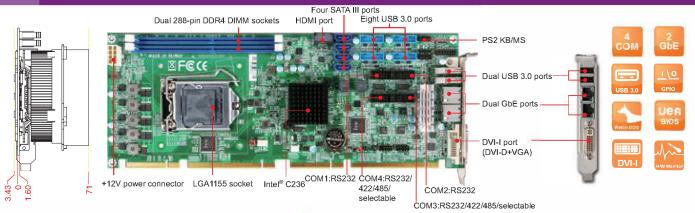
# **ROBO-8113VG2AR**

GENERAL

Watchdog Timer

Hardware Monitoring

Intel® Xeon® and Core™ i3 processor based on PCIMG 1.3 SHB with DDR4 SDRAM, HDMI, DVI-I, Dual Gigabit Ethernet, Audio and USB



ROBO-8113VG2AR is based on Intel® C236 chipset and workstation processors. Built with flexible PCI express expansions, ROBO-8113VG2AR is suitable for Medical, Industrial automation, and Digital Signage application.

# **FEATURES**

- Supports Intel® 6th Skylake-S Xeon® / Core™ i3 processors in LGA 1151 package
- Delivers up to 32GB maximum DDR4 2133 ECC DIMM on two sockets
- Supports mutiple display by DVI-I(DVI-D+VGA) and HDMI
- High speed dual Gigabit Ethernet based on PCI express x 1, high bandwidth I/O
- Rich I/O connections such as four serials ports, USB 3.0/2.0, SATA III ports

# **ORDERING GUIDE**

AB1-3D40	(R).ROBO-8113VG2AR
	PICMG 1.3(PCI-E+PCI).LGA1151;aIntel
	Xeon/Core i3 processors.SHB.w/VGA/Dual
	GbE/Audio/four COM ports

## **PACKING LIST**

Standard	B6902932 SATA III cable
	B8981980 PICMG SBC Handling and Installation
	Notice
	B6903350 DVI-D + VGA cable
	B6903240 dual head COM port cable with
	bracket
	B8983660 Installation CD
Optional	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

Processor	<ul> <li>Intel® Xeon® E3-1200v5 series / Core™ i3 processors up to 3.6 GHz (35~80W) with (8MB) Cache in LGA-1151 package</li> <li>DMI x4 Link, 5.0GT/s</li> <li>Support Intel® Turbo Boost , Hyper-Threading, Virtualization, Thermal Monitoring, Trusted Execution and SpeedStep Technology (depends on CPU sku)</li> </ul>
Chipset	Intel® C236 PCH
BIOS	AMI uFEI BIOS (SPI ROM)
Memory	- Supports up to 32GB DDR4 2133/1866 SDRAM on two 288-pin DIMM sockets - Supports ECC
Storage Devices	- 6x SATAIII drives (Dual ports via Backplane) - RAID 0. 1. 5. 10

Programmable via S/W from 0.5 sec. to 254.5 sec

System monitor(Voltage,Fan Speed and Temperature)

- From CPU (Xeon/Core i3): 1x PCI Express x16 or 2x PCI Express x8 or 1x PCI

Expansion Interface	Express x8 + 2x PCI Express x4 by jumper setting (Gen3 up to 8.0 GT/s) - From PCH: 1x PCI Express x4 or 4x PCI Express x1 by different bios support (Gen 3 up to 8.0 GT/s)
I/O INTERFACE	
Embedded Controller	ITE IT8528E
Audio	- Intel® PCH built-in High Definition Audio up to 192-kHz 32-bit - Realtek ALC886-GR HDA codec. 5.1 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 connector with two LED indicators - 2x RS232 ports Serial Port - 2x RS232/422/485 selectable - LPC to COM port IC Fintek F81216DG - 2x USB 2.0 ports (through backplane) 480Mb/s bus capable of high-speed/full-speed/low-speed data ranges
 10x USB 3.0 ports on board (eight ports on board, dual ports on bracket) USB

- 5Gbps bus capable of high-speed/ full-speed/low-speed data ranges - 2x USB 3.0 ports on bracket dedicated to keyboard & mouse (on bracket) Keyboard & Mouse - 1x 10 pin box header for external PS/2 keyboard/mouse

On board programmable 8-bit Digital I/Os

# DISPLAY

**GPIO** 

Graphic Controller	<ul> <li>Intel® Xeon® and Core® 13 processors integrated graphics engine</li> <li>Provides improved 3D multimedia capabilities including Microsoft DirectX 12, OCL 2.x and OpenGL 4.3/4.4</li> </ul>
	- Support independent triple display by

- CRT on bracket: Resolution up to 1920x1200 @ 60Hz - DVI-D on bracket: up to 1920x1200 @ 60Hz Display Interface (CRT + DVI-D on bracket by DVI-I port) - HDMI: up to 4096x2160 @ 24Hz

### Mechanical & Environment

I I I I I I I I I I I I I I I I I I I	
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	- Operatin Temperature:0~60°C - Storage Temperature:-20~80°C - Relative Humidity:5~90%,non-condensing
MTBF	Over 100,000 hours at 40°C





