

## ROBO-8114VG2AR

Intel® Xeon® E-2100/2200 series 8th/ 9th Gen Core™ i3/i5/i7 processors based on PICMG 1.3 SHB with DDR4 SDRAM, HDMI, DVI-I, Dual Gigabit Ethernet, Audio and



ROBO-8114VG2AR is based on Intel® C246 chipset and workstation processors. Built with flexible PCI express expansions, ROBO-8114VG2AR is suitable for Medical, Industrial Automation, and Digital Signage applications.

## **FEATURES**

- Intel® Xeon® E-2100/2200 series 8th/9th Gen Core™ i3/i5/i7 processors in LGA 1151
- Delivers up to 128GB (with Non-ECC) maximum DDR4 2666 ECC SO-DIMM on four
- Supports multiple 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
- Rich I/O connections such as four serials ports, USB 3.0/2.0, SATA III ports
- Supports on board TPM2.0

## PACKING LIST

Standard	B8983660 Installation CD
	B6902350 dual head COM port cable with bracket
	B6903350 DVI-D + VGA cable
	B8981980 PICMG SBC Handling and Installation Notice
	B6902932 SATA III cable
Optional	B6902980 PS/2 Keyboard / Mouse Cable with bracket
	B6903090 USB 3.0 cable with bracket
	B6902230 USB port cable with bracket

GENERAL	
Processor	- Intel® Xeon® E-2100/2200 series / 8 <sup>th</sup> /9 <sup>th</sup> Gen Core™ i3/i5/i7 processors up to 3.6 GHz (35~95W) in LGA 1151 package - DMI x4 Link: 5.0GT/s - Supports Intel® Turbo Boost, Hyper-Threading, Visualization, Thermal Monitoring, Trusted Execution and Speed Step Technology (Depends on CPU SKU)
Chipset	Intel® C246 PCH
BIOS	AMI UEFI BIOS (SPI ROM)
Memory	- Supports up to 128GB(with Non-ECC) DDR4 2666/2400/2133 on four 260-pin SO-DIMM - Supports ECC
Storage Devices	- 5x SATAIII drives (Dual ports via Backplane)
	- Supports RAID 0, 1, 5, 10
Watchdog Timer	Programmable via S/W from 0.5 sec. to 255 sec.
Hardware Monitoring	System monitor (Voltage, Fan Speed and Temperature)

I/O INTERFACE			
Expansion Interface	- From CPU (Xeon®/Core™ i3): 1x PCle x16 or 2x PCle x8 or 1x PCle x8 + 2x PCle x4 by jumper settting (Gen3 up to 8.0 GT/s) - From PCH: One PCle x4, or four PCle x1 by different bios support (Gen 3 up to 8.0 GT/s) - 4x PCl devices at 32bit 33MHz		
Super I/O(Embedded Controller)	ITE IT5121E-I-128		
Audio	-Intel® PCH built-in High Definition Audio up to 192-kHz 32-bit -Realtek ALC886 HDA codec, 7.1 channels -1x on board audio pin header		
Ethernet	<ul> <li>Intel® WGI219LM + WGI210AT Gigabit Ethernet controller</li> <li>Dual 10BASE-T / 100BASE-TX / 1000BASE-T Ethernet</li> <li>PCI Express x1 interface based on Gigabit Ethernet</li> <li>Dual RJ-45 connectors with two LED indicators</li> </ul>		
Serial Port	- 2x RS-232 ports - 2x RS -232/422/485 ports selectable - LPC to COM port IC: Fintek F81216DG		
USB	- 4x USB 2.0 ports (through backplane) - 2x USB 3.1 Gen2 ports - 8x USB 3.0 ports (from pin header)		
Keyboard & Mouse	1x 10 pin box header for external PS/2 KB & MS		
GPIO	On board programmable 8-bit Digital I/O		

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- Intel® Xeon® and Core™ processors integrated graphics engine Graphic Controller - Provides improved 3D multimedia capabilities including Microsoft DirectX 12, OCL 2.x and OpenGL 4.3/4.4

## **Mechanical & Environment**

Display Interface Supports independent triple display by:

- VGA on bracket: Resolution up t o 1920x1200 @ 60Hz

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

- HDMI on board: up to 3200x2000 @ 60Hz - 338.5mm(L) x 126.39mm(W), 13.33"(L) x 4.98"(W) Dimension

- PCB: 8 layers

**Power Supply** Typical: +12V, +5V

- Supports ATX mode

- Operation Temperature: 0~60°C - Storage Temperature: -20~80°C

- Relative Humidity: 5~95%, non-condensing





















