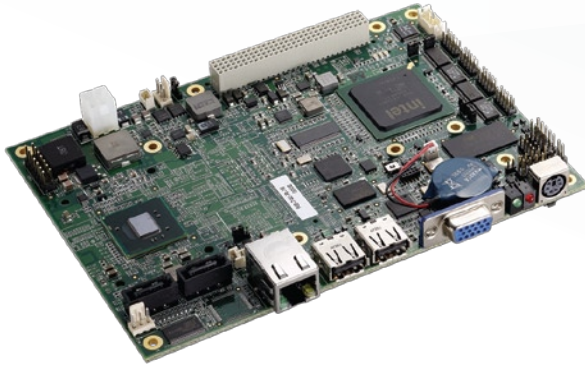


ReadyBoard™ 740

Dual-Core Intel® Atom™ EPIC Single Board Computer with H.264 Hardware Video Decoder



Features

- Intel® Dual Core Atom™ Processor Supported
- Gigabit LAN
- H.264 Hardware Video Decoder
- Analog VGA, LVDS and DVI-D display
- PCI Express Mini Card socket
- Onboard SSD

RUGGED

Choose the Ampro by ADLINK™ ReadyBoard™ 740 for...

Compact embedded applications that need ultra high CPU performance and high speed I/O

Description

The Ampro by ADLINK™ ReadyBoard 740 integrates a single- or dual-core Atom™ processor and ICH8M chipset, on board SSD, H.264 video decoder, networking and robust I/O in a compact EPIC form factor suitable for transportation, self-service, digital signage, and video surveillance applications.

Specifications

Core System

CPU – Intel® Atom™ N450, 1.66GHz, 5.5 W (1 core/2 threads)
Intel® Atom™ D510, 1.66GHz, 13 W (2 cores/4 threads)
Intel® Atom™ D410, 1.66GHz, 10 W (1 core/2 threads)
Cache – 1GB, 8-way L2 cache for D510 dual-core processor,
512KB, 8-way L2 cache for N450/D410 single-core processor
DRAM – Up to 2GB single channel DDR2 667/800 SODIMM
Chipset – Intel® ICH8-M
BIOS – AMI with CMOS backup in 16 Mbit SPI BIOS
Hardware Monitor - Supply voltages and CPU temperature

Bus Interface

PCI-104, PCIe Mini Card

I/O

SATA – 2 devices
USB – 6 USB 2.0 ports, 4 ports through pin headers
Serial – 4 configurable ports for RS-232/422/485
LED & reset – Power, SATA active, reset button
Keyboard/Mouse – PS/2 interface
GPIO – 8
Audio – High Definition Audio
Storage – Onboard SSD

Network Interface

Ethernet – Intel® 82574L Gigabit ports

Video Interface

Intel® GMA 3150 integrated on CPU
DVMT 4.0, 400 MHz core render clock

Intel® Clear Video Technology

- MPEG2 Hardware Acceleration
- ProcAmp

3 display ports: VGA, LVDS, and DVI

- Analog VGA display up to 2048 x 1536 @ 60 Hz
- Single channel 24-bit LVDS up to 1366 x 768
- DVI-D interface up to UXGA (1600 x 1200)

H.264 Video Decoder (optional)

- PCIe Broadcom BCM70015
- High Definition Video (1080p) playback

Software & Development Tools

OS Support – Linux / Windows® CE 6.0 / XPe / VxWorks 6.6 / QNX 6.4 / Windows® 7
BIOS – AMI with ACPI 2.0

Power Specifications

Input Power – AT mode (12 V +/- 5%), ATX mode (12 V and 5 Vsb +/- 5%)
Power States – Supports S0, S1, S3, S4, S5

Mechanical

Size – 165.1x114.3mm (6.5x4.5"); EPIC form factor
Board Thickness – .093" (2.36mm)

Temperature

- Standard: 0°C to +60°C
- Extended: -20°C to +70°C
- Storage: -20°C to +75°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
RB-740-R-18	Atom N450 1.66GHz, Integrated Graphics, 18-bit LVDS, 4GB on board SSD, 0°C to 60°C
RB-740-R-17	Atom N450 1.66GHz, H.264 decoder, DVI, 24-bit LVDS, 4GB on board SSD, -20°C to +70°C
RB-740-R-16	Atom D510 1.66GHz, H.264 decoder, DVI, 24-bit LVDS, 4GB on board SSD, -20°C to +70°C
RB-740-R-14	Atom D410 1.66GHz, Integrated Graphics, 24-bit LVDS, 4GB on board SSD, -20°C to +70°C
RB-740-L-16	Quick Start Kit (Atom D510 1.66GHz board, cable kit, 1GB RAM, DVI, 24-bit LVDS, Driver & Software)