



ADLQM67HDS - 2nd Generation Intel Core, Quad/DC 2.1 - 2.5 GHz

Features

- 2nd Generation Intel® Core™ i7/i5, Quad/DC 2.1 GHz - 2.5 GHz
- Intel QM67 PCH
- 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 8, Windows 10, 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



Ordering Information

| Item Code | Part # | Description |
|---------------------------------------|--------|--|
| ADLQM67HDS-2710QE | 294856 | Intel Core i7 2.1GHz 4C8T, 6M Smart Cache |
| ADLQM67HDS-2510E | 294857 | Intel Core i5 2.5GHz 2C4T, 3M Smart Cache |
| Memory | | |
| DDR3-DRAM2048-1333 | 997506 | DDR3-1333MHz 2GB Standard Temperature |
| DDR3-DRAM4096-1333 | 997507 | DDR3-1333MHz 4GB Standard Temperature |
| DDR3-DRAM8192-1333 | 997508 | DDR3-1333MHz 8GB Standard Temperature |
| DDR3-DRAM2048-1333-EX | 997516 | DDR3-1333MHz 2GB Extended Temperature |
| DDR3-DRAM4096-1333-EX | 997517 | DDR3-1333MHz 4GB Extended Temperature |
| DDR3-DRAM8192-1333-EX | 997518 | DDR3-1333MHz 8GB Extended Temperature |
| Other memory options available | | |
| Options and Accessories | | |
| ADL-ET | 290000 | Extended Temp Screen (-40° to +85° C) |
| ADLQM67HD-CK | 294875 | Standard Cable kit for ADLQM67HD |
| ADLCOM-ISOL1 | 299941 | Galvanically Isolated RS232 COM |
| ADLCOM-ISOL2 | 299942 | Galvanically Isolated RS485 COM |
| Thermal Solutions | | |
| ADLQM67HDS-SPREADER | 294861 | Chassis / Bulkhead mount heat spreader for ADLQM67HDS For Quad and Dual Core Variants. |
| 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 ADLQM67HDS features Intel's latest embedded two-chip platform. This 2nd generation Intel Core™ processor integrates Intel's HD Graphics 3000 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 ADLQM67HDS 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 ADLQM67HDS can excel, it also supports a broad set of features. The ADLQM67HDS 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 ADLQM67HDS 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.

NEW! 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.

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 i5/i7 | | i5-2510E, i7-2710QE |
| CPU Option / Performance (GHz) / L3 Cache | 2510E/2.5/3, 2710/2.1/6 | See ordering guide on page 1 | |
| Max. No. of Cores | 4 | 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 IO1 | 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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