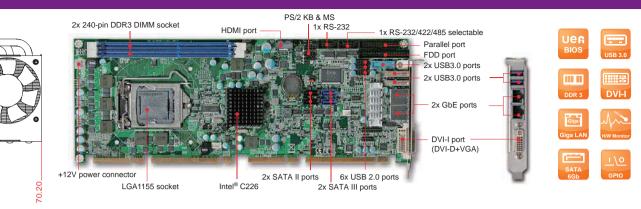# ROBO-8111VG2AR

Intel® Xeon® E3-1200v2/Core™ i3 series processor based on PICMG 1.3 SHB with DDR3 SDRAM, VGA, Dual Gigabit Ethernet, Audio and USB

2x 240-pin DDR3 DIMM socket
PS/2 KB & MS
HDMI port
1x RS-232
1x RS-232/422/485 selectable
Parallel port
FDD port
2x USB3.0 ports
2x USB3.0 ports
2x GbE ports
DVI-I port (DVI-D+VGA)
+12V power connector
LGA1155 socket
Intel® C226
2x SATA II ports
6x USB 2.0 ports
2x SATA III ports

UEFI BIOS | USB 3.0 | DDR 3 | DVI-I | Giga LAN | H/W Monitor | SATA 6Gb | GPIO

ROBO-8111VG2AR is based on the Intel® C216 chipset and workstation processor sku. Built with flexible PCI express expansion, it's suitable for medical, Factory Automation, and Digital Signage applications.

FEATURES

- Supports Intel® Xeon® E3-1200v2 series/ Core™ i3 processors in LGA1155 package

- Delivers up to 16GB maximum DDR3 1333/1600 MT/s ECC SDRAM on two DIMM sockets

- Supports multiple display by DVI-I (DVI-D+VGA) and HDMI

- Supports iAMT 8.0 on Intel® Xeon® E3-1200v2 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 two SATA II and two SATA III ports support RAID 0,1,5,10

ORDERING GUIDE

AB1-2329	**ROBO-8111VG2AR** PICMG 1.3(PCI-E+PCI).LGA1155. Xeon /i3 processors.SHB.w/VGA/Dual GbE/ Audio

PACKING LIST

Standard	B6901990 SATA II cable
	B6902930 SATA III cable (Black)
	B690021S cable kit for FDD+PRN with bracket
	B6903240 Dual head COM port cable with bracket
	B6903350 DVI-D + VGA cable
	B8981980 PICMG SBC Handling and Installation Notice
	B3751500 Installation CD
Optional	B6902980 PS/2 Keyboard / Mouse cable with bracket
	B6902230 USB port cable with bracket
	B6903090 USB 3.0 cable with bracket
	AB9-2066 PA-M1AU Multiple Media kit

GENERAL

Processor	- Intel® Xeon® E3-1200v2 series and Core™ i3 processor in LGA1155 package - IDMI x4 Link: 5.0 GT/s - Supports Intel® Turbo Boost, Hyper-Threading, Virtualization, Thermal Monitoring, Trusted Execution and SpeedStep Technology (depends on CPU sku)
Chipset	Intel® C216 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 2x SATA III drives and 4x SATA II drives (Dual SATA II 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	- From CPU (Xeon®/Core™ i3): 1x PCIe x16 or 2x PCIe x8 or 1x PCIe x8 + 2x PCIe x4 by jumper setting - From PCH: 1x PCIe x4 or 4x PCIe x1 by different bios support - 4x PCI devices at 32 bit 33 MHz

I/O INTERFACE

Super I/O	ITE IT8728F
Audio	- Intel® BD82C216 PCH built-in High Definition Audio up to 192-kHz 32-bit - Realtek ALC886-GR HDA codec, 5.1 channels
Ethernet	- Intel® 82579LM+82574L Gigabit Ethernet controller - Dual 10BASE-T/100BASE-TX/1000BASE-T Ethernet - PCI Express x1 interface based on Gigabit Ethernet - Dual RJ-45 connector with two LED indicators
Serial Port	- 1x RS-232 and 1x selectable RS-232/422/485 on board
USB	- 10x USB 2.0 ports (four ports through backplane) - 480Mb/s bus capable of high-speed/full-speed/low-speed data ranges - 4x USB 3.0 ports pn board (two ports on board, two ports on bracket) - 5Gbps bus capable of high-speed/ full-speed/low-speed data ranges
Keyboard & Mouse	2x USB 3.0 ports on bracket dedicated to KB & MS
GPIO	On board programmable 8-bit Digital I/Os
Others	1x parallel port

DISPLAY

Graphic Controller	- Intel® Xeon® and Core™ i3 processors integrated graphics engine - Provides improved 3D multimedia capabilities including Microsoft DirectX 11, Shader Model 4.0, MPEG-2 and OpenGL 3.1
Display Interface	- CRT on bracket:up to 2048x1536 @75Hz - DVI-D: up to 1920x1200 @60Hz - HDMI: up to 1920x1200 @60Hz (CRT+DVI-D on bracket by DVI-I port)

Mechanical & Environment

Dimension	- 338.5(L) x 126.39(W)mm; 13.33"(L) x 4.98"(W) - PCB: 12 layers
Power Supply	- Typical: +12V@6.96A; +5V@0.32A - Supports ATX mode
Environment	- Operation Temperature: 0°C~60°C (For 80W CPU limitation) - Storage Temperature: -20°C~80°C - Relative Humidity: 5~90%, non-condensing
Certification	CE,FCC Class A
MTBF	Over 100,000 hours at 40°C