APPLICATIONS

- Radar and sonar processing
- Image signal processing
- Tactical command and control
- Surveillance and reconnaissance
- Transportation and railway
- Unmanned autonomous systems

FEATURES

- 4th Gen Intel® Core™ Dual and Quad Core; BGA1364
- Intel® 8-Series PCH Lynx Point QM87 Chipset
- CPU TDP 37W to 47W
- Up to 8 GB DDR3L-1333/1600; 1.35V SoDIMM204 Socket
- Type 1 Bottom-Stacking PCIe/104 V2.01 with Gen2 PCIe x1 Lanes and Gen3 PEG x16
- 4x SATA 6 Gb/s with RAID 0/1/5/10, Backward Compatible
- 2x 10/100/1000 Mbit Ethernet LAN Port
- 2x RS232 COM Ports
- 13x USB 2.0 Total: 8x Onboard, 2x PCIe Connector, 1x Mini PCIe Socket, 2x USB 3.0
- 2x USB 3.0, Backward USB 2.0 Compatible
- Onboard VGA/DVI, HDMI/DisplayPort, and eDP
- Three Independent Displays
- Discrete 16bit GPIO Port
- 7.1 HD Audio with SPDIF In/Out
- Trusted Platform Module; TPM V1.2 (ATMEL® AT97SC3205)
- PCI Express Mini Card 1.2 Socket: Compatible with Mini PCIe or mSATA modules
- Windows 7, Windows 8, Windows 10, Linux Compatible
- 4.5" x 3.8" (115mm x 96mm) PCI/104-Express v1.0a Form
- Input Power = 5VDC, 5VS, 12VDC

RoHS compliant

DESCRIPTION

The ADLQM87PC has the most densely packed set of features and high-performance of any small form factor in the industry.

The ADLQM87PC delivers the industry's highest GIPS per in^2 and the most densely-packed comprehensive set of features. The ADLQM87PC's 17 in^2 footprint features 4th generation Intel Core processors with Intel 8-series QM87 PCH chipset, on-board Mini PCIe/mSATA socket for on-board WiFi, GPS, bootable flash storage, a Trusted Platform Module (TPM v1.2), 2xUSB 3.0, up to 8GB 1.35V DDR3L, 4x SATA 6 Gb/s, 2x GLAN, DisplayPort, HDMI/DVI, VGA, 8x USB 2.0, etc…all with a smaller footprint and height than a basic COM-Express module with greater temper-ature range and ruggedness.

The ADLQM87PC features a vastly improved HD4600 graphics engine with 2x the performance of the previous 2nd generation Intel Core graphics. It is ideal for space-constrained, rugged or extended temperature applications where multi-core proces-sor performance is critical.

It brings unparalleled performance to countless applications such as radar and sonar processing, image signal processing, tactical command and control, surveillance and reconnaissance, transportation and railway.

ADLQM87PC support includes 3D CAD modeling support and full system design services which include custom chassis design and system integration services. Please contact your sales representative for more information.

ADLSST System Sensor Technology Utility
The ADLSST System Sensor Technology v2.0 utility brings to the Linux environment the same type of CPU health monitor functions that have previously been readily available only in the Windows environment. Click here to download the drivers.

*Data subject to change without notice.

ADL Corporate: 4411 Morena Blvd. Suite 101 | San Diego, CA 92117-4345

T: 855.727.4200
sales@adl-usa.com

F: 858.490.0599
www.adl-usa.com

ORDERING INFORMATION

ITEM CODE	PART #	DESCRIPTION
PCIe/104 Board		
ADLQM87PC-4700EQ	292750	4th Generation Intel Core i7 2.4GHz 4C, 6M, 47W TDP
ADLQM87PC-4400E	292752	4th Generation Intel Core i5 2.7GHz 2C, 3M, 37W TDP
Memory		
4GB DDR3L-1333/1600	997600	DDR3L-1333/1600MHz 4GB Standard Temperature
8GB DDR3L-1333/1600	997601	DDR3L-1333/1600MHz 8GB Standard Temperature
4GB DDR3L-1333/1600-EX	997602	DDR3L-1333/1600MHz 4GB Extended Temperature
8GB DDR3L-1333/1600-EX	997604	DDR3L-1333/1600MHz 8GB Extended Temperature
Options and Accessories		
ADL-ET	290000	Extended Temp Screen (-40º to +85º C)
UNDERFILL	807707	BGA underfill req'd for <1nm BGA solderballs w/ Ext Temp
COATING	807706	Conformal Coating
UNDERFILL / BONDING	807709	Underfilling, Bonding, and Conformal Coating
Thermal Solutions		
ADLQM87PC-SP0600*	292760	0.600" Cu-Enhanced Heat Spreader
ADLQM87PC-SP1000*	292761	1.000" Cu-Enhanced Heat Spreader
ADLQM87PC-FANSINK	292762	Cu-Enhanced Heatsink with Dual-Fan combo
		*Stand-Off p/n's 293406 or 293436 are recommended for use with the above thermal solutions

*Data subject to change without notice.