ROBO-8113VG2AR-Q170

Dual 288-pin DDR4 DIMM sockets | Four SATAIII ports | HDMI port | Eight USB 3.0 ports | PS2 KB/MS | Dual USB 3.0 ports | Dual GbE ports | DVI-I port (DVI-D+VGA)

+12V power connector | LGA1155 socket | Intel® Q170 | COM1:RS232 | COM4:RS232/422/485/ selectable | COM2:RS232 | COM3:RS232/422/485/selectable
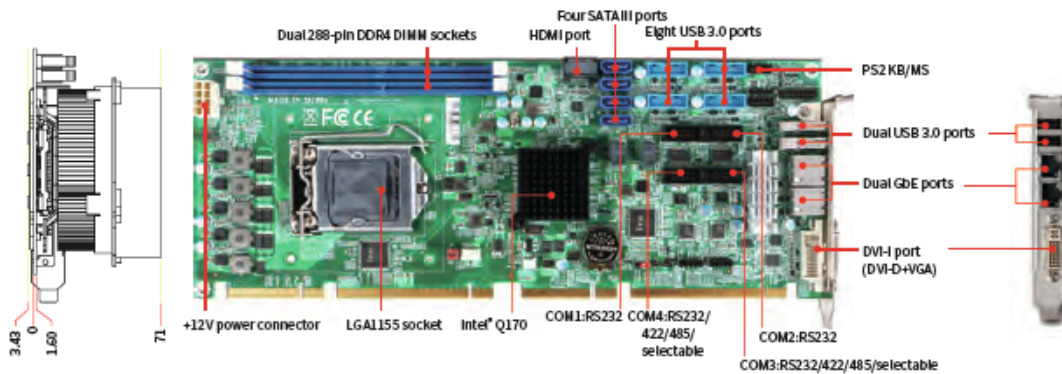
FEATURES

- Supports Intel 6ᵗʰ Skylake-S Core I5/I7 processors in LGA 1151 package

- Delivers up tp 32GB maximum DDR4 2133 non-ECC DIMM on two sockets

  Supports mutiple display by DVI-I(DVI-D +VGA)and HDMI

- High speed dual Gigabit Ethernet based on PCI express x 1, high bandwidth I/O Interface

- On-board six SATAIII ports

- Rich I/O connections such as four serials ports, USB 3.0/2.0, SATAIII ports

GENERAL

Processor	– Intel® XCore™ I5/I7 processors up to 3.4 GHz (35~65W) with (8MB) Cache in LGA-1151 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) Intel® Q170 PCH
Chipset	AMI uFEI BIOS (SPI ROM)
BIOS	
Memory	– Supports up to 32GB DDR4 2133/1866 SDRAM on two 288-pin DIMM sockets – Supports non-ECC
Storage Devices	– 6x SATAIII drives (Dual ports via Backplane) – RAID 0, 1, 5, 10
Watchdog Timer	Programmable via S/W from 0.5 sec. to 254.5 sec
Hardware Monitoring	System monitor (Voltage,Fan Speed and Temperature)
Expansion Interface	– From CPU (Core i5/i7): 1x PCI Express x16 or 2x PCI Express x8 or 1x PCI Express x8 + 2x PCI Express x4 by jumper setting (Gen3 up to 8.0 GT/s) – From PCH: 1x PCI Express x4 or 4x PCI Express x1 by different bios support (Gen 3 up to 8.0 GT/s)

I/O INTERFACE

Embedded Controller	ITE IT8528E
Audio	– Intel® PCH built-in High Definition Audio up to 192-kHz 32-bit – Realtek ALC886-GR HDA codec, 5.1 channels – one on- board audio pin header
Ethernet	– Intel® WGI219LM + 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	– 2x RS232 ports – 2x RS232/422/485 selectable – LPC to COM port IC: Fintek F81216DG
USB	– 2x USB 2.0 ports (through backplane) – 480Mb/s bus capable of high-speed/full-speed/low-speed data ranges – 10x USB 3.0 ports on board (eight ports on board, dual ports on bracket) – 5Gbps bus capable of high-speed/ full-speed/low-speed data ranges – 2x USB 3.0 ports on bracket dedicated to keyboard & mouse (on bracket)
Keyboard & Mouse	– 1x 10 pin box header for external PS/2 keyboard/mouse
GPIO	On board programmable 8-bit Digital I/Os

DISPLAY

Graphic Controller	– Intel® CoreTM I5/I7 processors integrated graphics engine – Provides improved 3D multimedia capabilities including Microsoft DirectX 12, OCL 2.x and OpenGL 4.3/4.4
Display Interface	– Support independent triple display by – CRT on bracket: Resolution up to 1920x1200 @ 60Hz – DVI-D on bracket: up to 1920x1200 @ 60Hz (CRT + DVI-D on bracket by DVI-I port) – HDMI: up to 4096x2160 @ 24Hz

Mechanical & Environment

Dimension	– 338.5mm(L) x 126.39mm(W), 13.33"(L) x 4.98"" (W) – PCB: 8 layers
Power Supply	– Typical: +12V,+5V – Support ATX mode
Environment	– Operatin Temperature:0~60°C – Storage Temperature:-20~80°C – Relative Humidity:5~90%,non-condensing
MTBF	Over 100,000 hours at 40°C