HPERC-IBR-MC

Extreme Rugged™ Coldplate Mount System with 3rd Gen Intel® Core™ i7 Processor and MIL-DTL-38999 Connectors

Features

- SWaP efficient sealed SFF system
- VITA 75 coldplate mounting
- Intel® Core™ i7 dual or quad-core processor
- Soldered DDR3L 8GB, up to 16GB RAM
- Quad Gigabit Ethernet
- Available GPGPU on 16-lane 3rd Generation PCI Express
- Simple user expansion and configuration
- Extreme Rugged temperature: -40°C to +85°C
- Dual independent displays (DVI/VGA)
- Tested to MIL-STD-810G and MIL-STD-461F standards; IP67 rating
- OS support: VxWorks 6.9, Ubuntu, Windows® 7 and WES7



Specifications

- **Core System**

  CPU
  Intel® Core™ i7-3517UE 1.7GHz, dual-core
  Intel® Core™ i7-3612QE 2.1GHz, quad-core

  Chipset
  Intel® QM77 Express Chipset

  GPGPU
  MXM NVIDIA GeForce GT 745M / GTX 950M with 2GB 128-bit GDDR5 (optional)

  Memory
  16GB DDR3L-1333 ECC
  8GB soldered down, 8GB SODIMM

  BIOS
  AMI EFI

  Expansion Busses
  MXM (3rd Generation PCIe x16)
  PCI/104 Express® Type 2 (PCIe Gen2)
  PCI Express Mini Card (PCIe Gen2)

- **Standard I/O**

  Video
  1x VGA, 2x DVI (only 2 display outputs supported concurrently)

  Audio
  1x amplified stereo output
  1x stereo input

  LAN Chipset
  4x Intel® I210 Ethernet controller

  LAN Speed
  10/100/1000 Mbps

  USB
  6x USB 2.0

  Serial
  7x RS-232/422

  GPIO
  8x digital IO

Specifications

Internal Storage

Removable SATA: 2x 2.5” SLC/MLC SSD on SATA 6 Gb/s (up to 1 TB)
RAID: Supports RAID 0/1
Removable: 1x SDHC - SLC (up to 64 GB)

Security

TPM: Atmel AT97SC3204-U1A190
Secure Erase: Software triggered

Power

Input: 10-36VDC
Performance: P-States 0-16 (Speedstep & Turbo)
S-States S3, S4

Thermal

Internal Transfer: Passive conduction to body

Storage Temperature

-55°C to +85°C

Baseplate Point

Extreme Rugged: -40°C to +85°C (i7-3517UE);

Temperature

-40°C to +80°C (i7-3612QE)
Coldplate conduction
VITA 75.22 mount

Environmental

Immersion

IEC 529 - IP-67

Salt Spray

RTCA/DO-160G, Section 14, Category S

Altitude

0 to 50K ft.

Humidity

95% at 60°C non-condensing

Shock

MIL-STD-810G - 516.6 Procedures I and V

Vibration

MIL-STD-810G - 514.6 Procedure I
Categories 4, 9, 11, 21

EMI/EMC

MIL-STD-461F

Temperature

MIL-STD-810G - 501.5 Procedure II
MIL-STD-810G - 502.5 Procedure II
Altitude: 50,000Ft

Mechanical

Form Factor

VITA-75.22 Conductive Coldplate

Dimension

223.65(L) x 177.8(W) x 68.7(H) mm (with mounting brackets)

Weight

3.12 kg

IO Connectors

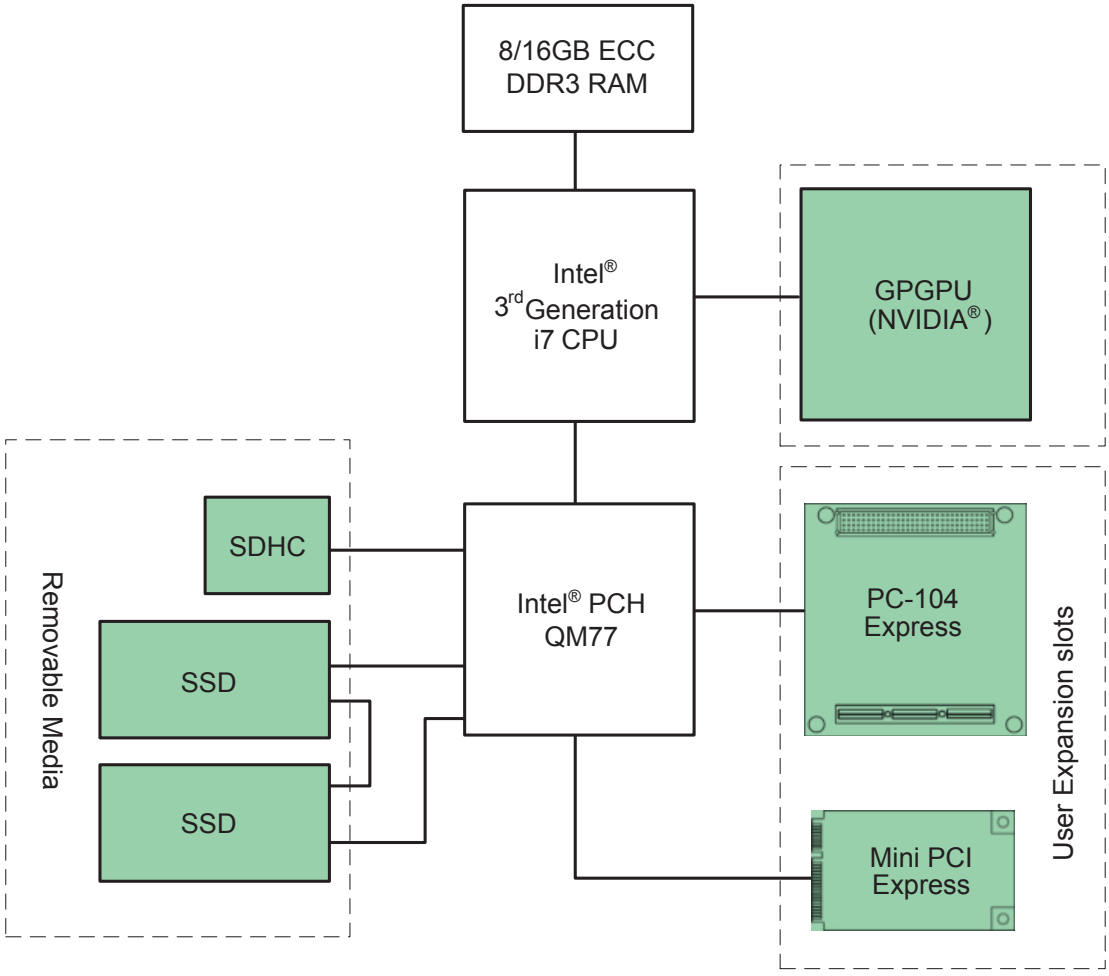
MIL-DTL-38999 (uniquely-keyed)

Operating Systeml

OS

Ubuntu 16.04
VxWorks 6.9.3.1 (Please contact ADLINK for other OS support)
Windows® 7 (64-bit)
WES 7 (64-bit/32-bit)

Functional Diagram



Ordering Information

- **HPERC-IBRMC-100XN**
  Coldplate, Intel® Core™ i7 3517UE, 16GB RAM
- **HPERC-IBRMC-B00XN**
  Coldplate, Intel® Core™ i7 3517UE, 8GB RAM
- **HPERC-IBRMC-300XN**
  Coldplate, Intel® Core™ i7 3612QE, 16GB RAM
- **HPERC-IBRMC-D00XN**
  Coldplate, Intel® Core™ i7 3612QE, 8GB RAM

HPERC Accessories

- **HPERC-X-03**
  HPERC™ breakout cable kit including Amphenol MIL-STD Nkey & Akey I/O cables, and AC adapter
- **M3N745M-JN-A**
  MXM NVIDIA GeForce GT 745M GPU card, with 2GB 128-bit GDDR5 memory (must be pre-assembled at ADLINK factory)
- **M3N950M-JN1A-A**
  MXM NVIDIA GeForce GTX 950M GPU card, with 2GB 128-bit GDDR5 memory (must be pre-assembled at ADLINK factory)

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

All products and company name listed are trademarks or trade names of their respective companies.
*Updated Feb. 07, 2018. ©2018 ADLINK Technology, Inc. All Rights Reserved.
All specifications are subject to change without further notice.