RUBY-D714VG2AR
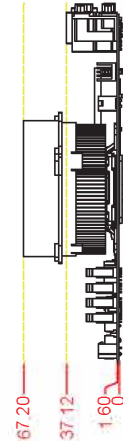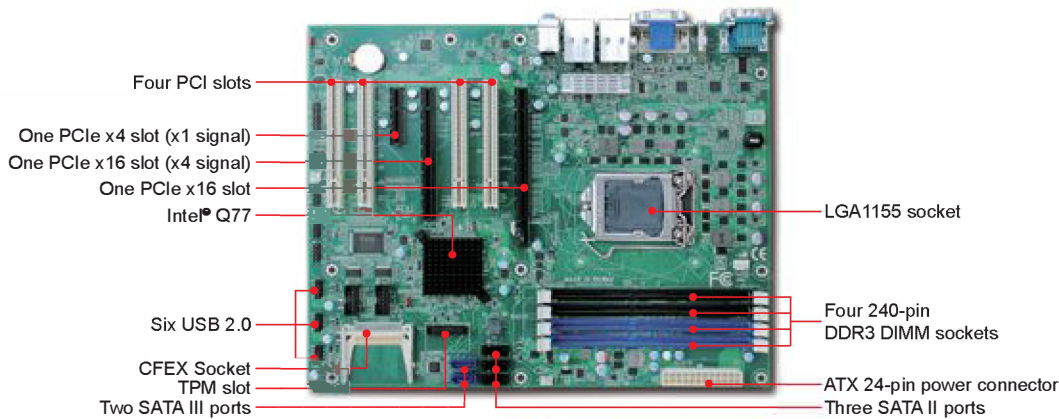
Intel® Core™ i5/i7 processor based ATX with DDR3 SDRAM, Triple display, Dual Gigabit Ethernet, and USB Ports

Four PCI slots
One PCIe x4 slot (x1 signal)
One PCIe x16 slot (x4 signal)
One PCIe x16 slot
Intel® Q77

Six USB 2.0

CFEX Socket
TPM slot
Two SATA III ports

LGA1155 socket

Four 240-pin DDR3 DIMM sockets

ATX 24-pin power connector
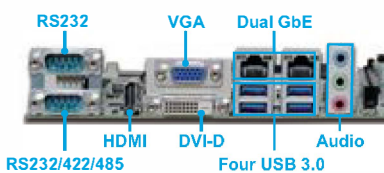Three SATA II ports

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RUBY-D714VG2AR is based on Intel® Q77 chipset and desktop processor sku like Core™ i7 and i5. Built with flexible PCI express expansion and bifurcation feature, it can support two I/O interface cards and can also suitable for Medical, Industrial Automation, and Digital Signage applications.

FEATURES

- Intel® Core™ i7 and i5 Processors support
- Four Long-DIMMs support dual channel DDR3 non-ECC SDRAM up to 32 GB
- Triple display by VGA/DVI-D/HDMI
- Rear I/O, USB 2.0/3.0, dual Gigabit Ethernet, COM ports and SATA II/III ports support Intel® RAID 0,1,5,10
- One PCIe x16 (Gen 3), one PCIe x16 (Gen 2, x4 signal), one PCIe x4 (Gen 2, x1 signal), and four PCI slots
- One CFEX Slot (Only support CFEX Card)
- Intel® Active Management Technology 8.0

REAR I/O

RS232   VGA   Dual GbE

HDMI   DVI-D   Audio
RS232/422/485   Four USB 3.0

ORDERING GUIDE

AB1-3847	**RUBY-D714VG2AR** ATX IMB. LGA1155 CPU. Q77. DDR3/VGA/DVI/HDMI/Dual GbE/COM/Audio/USB

PACKING LIST

One RUBY-D714VG2AR ATX Industrial Main Board
One SATA III Cable
One Installation CD
One I/O shield

DDR 3   SATA 6Gb   USB 3.0   Watch DOG   H/W Monitor   HDMI   VGA
DVI-D   FC   C€   Microsoft® Windows® Embedded Partner   RoHS   CFEX

GENERAL

Processor	- Intel® Core™ i7/i5 processor up to 3.4GHz with (3~8MB) Cache in LGA1155 package - DMI x4 Link: 5.0 GT/s - Supports Intel® Turbo Boost, Hyper-Threading, Virtualization, Thermal Monitoring and Trusted Execution (depend on CPU sku)
Chipset	Intel® Q77 PCH chipset
BIOS	Pheonix UEFI BIOS
Memory	Supports up to 32GB DDR3 1333/1600 SDRAM on four 240-pin DIMM sockets (dual channel)
Storage Devices	- 2x SATA support 6Gb/s data transfer rate - 3x SATA support 3Gb/s data transfer rate - Supports RAID 0,1,5,10 - 1xCFEX(Only support CFEX Card)
Watchdog Timer	Programmable via S/W from 0.5 sec. to 255 sec.
Hardware Monitoring	On board fan connector (CPU Cooler x1, System Fan x1); temperature and voltages monitoring
Expansion Interface	- 1x PCI Express x16 slot (Gen3, 8.0 GT/s) - 1x PCI Express x16 slot (with x4 signal Gen 2, 5.0 GT/s) - 1x PCI Express x4 slot (with x1 signal Gen 2, 5.0 GT/s) - 4x PCI devices at 32-bit 33 MHz

I/O INTERFACE

Super I/O	ITE IT8783F
Audio	- Intel® Q77 PCH built-in High Definition Audio up to 192-kHz 32-bit - Realtek ALC886-GR HDA codec, 5.1 channels - Audio Jack DIP Light Pink/Lime/Light Blue
Ethernet	- Intel® 82579LM and 82583V dual gigabit ethernet controllers - PCI Express x1 interface based on gigabit ethernet - Dual RJ-45 connectors with two LED indicators at rear I/O panel
Serial Port	- 4x RS232 - 1x RS232 and 1x Selectable RS232/422/485 on rear I/O
USB	- 4x USB 3.0 ports on rear I/O (5 Gbps) - 6x USB 2.0 ports on board (480 Mb/s)
Keyboard & Mouse	PS/2 on board dedicated to keyboard & mouse
GPIO	On board programmable 8-bit Digital I/Os

DISPLAY

Graphic Controller	- Quad Core™ Processor with Intel® HD Graphics 4000 and Integrated Memory Controller - Provided improved 3D multimedia capabilities including Microsoft DirectX 11, Shader Model 4.0, MPEG-2 and OpenGL 3.1
Display Interface	- VGA: Resolution up to 2560x1600 @60Hz - DVI-D: up to 1920x1200 @60Hz - HDMI: up to 1920x1200 @60Hz

Mechanical & Environment

Dimension	- 304.8(L) x 243.8(W)mm; 12"(L) x 9.6"(W) - PCB: 6 layers
Power Supply	ATX 24-pin power input
Environment	- Operation Temperature: 0~60 °C (with highest performance on 50 °C) - Storage Temperature: -20~80 °C - Relative Humidity: 5~95%, non-condensing
MTBF	Over 120,000 hours at 40°C