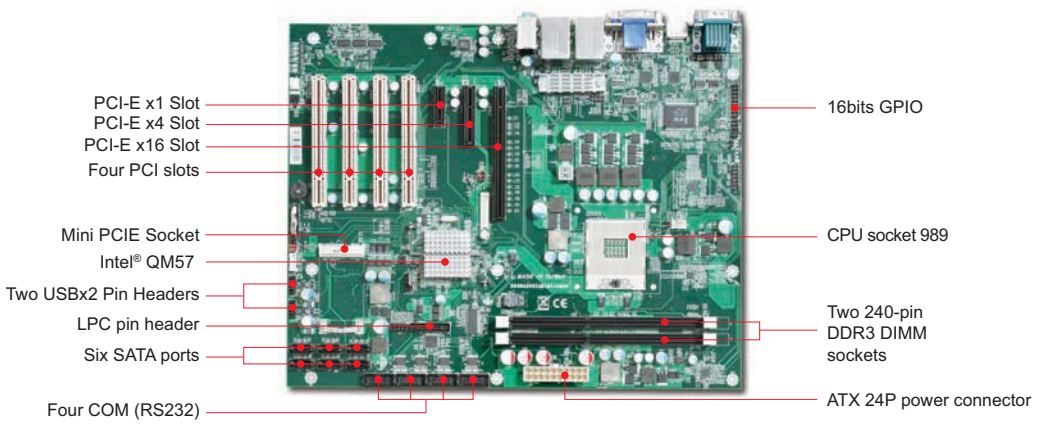
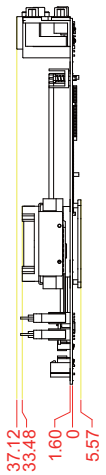
RUBY-M710VG2AR

Intel® Core™ i5/i7/P4500 processor based ATX with DDR3 SDRAM, Dual Display, Dual Gigabit Ethernet and USB Ports



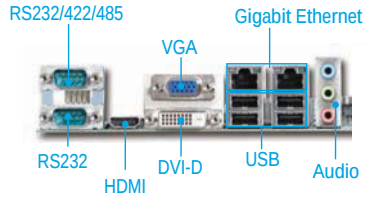


Built with latest mobile Intel® QM57 Express chipset which supports Intel® Core™ i5/ i7 processor, RUBY-M710VG2AR based industrial ATX motherboard is the ideal solution for Green PC and can be adopted in POS, medical, gaming, lottery, digital signage, surveillance security monitoring and kiosk.

FEATURES

- Intel® Core™ i5/i7/P4500 Processor (Quad Core CPU support)
- Intel® QM57 Chipset
- Two long DIMMs support dual channel DDR3 SDRAM up to 8GB
- Dual Display by VGA / DVI / HDMI / LVDS
- Intel® Active Management Technology (Intel® AMT 6.0)

REAR I/O



ORDERING GUIDE

AB1-3586	RUBY-M710VG2AR.ATX IMB.QM57 w/o ECC PGA989.w/DDR3 DIMMs/ VGA/LVDS/DVI/HDMI/ Dual GbE/COM/Audio/USB

PACKING LIST

One RUBY-M710VG2AR ATX Main Board x1
One SATA II Cable
One Installation CD

GENERAL

Processor	- Intel® Core™ i7/i5/P4500(1.6GHz/ 35W) Processor with 4/3/2MB L2 Cache in socket 989 - Support Intel® Virtualization Technology (VT-x), Enhanced Intel SpeedStep® Technology, Thermal Monitoring Technologies, Intel® Fast/Flex Memory Access(P4500 only), Execute Disable Bit, Intel® HT Technology (i7/ i5 only)
Chipset	Intel® QM57 PCH (3.5W)
BIOS	AMI UFEI BIOS
Memory	Support up to 8GB DDR3 800/1066 MHz SDRAM on two 240-pin DIMM sockets with dual channel mode
Storage Devices	- 6x SATA support 3Gb/s data transfer rate - RAID 0,1,5,10
Watchdog Timer	Programmable via S/W from 0.5 sec. to 254.5 min.
Hardware Monitoring	- System monitor (fan,temperature,voltage) - Temperature (CPU & System) - Voltage (CPU Vcore, 5VSB, 12V, 5V, 3.3V)
Expansion Interface	- 1x PCI Express x16 slot (Gen1, 2.5 GT/s) - 1x PCI Express x4 slot (Gen1, 2.5 GT/s) - 1x PCI Express x1 slot (Gen1, 2.5 GT/s) - 1x Mini-PCI Expressx1 socket (Gen1, 2.5 GT/s) - 4x PCI 32bit slots

I/O INTERFACE

Super IO	ITF IT8721F
Audio	- Intel® QM57 built-in High Definition Audio up to 192-kHz 24-bit - Realtek ALC888-GR LQFP48 codec, 7.1 channels - Audio Jack DIP Light Pink/Lime/Light Blue"
Ethernet	- Intel® 82574L & 82577LM dual Gigabyte Ethernet Controller Intel® 82574L & 82577LM - 2X RJ-45 connectors with two LED indicators
Serial Port	- 1x RS232/422/485 port on rear IO - 1x RS232 on rear IO and 4x RS232 on board
USB	- 4x USB 2.0 ports on rear IO - 4x USB 2.0 ports on borad with pitch 2.0 header - 480 Mb/s bus comprehends the high-speed / full-speed / low-speed data ranges
Keyboard & Mouse	1x PS/2 Keyboard & Mouse on board
GPIO	On board programmable 16-bit Digital I/Os

DISPLAY

Graphic Controller	- Intel® QM57 Graphics and Memory Controller Hub integrated Intel® Gen 6.0 integrated Graphics - Chrontel:HDMI lewel shifer
Display Interface	- VGA: Resolution up to 2048x1536 @75Hz - DVI-D: up to 1920x1200 @ 60Hz - LVDS: up to 1600x1200@66Hz - HDMI: up to 1920x1200 @ 60Hz

Mechanical & Environment

Dimension	305(L) x 244(W) mm; 12"(L) x 9.6"(W)
Power Supply	- Typical:+12V(CPU)@3.5A;+12V(System)@2A;+5V@4A;+3.3V@1.5A - Support ATX mode
Environment	- Operation Temperature: 0°C to 60°C - Storage Temperature: -20°C to 80°C - Relative Humidity: 5% to 90%, non-condensing
MTBF	Over 80,000 hours at 40°C