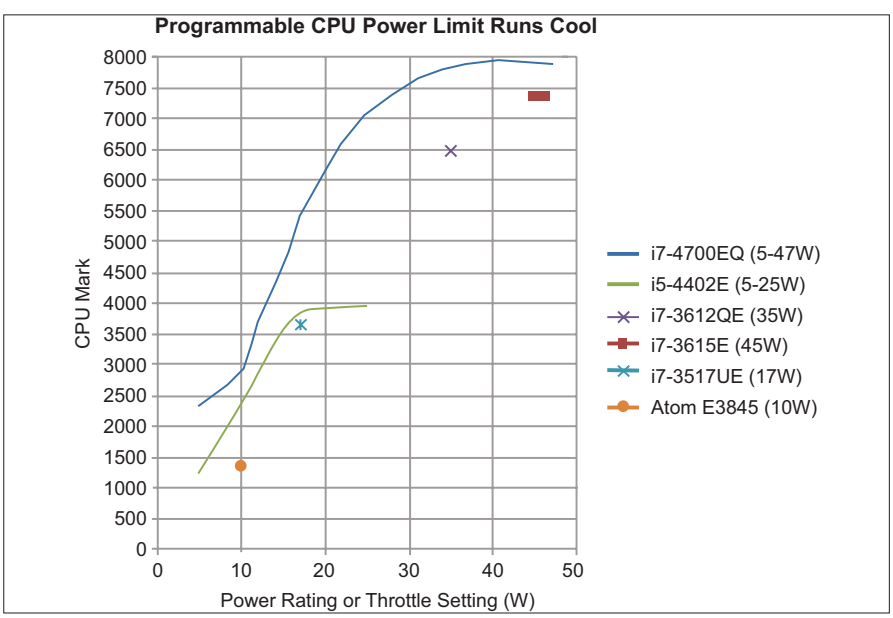
XHSA-6400
Active heat sink with fan







Module with optional XHSA-6400 heat sink and fan.



ISO9001
AS9100
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