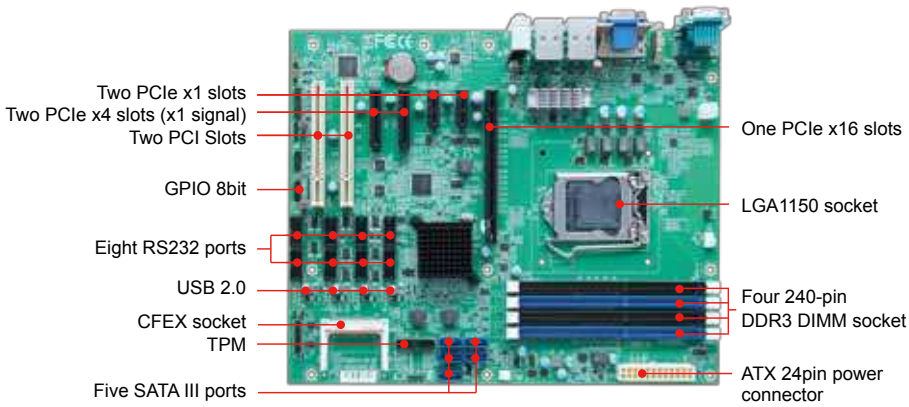
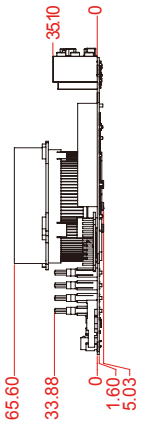
RUBY-D716VG2AR

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



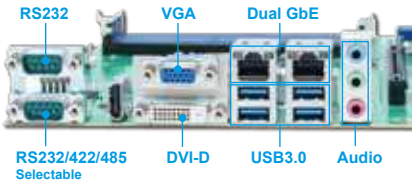


RUBY-D716VG2AR is based on Intel® Q87 chipset and desktop processor sku like Core™ i7 and i5. Build with PCI and PCI Express expensions , it is suitable for Medical, Industrial automation, and digital signage applications.

FEATURES

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

REAR I/O



ORDERING GUIDE

AB1-3941	RUBY-RUBY-D716VG2AR 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

GENERAL

Processor	- Intel® CoreTM i5/i7 processor up to 3.4 GHz with (3~8MB) Cache in LGA-1150 package - DMI x4 Link: 5.0GT/s - Support Intel® Turbo Boost, Hyper-Threading, Virtualization, Thermal Monitoring, Trusted Execution and SpeedStep Technology (depends on CPU sku)
Chipset	Intel® Q87 PCH
BIOS	Pheonix UEFI BIOS
Memory	Support up to 32GB DDR3 1333/1600 SDRAM on four 240-pin DIMM sockets(dual channel)
Storage Devices	- Support 5x SATA drives - Support 1x CFEX slot - Support RAID 0,1,5,10
Watchdog Timer	Programmable via S/W from 0.5 sec. to 254.5 sec.
Expansion Interface	- 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

I/O INTERFACE

Embedded Controller	ITE IT8518
Audio	- Intel® Q87 PCH built-in High Definition Audio up to 192-kHz 32-bit - Realtek ALC886-GR HDA codec, 5.1 channels
Ethernet	- Intel® WGI218LM + WGI210AT 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
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 I/O - 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
Display Interface	- VGA: Resolution up to 2560x1600 @ 60Hz - DVI-D: up to 1920x1200 @ 60Hz - HDMI: up to 1920x1200 @ 60Hz - Support Triple Display

Mechanical & Environment

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