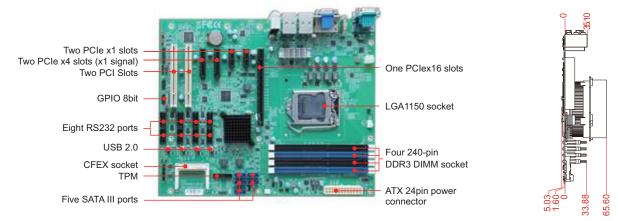


# RUBY-D716VG2AR

Intel<sup>®</sup> Core<sup>™</sup> i5/i7 processor based ATX with DDR3 SDRAM, Triple display, Dual Gigabit Ethernet, and **USB Ports** 



RUBY-D716VG2AR is based on Intel® Q87 chipset and desktop processor sku like Core™ i7 and i5. Build with PCI and PCI Express expensions, It is suitable for Medical, Industrial automation, and digital signage applications.

## **FEATURES**

- Intel® Core™ i5 and i7 processor Support
- Four Long-DIMMs support dual channel DDR3 non-ECC SDRAM up to 32GB
- Triple displlay by VGA/DVI-D/HDMI
- Rich I/O, USB2.0/3.0 dual Gigabit Ethernet. COM Port and SATA III ports support Intel RAID 0, 1, 5, 10.
- One PCle x16 (Gen3), Two PCle x4 (Gen2, x1 signail), Two PCle x1 (Gen2), And two PCI slot.
- Intel® Active Management Technology 9.0





### **ORDERING GUIDE**

RUBY-RUBY-D716VG2AR AB1-3941 ATX IMB. LGA1150 CPU. Q87. DDR3/VGA/ DVI-D/HDMI/Dual GbE/COM/Audio/USB

### **PACKING LIST**

One RUBY-D716VG2AR ATX Industrial Main Board One SATA III Cable One Installation DVD One I/O shield





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#### **GENERAL**

- Intel<sup>®</sup> Core<sup>™</sup> i5/i7 processor up to 3.4 GHz (65~95W) with (3~8MB) Cache in LGA-1150 package
- DMI x4 Link: 5.0GT/s
- Support Intel<sup>®</sup> Turbo Boost , Hyper-Threading, Virtualization, Thermal Monitoring, Trusted Execution and SpeedStep Technology (depends on CPU sku) Processor

Chipset Intel® Q87 PCH **BIOS** Pheonix UEFI BIOS

Memory Support up to 32GB DDR3 1333/1600 SDRAM on four 240-pin DIMM sockets(dual

Support 5x SATA drives Support 1x CFEX slot Support RAID 0,1,5,10 Storage Devices

Watchdog Timer Programmable via S/W from 0.5 sec. to 254.5 sec.

- 1x PCI Express x16 Gen3 up to 8.0 GT/s
- 2x PCI Express x4 (PCIe x1signal Gen2 up to 5.0 GT/s)
- 2x PCI Express x1 (Gen2 up to 5.0 GT/s)
- 2x PCI devices at 32 bit 33 MHz **Expansion Interface** 

## I/O INTERFACE

Embedded Controller ITE IT8518

Intel $^{\circ}$  Q87 PCH built-in High Definition Audio up to 192-kHz 32-bit Realtek ALC886-GR HDA codec, 5.1 channels Audio

 Intel® WG1218LM + WG1210AT gigabit ethernet controller
 Dual 10BASE-T / 100BASE-TX / 1000BASE-T Ethernet
 PCI Express x1 interface based on gigabit ethernet
 Dual RJ-45 connector with two LED indicators Ethernet

Serial Port

- 4x RS232 - 2x RS232/422/485 (support BIOS switch) - 4x RS232 optional (up to total 10 COM port)

USB 4x USB3.0 Ports on real IO 8x USB2.0 Ports on board

Keyboard & Mouse PS/2 on board dedicated to Keyboard&Mouse

**GPIO** on board programmable 8-bit Digital I/Os

#### **DISPLAY**

**Graphic Controller** 

Intel® Core™ i5/i7 processors integrated graphic engine
 Provided improved 3D multimedia capabilities including Microsoft DirectX 11.1, Shader Model 4.0, MPEG-2 and OpenGL 3.2

- VGA: Resolution up to 2560x1600 @ 60Hz Display Interface

- DVI-D: up to 1920x1200 @ 60Hz - HDMI: up to 1920x1200 @ 60Hz Support Triple Display

#### **Mechanical & Environment**

304.8(L) x 243.8(W); 12"(L) x 9.6"(W) PCB: 6 layers Dimension

Power Supply ATX 24-pin power input

Environment

Operation Temperature: 0~60 °C
 Storage Temperature: -20~80 °C
 Relative Humidity: 5~90%, non-condensing

**MTBF** Over 120,000 hours at 40°C