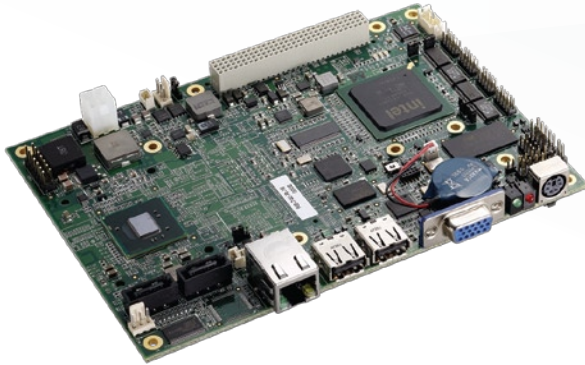


# ReadyBoard™ 740

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



## Features

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



## 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, onboard 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 – 1MB, 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  
DirectX 9 compliant Pixel Shader v2.0

### 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/7, VxWorks 6.6, QNX 6.4  
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 and Environmental

Size – 165.1 x 114.3 mm (6.5 x 4.5"); EPIC form factor  
Board Thickness – .093" (2.36 mm)

Temperature

- Standard: 0°C to +60°C
- Extended: -20°C to +70°C
- Storage: -20°C to +75°C

Humidity – 90% at 60°C

## Ordering Information

Model Number	Description/Configuration
<b>RB-740-R-18</b>	Atom N450 1.66GHz, Integrated Graphics, 18-bit LVDS, 4GB on board SSD, 0°C to 60°C
<b>RB-740-R-17</b>	Atom N450 1.66GHz, H.264 decoder, DVI, 24-bit LVDS, 4GB on board SSD, -20°C to +70°C
<b>RB-740-R-16</b>	Atom D510 1.66GHz, H.264 decoder, DVI, 24-bit LVDS, 4GB on board SSD, -20°C to +70°C
<b>RB-740-R-14</b>	Atom D410 1.66GHz, Integrated Graphics, 24-bit LVDS, 4GB on board SSD, -20°C to +70°C
<b>RB-740-L-16</b>	Quick Start Kit (Atom D510 1.66GHz board, cable kit, 1GB RAM, DVI, 24-bit LVDS, drivers & software)