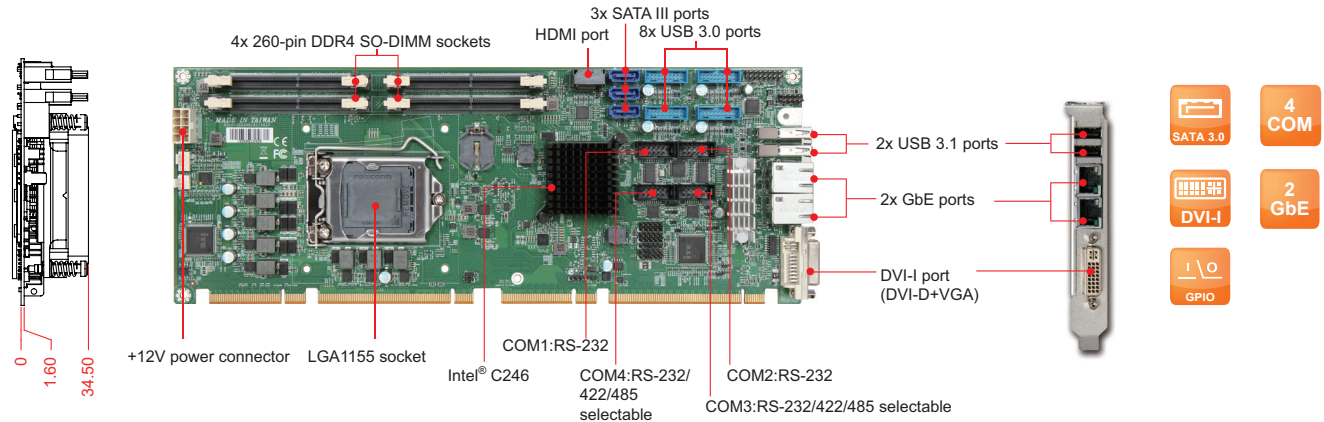


# ROBO-8114VG2AR

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



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.

## FEATURES

- Supports Intel® Xeon®/Core™ i3/i5/i7/ Pentium®/ Celeron® processors in LGA 1151 package
- Delivers up to 64GB maximum DDR4 2133 ECC SO-DIMM on four sockets
- Supports multiple display by DVI-I (DVI-D+VGA) and HDMI
- High speed dual Gigabit Ethernet based on PCIe xpress x1, high bandwidth I/O interface
- Rich I/O connections such as four serial ports, USB 3.0/3.1, SATA III ports
- Support on board TPM2.0

## ORDERING GUIDE

<b>AB1-3J28</b>	<b>ROBO-8114VG2AR</b> PICMG 1.3 (PCI-E+PCI), LGA1151, C246 PCH, Intel Xeon/Core i3 processors, SHB, w/ VGA/Dual GbE/Audio/four COM ports
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## PACKING LIST

Standard	TBD Installation CD
	B6902352 dual head COM port cable with bracket
	B6903351 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

Processor	- Intel® Xeon® E Family/ Core™ i3/i5/i7/ Pentium®/ Celeron® processors up to 3.6 GHz (35~95W) 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)
Chipset	Intel® C246 PCH
BIOS	AMI UEFI BIOS (SPI ROM) - Supports up to 64GB DDR4 2133 SDRAM on four 260-pin SO-DIMM sockets
Memory	- Supports ECC
Storage Devices	- 5x SATAIII drives (Dual ports via Backplane) - Supports RAID 0, 1, 5, 10 - 1x M.2 Type M 2280 (on bottom side)
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: 1x PCIe x16 or 2x PCIe x8 or 1x PCIe x8 + 2x PCIe x4 by jumper setting (Gen3 up to 8.0 GT/s) - From PCH: 1x PCIe x4 or 4x PCIe x1 by different bios support (Gen 3 up to 8.0 GT/s) - 4x PCI 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 - one on board audio pin header
Ethernet	- Intel® WG1219LM + WG1210AT Gigabit Ethernet controller - Dual 10BASE-T / 100BASE-TX / 1000BASE-T Ethernet - PCI Express x1 interface based on Gigabit Ethernet - Dual RJ-45 connectors with two LED indicators
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) - 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
Keyboard & Mouse	- 2x USB 3.1 ports on bracket dedicated to keyboard & mouse - 1x 10 pin box header for external PS/2 KB & MS
GPIO	On board programmable 8-bit Digital I/Os

## DISPLAY

Graphic Controller	- Intel® Xeon® and Core™ i3 processors integrated graphics engine - Provides improved 3D multimedia capabilities including Micro Direct X 12, OCL 2.x and OpenGL 4.3/4.4
Display Interface	Support independent triple display by - VGA on bracket: Resolution up to 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

## 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	- Operation Temperature: 0~60°C - Storage Temperature: -20~80°C - Relative Humidity: 5~95%, non-condensing

