

ROBO-8115VG2AR Pentium®/Celeron® processor based PICMG 1.3 SHB with DDR4 SDRAM, HDMI, DVI-I, Dual Gigabit Ethernet, Audio and USB

Intel® Xeon® W series/CoreTM i3/i5/i7/i9/

4x 288-pin DDR4 Long-DIMM sockets HDMI port 4x USB 3.2 ports 2x USB 3.2 ports 2x GbE ports DVI-I port (DVI-D+VGA)

3x SATA III ports













+12V power connector | I GA1200 socket

Intel® W480E/Q470E

ROBO-8115VG2AR is based on 10th Gen Intel® processors with W480E or Q470E chipset. Built with flexible PCI express expansions, ROBO-8115VG2AR is suitable for Medical, Industrial Automation, and Digital Signage applications.

FEATURES

- 10th Gen Intel[®] Xeon[®] W/Core[™] i3/i5/i7/i9/ Pentium®/Celeron® processors in LGA 1200 package
- Delivers up to 128GB maximum DDR4 2666 ECC/non-ECC Long-DIMM on four sockets
- Supports multiple displays by DVI-I (DVI-D+VGA) and HDMI
- High speed dual Gigabit Ethernet based on PCI express x 1, high bandwidth I/O interface
- Rich I/O connections such as four serials ports, six USB 3.2 Gen2, five SATA III ports
- On board TPM 2.0

GENERAL

- Intel® Xeon® W family/ Core™ i3/i5/i7/i9/ Pentium®/ Celeron® processors up to 4.8 GHz (35~95W) in LGA-1200 package

- DMI x4 Link: 5.0GT/s Processor

- Support Intel® Turbo Boost, Hyper-Threading, Virtualization, Thermal Monitoring, Trusted Execution and Speed Step Technology (depends on CPU sku)

Chipset Intel® W480F / Q470F AMI UEFI BIOS BIOS

- Supports up to 128GB DDR4 2666 SDRAM on four 288-pin DIMM sockets - Supports ECC (W480E) / Non-ECC (Q470E) Memory

- 5x SATAIII drives (Dual ports via Backplane)

- Supports RAID 0, 1, 5, 10 Storage Devices

- 1x M.2 Type M 2280 (on bottom side)

Watchdog Timer Programmable watchdog timer, time out period from 0.5 sec to 254.5 secs. Hardware Monitoring System monitor (Voltage,Fan Speed and Temperature)

- From CPU: 1x PCle x16 or 2x PCle x8 or 1x PCle x8 + 2x PCle x4 by jumper setting (Gen 3 up to 8.0 GT/s)

From PCH: 1x PCle x4 or 4x PCle x1 by different BIOS support (Gen 3 up to 8.0 GT/s)

- 4x PCI devices at 32bit 33MHz

ORDERING GUIDE

AB1-3K28Z	(R).ROBO-8115VG2AR.
	PICMG 1.3(PCI-E+PCI).LGA1200. W480E
	PCH. Intel Xeon/Core i3 processors.SHB.w/
	VGA/Dual GbE/Audio/fourCOM ports
AB1-3K31Z	(R).ROBO-8115VG2AR-Q470E
	PICMG 1.3(PCI-E+PCI).LGA1200. Q470E
	PCH. Intel Xeon/Core i3 processors.SHB.w/
	VGA/Dual GbE/Audio/fourCOM ports

I/O INTERFACE

Expansion Interface

Audio

Super I/O ITE IT5121E-I (Embedded Controller)

- Intel® PCH built-in High Definition Audio up to 192-kHz 32-bit

- Realtek ALC888S HDA codec, 7.1 channels

- One on board audio pin header

- Intel® WGI219LM + WGI210AT Gigabit Ethernet controller - Dual 10BASE-T / 100BASE-TX / 1000BASE-T Ethernet **Ethernet**

- PCI Express x1 interface based on Gigabit Ethernet

- Dual RJ-45 connectors with two LED indicators

- 2x RS-232 ports

- 2x RS-232/422/485 ports selectable - LPC to COM port IC: Fintek F81216DG Serial Port

- 4x USB 2.0 ports through backplane (480Mb/s)

- 4x USB 3.2 Gen 2 ports on board (10Gb/s) USB

- 2x USB 3.2 Gen 2 ports on bracket (10Gb/s)

Keyboard & Mouse 1x 10 pin box header for external PS/2 KB & MS **GPIO** On board programmable 8-bit Digital I/Os

DISPLAY

- Intel® processors integrated graphics engine Provides improved 3D multimedia capabilities including Microsoft DirectX 12, **Graphic Controller** OpenGL 4.5

Triple independent displays by

-VGA on bracket: Resolution up to 1920x1200 @ 60Hz Display Interface

- DVI-I on bracket: up to 1920x1200 @ 60Hz (VGA + DVI-D on bracket by DVI-I port)

- HDMI on board: up to 4096x2160 @ 30Hz

Mechanical & Environment - 338.5mm(L) x 126.39mm(W),13.33"(L) x 4.98"(W) Dimension - PCB: 10 layers - Typical: +12V, +5V

Power Supply - Support ATX mode - Operation Temperature: 0°C to 60°C - Storage Temperature: -20°C to 80°C Environment

- Relative Humidity: 5~95%, non-condensing Certification CE.FCC Class A

PACKING LIST

Standard	B6902932 SATA III cable
	B8981980 PICMG SBC Handling and Installation
	B6903351 DVI-I to DVI-D+VGA Y cable,
	L=150mm
	B6902352 Dual head COM port cable with
	bracket DB9x2 to HSG(5x2)x2, L=300mm
	TBD Installation CD
Optional	B6903090 USB 3.0 cable with bracket
•	B6902980 PS/2 Keyboard / Mouse Cable with
	bracket
	B6902230 USB 2.0 port cable with bracket







MTRF