

Express-CBR

COM Express™ Module with Intel® Core™ i7 Processor and QM57 Chipset



Features

- Intel® Core™ i7 Processor
- Dual Channel DDR3 SODIMM up to 8GB
- Onboard Gigabit Ethernet
- Embedded DisplayPort (eDP) or PCI Express x8
- Dual Channel 18/24-bit LVDS, VGA and SDVO



Choose the Ampro by ADLINK™ Express-CBR for...

Modular, ultra high performance applications that require a low power platform for harsh environments.

Description

The Ampro by ADLINK™ Express-CBR leverages the Intel® Core™ i7 processor for ultra high performance and the Intel® 82574IT GbE Controller for wide range temperature applications. USB 2.0, SATA and PICMG® COM Express™ COM.0 compliance. Also featured are Intel® Turbo Boost, Hyper-Threading Technology, USB 2.0, SATA and PICMG® COM Express™ COM.0 compliance.

Specifications

Core System

- CPU – Intel® Core™ i7 Dual Core Processor
 - 4MB L2 cache
 - Integrated graphics processor and memory controller

DRAM – Up to 8GB Dual Channel DDR3 800/1066 SODIMM

Chipset – Intel® QM57 Express Chipset

BIOS – AMI Aptio EFI

Bus Interface

Six PCI Express x1, 32-bit PCI at 33MHz, LPC, SMBus, I²C, PCI Express x8 (multiplexed w/ eDP)

I/O

PATA – Single channel PATA (SATA to PATA conversion)

SATA – Four channels

USB – Eight USB 2.0 ports

Audio – High Definition Audio

GPIO – Eight general-purpose digital I/O pins

TPM (Optional)

Chipset – Infineon SLB9635TT1.2

Type – TPM 1.2

Note: TPM configurations support standard temperature range -20°C to +70°C

Network Interface

Ethernet – Intel® 82574IT Gigabit Ethernet Controller

Video Interface

Dual Channel 18/24-bit LVDS

Analog VGA

SDVO

Embedded DisplayPort (eDP) (multiplexed w/ PCI Express x8)

Software & Development Tools

OS Support – Linux / Windows® CE 6.0 / XPe / VxWorks 6.7 / QNX 6.4*

*Note: Available upon request. Contact us for additional software support.

Power Specifications

Input Power – 9-16 V wide range input support, with optional 5Vsb at ATX power supply

Power States – Supports S0, S1, S3, S4, S5

Mechanical

Size – COM Express™ basic form factor 125mm x 95mm with Type II pin out

Board Thickness – .093" (2.36mm thick)

Temperature

- Standard: -20°C to +70°C
- Extended: -40°C to +85°C
- Storage: -55°C to +85°C

Humidity – 90% at 60°C

Shock

- Non-operation: 50G peak-to-peak, 11ms duration, MIL-STD-202G Method 213B

Vibration

- Operation: 11.95 Grms, 50-2000 Hz, each axis, MIL-STD-202G Method 214A

Ordering Information

Model Number	Description/Configuration
Express-CBR-R-20	Express-CBR, Intel® Core™ i7-620LE, 2.0GHz, Dual Core, no RAM
Express-CBR-R-10	Express-CBR, Intel® Core™ i7-620UE, 1.06GHz, Dual Core, no RAM
Express-CBR-L	ATX form factor starterkit for the Express-CBR. Includes ATX-base board, accessories, BSP/driver in USB stick and manuals. Please order Express-CBR module, Memory and thermal solution separately!
Express-CBRE-L	EBX form factor starterkit for the Express-CBR. Includes EBX-base board, accessories, BSP/driver in USB stick and manuals. Please order Express-CBR module, Memory and thermal solution separately!

Contact us for additional processors and configurations support.