# **RUBY-D711VG2AR**

Intel<sup>®</sup> Core<sup>™</sup> i3 and Xeon<sup>®</sup> processor based ATX with DDR3 SDRAM, Dual Display, Dual Gigabit Ethernet and USB Ports

One PCIe x4 slot (x1 signal) One PCIe x8 slot (x4 signal) One PCIe x16 slot Four PCI slots

> 16 bits GPIO (8 in/8 out) Intel® C206 TPM Four USB ports

One RS232/422/485 selectable port Three RS232 ports Four SATA II ports Two SATA III ports

On the basis of Intel<sup>®</sup> C206 Chipset, RUBY-D711VG2AR supports the latest quad-core 2nd Generation Intel<sup>®</sup> Core<sup>™</sup> i3 and Xeon<sup>®</sup> processors and provides numerous I/O connectors and also applies high performance in such areas as factory automation, medical, gaming, digital signage, surveillance security monitoring and kiosk.

## **FEATURES**

- Intel<sup>®</sup> Core<sup>™</sup> i3 and Xeon<sup>®</sup> E3-1200 series Processors (Quad Core CPU support)
- Four Long-DIMMs support dual channel DDR3 ECC SDRAM up to 32GB
- Dual Display by VGA/DVI/HDMI
- SATA ports support Intel® RAID 0,1,5,10
- One PCIe x16, one PCIe x8 (x4 signal), one PCIe x4 (x1 signal) and four PCI slots
- Intel<sup>®</sup> Active Management Technology 7.0

# **REAR I/O**



#### ORDERING GUIDE

AB1-3633 RUBY-D711VG2AR. ATX IMB. C206 w/ECC LGA1155.w/DDR3 DIMMs/ VGA/LVDS/DVI/HDMI/Dual GbE/COM/Audio/USB

## **PACKING LIST**

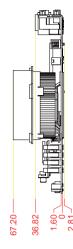
One RUBY-D711VG2AR ATX Industrial Main Board	
One SATA II Cable	
One Installation CD	
One I/O shield	





- LGA1155 socket

- Four 240-pin DDR3 DIMM sockets
- ATX 24-pin power connector



GENERAL	
Processor	<ul> <li>Intel<sup>®</sup> Core<sup>™</sup> i3 and Xeon<sup>®</sup> E3-1200 series processor up to 3.4GHz (65~95W) with (3~8MB) Cache in LGA1155 package</li> <li>DMI x4 Link: 5.0 GT/s</li> <li>Supports Intel<sup>®</sup> Turbo Boost, Hyper-Threading, Virtualization, Thermal Monitoring and Trusted Execution (depend on CPU sku)</li> </ul>
Chipset	Intel <sup>®</sup> C206 PCH chipset (6.6W)
BIOS	AMI UEFI BIOS
Memory	Supports up to 32GB DDR3 1333/1066 MT/s SDRAM on 4x 240-pin ECC/non- ECC DIMM sockets (dual channel)
Storage Devices	<ul> <li>- 2x SATA support 6Gb/s data transfer rate</li> <li>- 4x SATA support 3Gb/s data transfer rate</li> <li>- RAID 0,1,5,10</li> </ul>
Watchdog Timer	Programmable via S/W from 0.5 sec. to 255 min.
Hardware Monitoring	- System monitor (fan, temperature, voltage) - Temperature (CPU & System) - Voltage (CPU Vcore, 5VSB, 12V, 5V, 3.3V)
Expansion Interface	<ul> <li>1x PCI Express x4 slot (Gen2, 5.0 GT/s)</li> <li>1x PCI Express x8 slot (Gen2, 5.0 GT/s)</li> <li>1x PCI Express x16 slot (Gen2, 5.0 GT/s)</li> <li>4x PCI 32-bit slots</li> </ul>

#### **I/O INTERFACE**

Super I/O	ITE IT8728F
Audio	<ul> <li>Intel<sup>®</sup> BD82C206 built-in High Definition Audio up to 192-kHz 32-bit</li> <li>Realtek ALC662-GR 5.1 Channel High Definition Audio Codec</li> <li>Audio Jack DIP Light Pink/Lime/Light Blue</li> </ul>
Ethernet	- Intel® 82574L and Intel® 82579LM dual gigabit ethernet controllers - 2x RJ-45 connectors with one LED indicators at rear I/O panel
Serial Port	- 3x RS232 on board and 1x RS-232/422/485 selectable on board - 1x RS232 on rear I/O and 1x RS-232/422/485 selectable on rear I/O
USB	- 4x USB 2.0 ports on rear I/O and 4x USB 2.0 ports on board with pitch 2.54 header - 480 Mb/s bus comprehends the high-speed/full-speed/low-speed data ranges
Keyboard & Mouse	1x PS/2 Keyboard & Mouse on rear I/O
GPIO	On board programmable 16-bit Digital I/Os

<ul> <li>Intel<sup>®</sup> HD Graphics 2000/3000 integrated Graphics Engine provides a visually stunning experience optimized for Blu-ray* and HD video HDMI</li> <li>Chrontel: CH7318B QFN-48</li> </ul>
- VGA: Resolution up to 2048x1536 @75Hz - DVI-D: up to 1920x1200 @60Hz - HDMI: up to 1920x1200 @60Hz

Mechanical	& Environment
Dimension	243.8(L) x 304.8(W)mm; 9.6"(L) x 12"(W)
Power Supply	- Typical: +12V(CPU)@3.81A; +12V(System)@2.21A; +5V@2.3A; +3.3V@1.15A - Supports ATX mode
Environment	<ul> <li>Operation Temperature: 0°C to 60°C</li> <li>Storage Temperature: -20°C to 80°C</li> <li>Relative Humidity: 5% to 95%, non-condensing</li> </ul>
MTBF	Over 120,000 hours at 40°C