



Features

- Intel® Core™ i7 Processor, 2.53 GHz max.
- Up to 8GB DDR3 ECC RAM with rugged small outline memory module (RSOMM)
- 2 DisplayPorts, LVDS (dual channel)
- 2x Gigabit Ethernet
- 10x USB 2.0 host ports, 2x with extended power capability
- 4x SATA with RAID support
- Supports Smart Embedded Management Agent (SEMA) functions

Specifications

Core System

Processor	Intel® Core™ i7 processor Intel® Core™ i7 – 620UE, 1.06 GHz, dual core Intel® Core™ i7 – 610E, 2.53 GHz, dual core
RAM	8 GB DDR3 ECC RAM maximum 4GB soldered 4GB RSOMM module (optional)
RAM Clock	DDR3 1066MHz
Chipset	Mobile Intel® QM57 Express Chipset
BIOS	Phoenix BIOS BIOS parameters are saved in flash
Watchdog	Yes (SEMA)
SEMA	Yes, Condition Monitoring
PCI Express Bus	PCIe/104 Type 1 connector with - 4 x1 lanes (PCIe 1.0a) - 1 x16 lane, configurable as 2 x8 lanes (2.5Gbit/s, PCIe 2.0 compliant)
PCI Bus	PCI-104
LPC Bus	Yes
SPI Bus	Yes
SMB Bus	Yes

Video

LVDS	Dual channel 18/24-bit LVDS, resolution up to 1920 x 1200 @ 60Hz
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Audio

Optical SPDIF
Analog 7.1 (Azalia)

Power

Power Supply	ATX 1.3 compatible
Power Consumption	25 to 45 watts, depending on processor type
RTC Backup	Integrated battery

Multi I/O and Storage

USB	6x USB 2.0 host external access, 2x supporting up to 1A max. 4x USB 2.0 host internal only
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Ethernet

2 x Gigabit Ethernet	- Integrated in chipset, with 82577 PHY - Intel® 82574
SATA	4 ports, support for RAID 0, 1, 5, 10

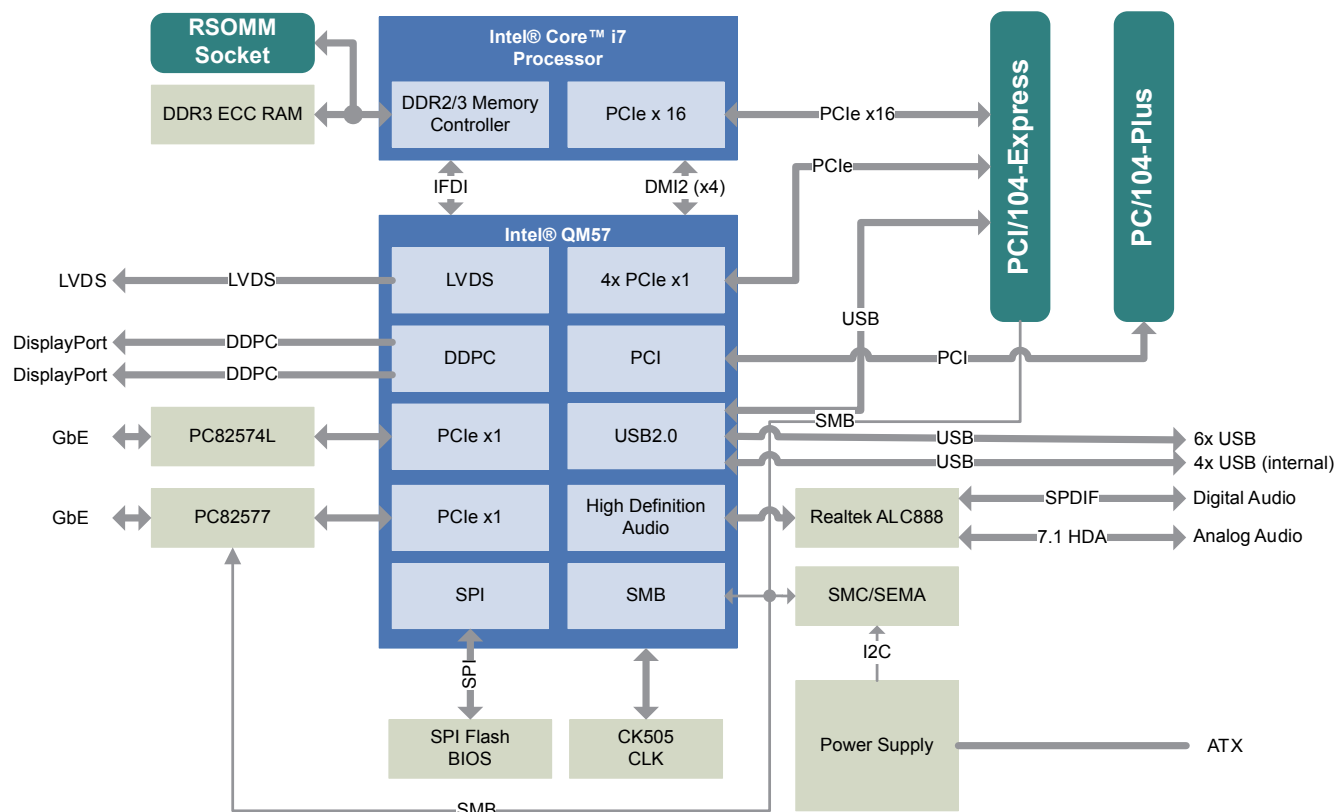
Mechanical and Environmental

Board Format	115 x 165mm
Cooling	Passive cooling possible Heatspreader available
Operating Temperature	Standard: 0°C to 60°C Industrial: -20°C to 60°C Extended: -40°C to 85°C (optional)
Shock & Vibration	VITA 47-2005 V3 & OS tests approved
Status LED	HDD, power, power mode, SMC activity, 4x Ethernet, watchdog
MTBF	128,820 hours at 25 °C

Operating Systems

Standard Support	Windows, Linux
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Functional Diagram



Ordering Information

Modules

Model Number	Description/Configuration
714-0006-10	EPIC-Express, Hurricane-QM57, Intel i7-620UE, 1.06 GHz, 2GB RAM, 0°C to +60°C
814-0006-10	EPIC-Express, Hurricane-QM57, Intel i7-620UE, 1.06 GHz, 2GB RAM, -20°C to +60°C
914-0006-10	EPIC-Express, Hurricane-QM57, Intel i7-620UE, 1.06 GHz, 2GB RAM, -40°C to +85°C
714-0007-10	EPIC-Express, Hurricane-QM57, Intel i7-610E, 2.53 GHz, 2GB RAM, 0°C to +60°C
814-0007-10	EPIC-Express, Hurricane-QM57, Intel i7-610E, 2.53 GHz, 2GB RAM, -20°C to +60°C
914-0007-10	EPIC-Express, Hurricane-QM57, Intel i7-610E, 2.53 GHz, 2GB RAM, -40°C to +85°C
714-0008-10	EPIC-Express, Hurricane-QM57, Intel i7-610E, 2.53 GHz, 2GB RAM, -40°C to +85°C
814-0008-10	EPIC-Express, Hurricane-QM57, Intel i7-610E, 2.53 GHz, 4GB RAM, -20°C to +60°C
914-0008-10	EPIC-Express, Hurricane-QM57, Intel i7-610E, 2.53 GHz, 4GB RAM, -40°C to +85°C

Accessories

Model Number	Description/Configuration
760-0027-10	RAM, unbuffered ECC, RSOMM Reverse, 2GB, 0°C to +60°C
860-0027-10	RAM, unbuffered ECC, RSOMM Reverse, 2GB, -20°C to +60°C
960-0027-10	RAM, unbuffered ECC, RSOMM Reverse, 2GB, -40°C to +85°C
760-0033-10	RAM, unbuffered ECC, RSOMM Reverse, 4GB, 0°C to +60°C
860-0033-10	RAM, unbuffered ECC, RSOMM Reverse, 4GB, -20°C to +60°C
960-0033-10	RAM, unbuffered ECC, RSOMM Reverse, 4GB, -40°C to +85°C
765-0031-10	Heat Sink, active, Hurricane-QM57
765-0032-10	Heat sink, heat pipe adapter, Hurricane-QM57