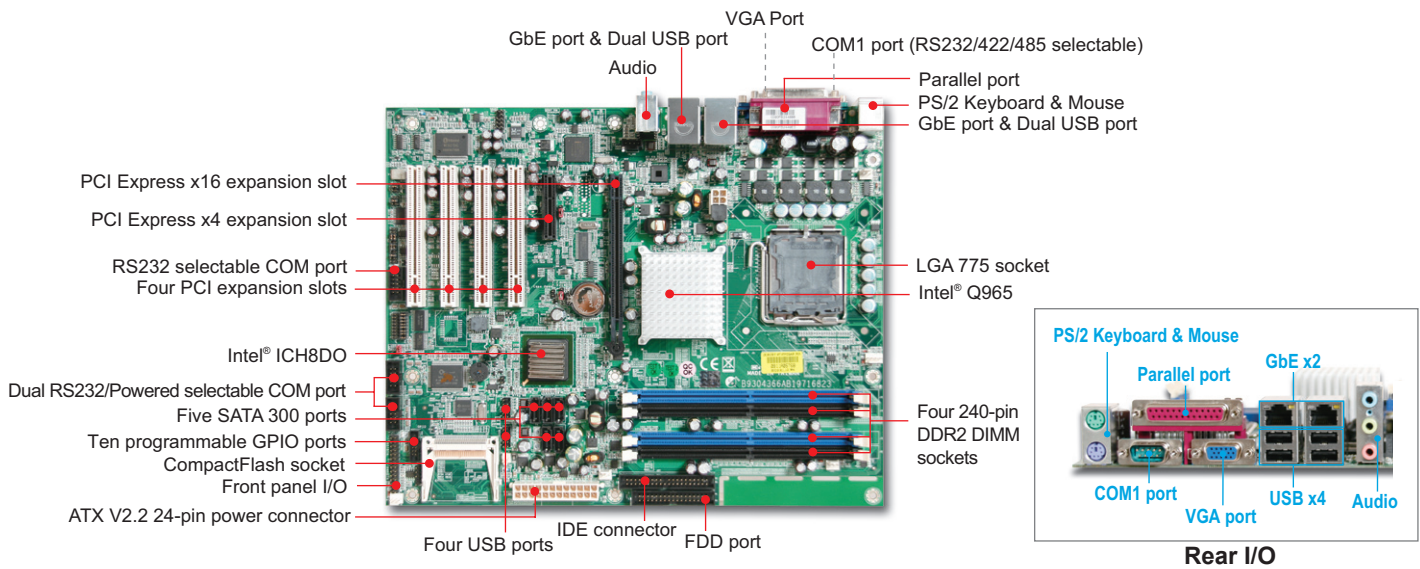# RUBY-9716VG2AR

Intel® Core™ 2 Quad processor based ATX Industrial Mainboard with DDR2 SDRAM, VGA, Dual Gigabit Ethernet, Audio and USB

GbE port & Dual USB port
VGA Port
Audio
COM1 port (RS232/422/485 selectable)
Parallel port
PS/2 Keyboard & Mouse
GbE port & Dual USB port

PCI Express x16 expansion slot
PCI Express x4 expansion slot
RS232 selectable COM port
Four PCI expansion slots
Intel® ICH8DO
Dual RS232/Powered selectable COM port
Five SATA 300 ports
Ten programmable GPIO ports
CompactFlash socket
Front panel I/O
ATX V2.2 24-pin power connector
Four USB ports
IDE connector
FDD port

LGA 775 socket
Intel® Q965
Four 240-pin DDR2 DIMM sockets

Rear I/O

PS/2 Keyboard & Mouse
Parallel port
GbE x2
COM1 port
VGA port
USB x4
Audio

FEATURES

- Industrial mainboard in ATX form factor supports all Intel® mainstream desktop processors - Core™ 2 Quad, Core™ 2 Duo, Pentium® D, Pentium® 4, Celeron® D processor in LGA-775 package

- Benefits such as Hyper-Threading, EM64T, dual-core, EIST, XD & VT of processor can be easily applied to system by changing processor

- Embedded Intel 4th generation graphics engine provides better user experience of display performance

- 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 300 ports together with one IDE channel and CF socket are perfect combination to storage interface for all kinds of applications; supports Intel® Matrix Storage Technology

ORDERING GUIDE

Standard	RUBY-9716VG2AR
	LGA-775 Core™ 2 Quad processor based ATX Industrial Mainboard with DDR2 SDRAM, VGA, Dual Gigabit Ethernet, Audio and USB

GENERAL

Processor	CPU & Package: Intel® Core™ 2 Quad, Core™ 2 Duo, Pentium® D, Pentium® 4, Celeron® D processor in LGA-775 package FSB: 1066/800/533MHz
Chipset/Core Logic	Intel® Q965 and ICH8DO
System Memory	Up to 8GB DDR2 800/667/533 SDRAM on four 240-pin DIMM sockets
BIOS	Award BIOS
Storage Devices	EIDE: Support single EIDE device with Ultra DMA 100/66/33 SATA: Support five SATA 300 drives
Solid State Disk	One Type II CF socket (only available if no IDE device attached)
Watchdog Timer	Programmable via software from 1 sec. to 255 min.
Expansion Interface	- Four 32-bit PCI expansion slots - One PCI Express x4 slot for x1 or x4 card - One PCI Express x16 slot for PCIe x16 or PCIe x1 or ADD2/+ card
Hardware Monitoring	System monitor (fan, temperature, voltage)
Power Requirement	Typical: +5V@4.0A; +12V@6.5A; 3.3V@3A
Dimension	Dimension : 304.8(L) x 243.8(W) mm; 12"(L) x 9.6" (W)
Environment	Operating Temperature: 0 to 55°C Storage Temperature: -20 to 80°C Relative Humidity: 5% to 90%, non-condensing
MTBF	73,803 hrs

I/O

MIO	Four serial (RS232/TTL selectable x1, RS232/Powered selectable x2, RS232/422/485 selectable x1), one at rear I/O panel, one parallel, one FDD channel
IrDA	IrDA 1.0
Ethernet	- Dual 10BASE-T/100BASE-TX/1000BASE-T Ethernet (Intel® 82573L, Intel® 82566DM) - PCI Express x1 interface based Gigabit Ethernet - Dual RJ-45 connector with two LED indicators at rear I/O panel
Audio	HDA interface, 2-channel Audio
USB	Eight USB 2.0 ports (Four ports at rear I/O panel; four ports internal)
Keyboard & Mouse	PS/2 keyboard/mouse at rear I/O panel

DISPLAY

Graphic Controller	- GMCH integrated Intel® 4th generation Extreme Graphics controller - Intel® GMA 3000 which provides improved 3D multimedia capabilities including DirectX9, Shader Model 3.0, OpenGL 1.5, Advanced De-interlacing, MPEG-2 hardware acceleration - Support dual independent display with ADD2/+ card