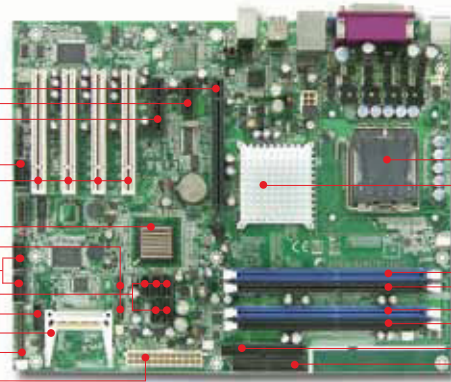# RUBY-9716VGAR

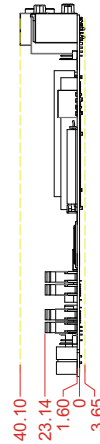**Intel® Core™ 2 Quad processor based ATX Motherboard with DDR2 SDRAM, VGA, Gigabit Ethernet, Audio and USB**

One PCIe x16 expansion slot
One PCIe x1 expansion slot
One PCIe x4 expansion slot
One RS232 selectable port
Four PCI expansion slots
Intel® ICH8DO
Four USB ports
Two RS232 power selectable ports
Five SATA II ports
Ten programmable GPIO ports
CompactFlash socket
Front panel I/O
ATX V2.2 24-pin power connector

LGA775 socket
Intel® Q965
Four 240-pin DDR2 DIMM sockets
IDE connector
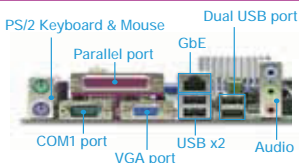FDD port

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Built with Intel® Q965 chipset, RUBY-9716VGAR supports Intel® Core™ 2 Duo processor based ATX Industrial Mainboard with DDR2 SDRAM, VGA, Gigabit Ethernet, Audio and USB. In addition, five SATA II ports, one IDE channel and CF socket are perfect storage interfaces for all kinds of applications; supports Intel® Matrix Storage Technology.

FEATURES

- Intel® mainstream desktop processors - Core™ 2 Quad, Core™ 2 Duo, Pentium® D, Pentium® 4,Celeron® D processor in LGA775 package

- One PCI Express x16 slot features high-end graphics card connection interface or dual independent display with ADD2+ media card that provides TV tuner, video capture in and DVI, TV-out

- One PCI Express x4 slot for storage add-in card which provides reliable and safer data storage with adequate I/O throughput

- Five SATA II ports together with one IDE channel and CF socket are perfect combination

REAR I/O

PS/2 Keyboard & Mouse
Parallel port
GbE
Dual USB port
COM1 port
VGA port
USB x2
Audio

ORDERING GUIDE

AB1-3018	RUBY-9716VGAR.Socket LGA775.Intel Q965.Core 2 Duo.IMB.w/VGA/GbE/Audio

PACKING LIST

One RUBY-9716VGAR ATX Industrial Main Board
One SATA II Cable
One Installation CD
One I/O shield
One IDE cable

GENERAL

Processor	- Intel® Core™ 2 Quad/Core™ 2 Duo Pentium® D/Pentium® 4/Celeron® D Processor with 2MB L2 Cache in LGA775 package - FSB: 1066/800MHz - Supports Enhanced Intel SpeedStep® Technology, Intel® 64 architecture, Execute Disable Bit (Core™ 2 Duo only)
Chipset	Intel® Q965 Graphics and Memory Controller Hub (28W)+ICH8DO
BIOS	Award BIOS
Memory	Supports up to 8GB DDR2 533/667/800MHz SDRAM on four 240-pin DIMM sockets
Storage Devices	- 1x EIDE connector supports Ultra DMA100/66/33MB/s - 5x SATA support 3Gb/s data transfer rate and 1x FDD channel - 1x CompactFlash connector supports Ultra DMA100/66/33MB/s (share with IDE channel)
Watchdog Timer	Programmable via S/W from 1 sec. to 255 min.
Hardware Monitoring	- System monitor (fan, temperature, voltage) and Temperature (CPU & System) - Voltage (CPU Vcore, 5VSB, 12V, 5V, 3.3V)
Expansion Interface	- 1x PCI Express x4 slot for x1 or x4 card (Gen 1, 2.5 GT/s) - 1x PCI Express x1 slot (Gen 1, 2.5 GT/s) - 1x PCI Express x16 slot for PCIe x16 or PCIe x1 or ADD2/+ card (Gen 1, 2.5 GT/s) - 4x PCI 32-bit slots

I/O INTERFACE

Super I/O	Winbond W83627HG-AW
Audio	- Intel® Q965 built-in High Definition Audio up to 92-kHz 32-bit - Realtek ALC262-VC2 LQFP48 codec, 2+2 channels - Audio Jack DIP Light Pink/Lime/Light Blue
Ethernet	- Intel® 82566DM single gigabit ethernet controller - 1x RJ-45 connectors with two LED indicators at rear I/O panel - PCI Expressx1 interface based Gigabit Ethernet
Serial Port	- 1x RS232/TTL selectable on rear I/O panel - 2x RS232 Power selectable on board and 1x RS232/422/485 selectable on board
USB	- 4x USB 2.0 ports on rear I/O and 4x USB 2.0 ports on board - 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 10-bit Digital I/Os
Other	1x parallel port on rear I/O

DISPLAY

Graphic Controller	- Intel® Q965 Graphics and Memory Controller Hub integrated Intel Graphics Media Accelerator 3000 (Intel GMA 3000), provides a visually stunning experience optimized for Blu-ray and HD video - Supports dual independent display with ADD2/+ card
Display Interface	- VGA: Resolution up to 2048x1536 @75Hz - DVI-D: up to 1600x1200 @60Hz

Mechanical & Environment

Dimension	304.8(L) x 243.8(W)mm; 12"(L) x 9.6"(W)
Power Supply	- Typical: +12V@6.5A; +5V@5.95A; +3.3V@3A - Supports ATX mode
Environment	- Operation Temperature: 0°C to 55°C - Storage Temperature: -20°C to 80°C - Relative Humidity: 5% to 90%, non-condensing
MTBF	Over 100,000 hours at 40°C

DDR 2   SATA 3Gb   Watch DOG   H/W Monitor   GPIO   Giga LAN