



APPLICATIONS

- Secure Networking, i.e. Secure Routing, Traffic Monitoring and Gateways
- Cyber Security Edge Devices for ICS and SCADA threat security.
- Unmanned, and Drone Payload Computing
- Industrial IoT Gateways and Controllers
- Mobile Telephony
- Traffic Engineering
- Transportation
- Wind Turbine Datalogging and Collision Avoidance
- Oil and Gas IPC
- Unmanned Autonomous Systems

FEATURES

- 6th Generation Intel® Core™ Processors
- Intel® Q170 Chipset
- firmware TPM 2.0 (fTPM)
- Up to 32GB DDR4
- 4x USB 3.0; 1x IPEX-USB 3.0
- 4x SATA 6 Gb/s
- IPEX - DVI/HDMI/DP/USB3.0
- 4x PCIe X1 Expansion Lanes
- Operating Temperature -20C to 70C; Optional -40C to 85C
- Windows and Linux Compatible with Full Driver Support
- MTBF > 250,000 hours

DESCRIPTION

The ADLQ170HDS is the latest in ADL's line of high-performance 3.5" Intel® Core™ single board computers (SBC). It makes use of 6th generation Intel Core processors and Intel's Q170 chipset to provide a robust set of features including 32 GB DDR4/ECC DRAM, 4x SATA 6Gb/s, 4x USB 3.0 and more.

This makes it ideal for a variety of system-critical industrial applications where these high-performance features are an absolute necessity, but no less critical are less tangible features like high MTBF, long-life availability, hardware and firmware revision control, obsolescence management, technical, engineering and design support.

Custom System Solutions...

As well, ADL Embedded Solutions, Inc. is expert at collaborating with customers to create custom system solutions built on our strong portfolio of embedded computing products and engineering and design expertise. Contact us at www.adl-usa.com or sales@adl-usa.com.

ORDERING INFORMATION

ITEM CODE	PART #	DESCRIPTION
CPU		
ADLQ170HDS-6700TE	294900	Intel® Core™ i7-6700TE 2.4 GHz 4C/8T, 8MB
ADLQ170HDS-6100TE	294902	Intel® Core™ i3-6100TE 2.7GHz 2C/4T, 3MB
DDR4 Memory		
DDR4-2133-8GB	997610	DDR4-2133 MHz 8GB Standard Temperature
DDR4--2133-16GB	997611	DDR4-2133 MHz 16GB Standard Temperature
DDR4-2133-8GB-EX	997612	DDR4-2133 MHz 8GB Extended Temperature
DDR4-2133-16GB-EX	997614	DDR4-2133 MHz 16GB Extended Temperature
Options		
ADLQ170HDS-SPREADER	294866	0.400" Copper / Aluminum Heat Spreader
Coating, Underfill & Bonding	807709	Conformal Coating of CPU board, Underfill of BGA components and Bonding of high mass components
ADL-ET	290000	Extended Temperature Screening (-40C to +85C)

*Data subject to change without notice.



TECHNICAL SPECIFICATIONS - ADLQ170HDS

FEATURE	FUNCTION	NOTES
CPU		
CPU	6th Generation Intel Core Processors	Dual and Quad Core variants.
Socket	LGA1151	Includes mechanical retention plate.
Chipset		
Chipset	Intel Q170	
Hardware Monitoring	Via BIOS-API:CPU and Board Temperature; Board Voltages; Watchdog; Fan Speed; GPIO Control; Boot History	Linux and Windows BIOS-API Drivers Available. Linux kernel 3.0+ Required.
Memory		
Type	2x SODIMM260 1.2V DDR4	
Max. Memory	32 GB	
Graphic		
Controller	CPU Integrated	
Video BIOS	Intel Extreme BIOS	
Memory	Max 512MB DVMT	
CRT	-	
DVI	DVI/HDMI 1.4	
DVI/HDMI/DisplayPort	1/1/1	2 Connectors: 1x DVI/HDMI; 1x IPEX DVI/HDMI/DP
LCD Resolution	HDMI 1.4: 2560x1600 @ 60Hz; 4096x2160 @ 24Hz DisplayPort: 4096x2304 @ 60Hz DVI: 1920x1200 @ 60Hz	
BIOS		
Manufacturer	AMI Aptio	128 Mbit SPI-Flash
Power Management APM/ACPI	APM/ACPI	
Speedstep/ATM	Speedstep supported	Adjustable Fixed Frequency Available
Powerstates S0/S1/S3/S4/S5	S0/S1/(S3)/S4/S5	
Security	firmware TPM 2.0 (fTPM)	Via Intel PTT
I/O		
LAN1	10/100/1000 Intel Q170/i219 Phy	PXE Boot and WOL (Wake-On-LAN)
LAN2	10/100/1000 Intel i210	
SATA	4x SATA 6Gb/s	
SATA RAID	0/1/5/10	
USB 2.0	11x (6x Onboard + 5x USB 3.0)	USB 3.0 is Backward Compatible to USB 2.0
USB 3.0	5x	4x Front Side; 1x IPEX Connector
COM 1	RS232 (RSD/TXD/TRS/CTS)	
OTHER FUNCTIONS		
Watchdog	Yes	
GPIO	8 bit	
Input Power	3.3V, 5V, 5VS (12V for FAN)	

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

T: 858.490.0597
sales@adl-usa.com

F: 858.490.0599
www.adl-usa.com