



ADL3GQM67HDS - 3rd Generation Intel Core Quad/Dual Core

Features

- 3rd Generation Intel® Core™ Dual and Quad Core; 2.3-2.7 GHz
- Supports i7-3610QE Quad; i5-3610ME DC
- Up to 16GB DDR3-1333 DRAM SoDIMM204 (8GB x 2)
- PCIe 2.0 2x40 pin Bus Connector (One x4 or Four x1)
- 4x SATA Ports with RAID (2x SATA 6G, 2x SATA 3G)
- 2x 10/100/1000Mbit Ethernet LAN Port
- 4x RS232 COM Ports, 10x USB2.0 Ports
- Separate Onboard DVI / VGA, HDMI / DVI
- Dual Independent Displays
- Hardware Monitor with API
- ADL-SST (System Sensor Technology)
- Watchdog Timer
- Windows 7, Windows 7 Embedded Standard, Windows 7 Embedded Compact, XP Embedded
- Linux Compatible
- Discrete 8-bit GPIO Port
- 7.1 HD Audio with SPDIF In/Out
- 4" x 5.8" (102mm x 147mm) 3.5-inch Form Factor



Preliminary

Ordering Information

Item Code	Part #	Description
ADL3GQM67HDS-3610QE	294870	Intel Core i7-3610QE 2.3 GHz 4C8T, 6M Smart Cache
ADL3GQM67HDS-3610ME	294871	Intel Core i5-3610ME 2.7 GHz 2C4T, 3M Smart Cache
Memory		
DDR3-DRAM4096-1333	997507	DDR3-1333MHz 4GB Standard Temperature
DDR3-DRAM8192-1333	997508	DDR3-1333MHz 8GB Standard Temperature
DDR3-DRAM-4096-1333EX	997517	DDR3-1333MHz 4GB Extended Temperature
DDR3-DRAM8192-1333EX	997518	DDR3-1333MHz 8GB Extended Temperature
Options and Accessories		
ADL-ET	290000	Extended Temp Screen (-40° to +85° C)
ADLQM67HD-CK	292520	Standard Cable kit for ADL3GQM67HDS
ADLCOM-ISOL1	299941	Galvanically Isolated RS232 COM
ADLCOM-ISOL2	299942	Galvanically Isolated RS485 COM
Thermal Solutions		
ADLQM67HDS-SPREADER	294860	Chassis / Bulkhead mount heat spreader for ADLQM67HDS Quad Core
ADL35-BBHS	294152	Large Heatsink for use with XXXHD(S)-SPREADER
ADL35-LFAN	294154	Large Fan for ADL35-BBHS
ADL35-SOSET	294156	Stand-Off Set for ADL35-BBHS, M3, 6mm, 37mm

Description

The ADL3GQM67HDS features Intel's latest embedded two-chip platform. This 3rd generation Intel Core™ processor integrates Intel's HD Graphics 4000 engine with AVX (Advanced Vector Extensions) as well as the memory controller functions of a traditional GMCH. The QM67 Platform Controller Hub (PCH) provides PCI-Express I/O bandwidth at twice the speed (5Gbps) of previous Intel Core or Core 2 Duo platforms.

The ADL3GQM67HDS is ideal for mobile and embedded applications where high processor performance is critical. It brings unparalleled performance to applications such as radar and sonar processing, image signal processing, tactical command and control, surveillance and reconnaissance, medical imaging and lab analysis, and industrial automation.

In addition to the wide range of applications in which the ADL3GQM67HDS can excel, it also supports a broad set of features. The ADL3GQM67HDS has a discrete 8-bit digital I/O port as well as separate DVI-I and HDMI interfaces. The onboard DVI-I connector provides signaling for analog VGA, as well as can be configured as an HDMI with audio. The internal HDMI port can be configured to DVI-D through cabling options. The ADL3GQM67HDS also has 4x RS232 COM ports, 4x SATA with RAID 0, 1, 5 and 10 support. Two of the ports support up to SATA 6G while the other two support SATA 3G. 10x USB2.0 with 4x onboard connectors, two bootable Gigabit Ethernet LAN, HDA 7.1, and a 2x40-pin PCIE connector that is configurable as one x4 lane or four x1 lanes of PCI Express for addition of peripherals.

ADL Embedded Solutions offers highly effective active and passive thermal solutions designed for this product. Contact your sales representative for more information.

Data subject to change without notice.



Technical Specifications - ADLQM67HDS

FEATURE	FUNCTION	REMARKS	OPTIONS
CPU			
CPU Class	Intel Core i3/i5/i7, Celeron		Celeron B810, i3-2310E, i5-2510E, i7-2710QE
CPU Option / Performance (GHz) / L3 Cache	B810/1.6/3, 2330E/2.2/3, 2510E/2.5/3, 2710/2.1/6	See ordering guide on page 1	
Max. No. of Cores	4	B810-2C2T, 2330E-2C4T, 2510E-2C4T, 2710QE-4C8T	See ordering guide on page 1
Soldered (or Socket Name)	rPGA988B		
Chipset			
North Bridge (GMCH)	Intel QM67 PCH		
South Bridge (ICH)	Intel QM67 PCH		
Super IOT	SMSC SCH3114	Hardware monitoring	
Memory			
Type	SODIMM204-1.5V / DDR3	DDR3 1066/1333 MHz	
Size max (MB)	16GB	8GB x 2 (Dual Channel)	
Graphic			
Controller	CPU integrated	Memory max. up to 512MB DVMT	
CRT	Yes	2048 x 1536 max. res.	CRT or DVI-I is cabling option
DVI / HDMI / DisplayPort	DVI x2 /HDMI	Max res all digital video - 1920 x 1200	HDMI or DVI-D is cabling option
LCD LVDS 18/24/36/48	--	--	--
BIOS			
Power Management APM/ACPI	APM/ACPI	Power States : S0/S1/S4/S5	
Hardware Monitoring	ADL-SST API	BIOS Setup	
Audio			
Controller and Codec	Intel QM67 / Realtek ALC889 (HDA)	2/6/8 channel support	
LAN			
LAN1 Controller	Intel QM67 / 579 Phy	10/100/1000 Mbit, RPL/PXE/WOL support	Jumbo Framing supported
LAN2 Controller	Intel 82574L	10/100/1000 Mbit, RPL/PXE/WOL support	Jumbo Framing supported
Buses			
PCIe x1 / x4	Configurable one x4 or four x1	Custom 2 x 40-pin header	
Specials/Options	mini-PCI socket (mPCI)		
SATA Interfaces			
SATA Channels	4	2x SATA 3G, 2x SATA 6G	RAID 0/1/5/10
USB Interfaces			
USB-Channels	10	USB 1.1/2.0/Host - x4 onboard connectors, x6 cable headers	Boot options: HD/FDD/CDROM/FD/ZIP
Interfaces			
COM1/2/3/4: TTL/RS232/RS485/RS422	RS232	1x onboard D-sub, 3x cable header	
PS/2 Keyboard/Mouse	Yes		
Watchdog	Yes		
Specials/Options	8-Bit GPIO	Discrete port	
Power Supply			
Supply Voltage	5V, 12V, 5VSUS		
Power Consumption (typical*)	TBD	Contact your Sales Engineer for more information on "typical" configuration	
Cooling			
Operating Temperature (ambient)	-25 to 70 °C	ADL Embedded Solutions thermal solution recommended	
Extended Temperature	TBD -40 to 85° C	Requires ADL-ET and Approved Thermal solution	
Storage Temp.	-40 to 85 °C		
Dimensions	102mm x 147mm (4" x 5.8")		

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