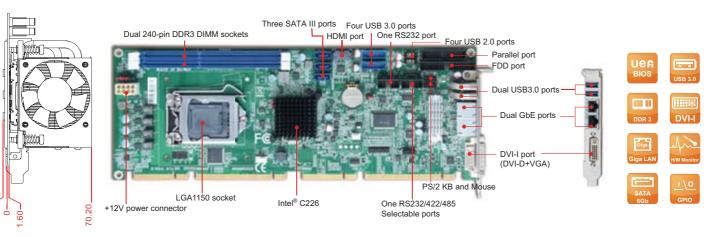
# ROBO-8112VG2AR processor based on PICMG 1.3 SHB with DDR3 SDRAM, VGA, Dual Gigabit Ethernet,

Intel<sup>®</sup> Xeon<sup>®</sup> E3-1200v3/CoreTM i3 series Audio and USB



ROBO-8112VG2AR is based on Intel C226 chipset and workstation processor sku like Xeon and Core i3. Build with flexible PCI express expension, it's suitable for Medical, Industrial automation, and digital signage applications

## **FEATURES**

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- Supports Intel® Xeon® E3-1200v3 series/CoreTM i3 processors in LGA1150 package
- Delivers up to 16GB maximum DDR3 1333/1600 ECC SDRAM on two DIMM sockets
- Supports triple display by DVI-I (DVI-D+VGA) and
- Supports iAMT 9.0 on Intel® Xeon® E3-1200v3 series processors
- High speed dual Gigabit Ethernet based on PCI Express x1, high bandwidth I/O interface
- Rich I/O connections such as FDD, two Gigabit Ethernet, serial ports, parallel port, USB 2.0/3.0
- On-board five SATA III ports support RAID 0,1,5,10 (dual ports on backplane)

## **ORDERING GUIDE**

AB1-3954

ROBO-8112VG2AR PICMG 1.3(PCI-E+PCI).LGA1150. Intel Xeon/Core i3 processors.SHB.w/VGA/Dual GbE/Audio

# PACKING LIST

Standard	B6902930 SATA III cable (Black)
	B690021S Cable kit for FDD+PRN with bracket
	B8981980 PICMG SBC Handling and Installation Notice
	B6902890 DVI-D + VGA cable with bracket
	B6903240 dual head COM port cable with bracket
	B3751640 Installation CD
Option	B6902980 PS/2 Keyboard / Mouse Cable with bracket
	B6902230 USB port cable with bracket
	AB9-2066 PA-M1AU Multiple Media kit
	B6903090 USB 3.0 cable with bracket



#### American Portwell (Fremont, California)

Tel: +1-510-403-3399 Fax: +1-510-403-3184 E-mail: info@portwell.com http://www.portwell.com

#### **GENERAL**

processor	<ul> <li>Intel<sup>®</sup> CoreTM i3 and Xeon<sup>®</sup> E3-1200v3 series processor up to 3.5 GHz (45~95W) with (8MB) Cache in LGA-1150 package</li> <li>DMI x4 Link: 5.0GT/s</li> <li>Support Intel<sup>®</sup> Turbo Boost, Hyper-Threading, Virtualization, Thermal Monitoring, Trusted Execution and SpeedStep Technology (depends on CPU sku)</li> </ul>
Chipset	Intel® C226 PCH
BIOS	Phoenix uEFI BIOS
Memory	- Supports up to 16GB DDR3 1333/1600 SDRAM on two 240-pin ECC DIMM sockets - Supports ECC
Storage Devices	- Supports 5x SATA III drive (Dual ports via Backplane) - RAID 0,1,5,10 - 1x FDD channel
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	<ul> <li>From CPU (Xeon/Core i3): 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)</li> <li>From PCH: 1x PCI Express x4 or 4x PCI Express x1 by different bios support (Gen2 up to 6.0 CT/c)</li> </ul>

up to 5.0 GT/s) - 4x PCI devices at 32 bit 33 MHz

## **I/O INTERFACE**

Super I/O	ITE IT8728F
Audio	<ul> <li>Intel<sup>®</sup> BD82C226 PCH built-in High Definition Audio up to 192-kHz 32-bit</li> <li>Realtek ALC886-GR HDA codec, 7.1 channels</li> </ul>
Ethernet	<ul> <li>Intel<sup>®</sup> WGI217LM + 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 connector with two LED indicators</li> </ul>
Serial Port	- 1x RS232 and 1x selectable RS232/422/485 on board
USB	<ul> <li>- 8x USB 2.0 ports (four ports through backplane)</li> <li>- 480Mb/s bus capable of high-speed/full-speed/low-speed data ranges</li> <li>- 6x USB 3.0 ports pn board (four ports on board, dual ports on bracket)</li> <li>- 5Gbps bus capable of high-speed/ full-speed/low-speed data ranges</li> </ul>
Keyboard & Mouse	<ul> <li>- 2x USB 3.0 ports on bracket dedicated to keyboard &amp; mouse (on bracket)</li> <li>- 1x 10 pin box header for external PS/2 keyboard/mouse</li> </ul>
GPIO	On board programmable 8-bit Digital I/Os
Others	1x Parallel port
DISPLAY	

Graphic Controller	<ul> <li>Intel<sup>®</sup> Xeon<sup>®</sup> and CoreTM i3 processors integrated graphics engine</li> <li>Provides improved 3D multimedia capabilities including Microsoft DirectX 11.1, Shader Model 4.0, MPEG-2 and OpenGL 3.2</li> </ul>
Display Interface	- Support independent triple display by - CRT on bracket: Resolution up to 1920x1200 @ 60Hz - DVI-D on bracket: up to 1920x1200 @ 60Hz - HDMI: up to 4096x2160 @ 24Hz (CRT + DVI-D on bracket by DVI-I port)

Mechanical &	Environment
Dimension	- 338.5mm(L) x 126.39mm(W), 13.33""(L) x 4.98""(W) - PCB: 8 layers
Power Supply	- Typical: +12V@5.29A;+5V@4.94A - Support ATX mode
Environment	- Operation Temperature: 0~60 °C - Storage Temperature: -20~80 °C - Relative Humidity: 5~90%, non-condensing
MTBF	Over 100,000 hours at 40°C