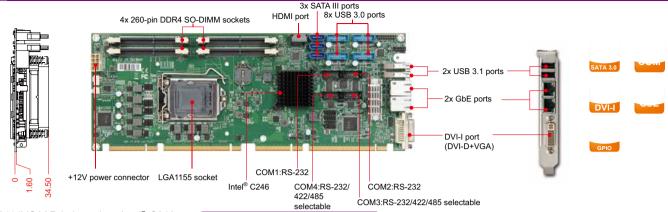


# ROBO-8114VG2AR

Intel® Xeon® E/ Core™ i3/i5/i7 Pentium® / Celeron® processor based on PICMG 1.3 SHB with DDR4 SDRAM, HDMI, DVI-I, Dual GigabitEthernet, Audio and USB



ROBO-8114VG2AR is based on Intel® C246 chipsetand workstation processors. Built with flexible PCI express expansions, ROBO-8114VG2AR is suitablefor Medical. Industrial automa

#### **FEATURES**

- Supports Intel® Xeon®/Core™ i3/i5/i7/ Pentium®/ Celeron® processors in LGA 1151package
- Delivers up to 64GB maximum DDR4 2133 ECC SO-DIMM on four sockets
- Supports mutiple display by DVI-I(DVID+VGA)and HDMI
- High speed dual Gigabit Ethernet based on PClexpress x 1, high bandwidth I/O
- Rich I/O connections such as four serials ports, USB 3.0/3.1, SATA III ports
- Support on board TPM2.0

## ORDERING GUIDE

AB1-3J28	ROBO-8114VG2AR.
	PICMG 1.3(PCI-E+PCI).LGA1151. C246
	PCH. IntelXeon/Core i3 processors.SHB.w
	VGA/DualGbE/Audio/four COM ports

### **PACKING LIST**

Standard	TBD 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	B6903090 USB 3.0 cable with bracket
	B6902980 PS/2 Keyboard / Mouse Cable with
	bracket
	B6902230 USB port cable with bracket











#### **GENERAL**

- Intel® Xeon® E Family/ Core™ i3/i5/i7/ Pentium®/ Celeron® processors up to 3.6 GHz(35~95W) in LGA-1151 package Processor - DMI x4 Link: 5.0GT/s - Support Intel® Turbo Boost, Hyper-Threading, Virtualization, Thermal Monitoring, Trusted Execution and Speed Step Technology (depends on CPU sku) Intel® C246 PCH Chipset BIOS AMI UEFI BIOS (SPI ROM) - Supports up to 64GB DDR4 2133 SDRAM on four 260-pin SO-DIMM Memory - Supports ECC - 5x SATAIII drives (Dual ports via Backplane) - Supports RAID 0 1 5 10 Storage Devices - 1x M.2 Type M 2280 (on bottom side)

Programmable via S/W from 0.5 sec. to 255 sec

System monitor(Voltage, Fan Speed and Temperature)

# I/O INTERFACE

Watchdog Timer

Hardware Monitoring

- From CPU: 1x PCle x16 or 2x PCle x8 or 1x PCle x8 + 2x PCle x4 by jumper seng
(Gen3 up to 8.0 GT/s)

- From PCH: 1x PCle x4 or 4x PCle x1 by different bios support **Expansion Interface** (Gen 3 up to 8.0 GT/s)

- 4x PCI devices at 32bit 33MHz

Super I/O ITE IT5121E-I-128 (EmbeddedController)

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

- Realtek ALC886 HDA codec, 7.1 channels Audio

- 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

Serial Port - 2x RS-232/422/485 ports selectable

- LPC to COM port IC: Fintek F81216DG

- 4x USB 2.0 ports (through backplane)

480Mb/s bus capable of high-speed/full-speed/low-speed data ranges - 5Gbps bus capable of high-speed/ full-speed/low-speed data ranges

- 10Gbps bus capable of high-speed/ full-speed/low-speed data ranges

- 2x USB 3.1 ports on bracket dedicated to keyboard & mouse

Keynoard & Mouse - 1x 10 pin box header for external PS/2 KB & MS

**GPIO** On board programmable 8-bit Digital I/Os

## **DISPLAY**

**USB** 

- Intel® Xeon® and Core™ i3 processors integrated graphics engine **Graphic Controller** - Provides improved 3D multimedia capabilities including Microso DirectX 12, OCL

2.x and OpenGL 4.3/4.4 Support independent triple display by

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

- DVI-D on bracket: up to 1920x1200 @ 60Hz Display Interface

(VGA + DVI-D on bracket by DVI-I port) - HDMI on board: up to 3200x2000 @ 60Hz

## **Mechanical & Environment**

- 338.5mm(L) x 126.39mm(W), 13.33"(L) x 4.98"(W) Dimension

- PCB: 8 layers

- Typical: +12V, +5V **Power Supply** - Support ATX mode

- Operation Temperature: 0~60°C Environment

- Storage Temperature: -20~80°C - Relative Humidity: 5~95%, non-condensing

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