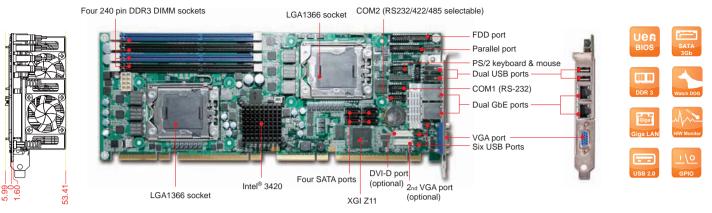
# ROBO-8120VG2R based on PICMG 1.3 SHB with DDR3 SDRAI VGA, Dual Gigabit Ethernet, Audio and USB

Intel® Xeon® C5500/C3500 series processor based on PICMG 1.3 SHB with DDR3 SDRAM,



ROBO-8120VG2R is based on Intel® 3420 chipset and dual Xeon<sup>™</sup> processors. It's a server grade SHB built with high computing power and flexible PCI express expansion support, it's suitable for military, industrial automation, and digital signage applications.

## **FEATURES**

- Support Intel<sup>®</sup> Dual/Quad Core<sup>™</sup> Xeon<sup>®</sup> processors with LGA 1366 package
- Delivers up to 32 GB DDR3 maximum ECC registered memory assured the computer reliability and benefited the data swapping process
- Adopt XGI Z11 graphic engine offers solid 2D performance
- Support VGA display on bracket and optional 2nd VGA or DVI-D interface
- Rich & powerful I/O expansion covers PCIE Gen 2.0 for one PCI Express x16 or two PCI Express x 8 or four PCI Express x4
- High speed dual Gigabit Ethernet based on PCI Express x1 interface provides Wake-On-LAN function
- Rich I/O connectors such as FDD, two Gigabit Ethernet, serial ports, parallel port, USB 2.0, and SATA ports

### **ORDERING GUIDE**

AB1-3479	ROBO-8120VG2R PICMG 1.3(PCI-E+PCI).LGA1366.Jasper Forest Single/Dual/Quad Core processors.SHB.w/VGA/ Dual GbE

## **PACKING LIST**

Standard	B6900960 cable kit for 1 serial + 1 parallel port w/ bracket
	B6900074 FDD Cable
	B6901990 SATA II cable
	B8981980 PICMG SBC Handling and Installation Notice
	B3751380 Installation CD
	B8303921 single processor cooler
Optional	B6901970 two USB port cable w/bracket
	B6901610 one DVI-D + one VGA cable with bracket



### CENEDAI

GENERAL	
Processor	Intel® Single/Dual/Quad Core™ Xeon®C5500/C3500 series processor up to 2.53 GHz (23~85W) with 2~8MB LLC Cache in LGA-1366 package (Only support single processor on C3500 series) Intel® QPI transfer rates: 4.8 and 5.87 GT/s (depends on CPU sku) DMI x4 Link: 2.5GT/s Support Intel® Hyper-Threading, Virtualization Technology (VT-x), and QuickPath Technology
Chipset	- Intel® 3420 (4.8W) - Support Intel® Rapid Storage Technology
BIOS	AMI UEFI BIOS
Memory	Support up to 32GB DDR3 1333/1066/800 SDRAM on four 240-pin DIMM sockets, support ECC, rigistered
Storage Devices	- 6x SATA 300 drivers(Dual SATA ports via Backplane) - RAID 0,1,5,10 - 1x FDD channel on board box header
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>1x PCI Express x16 Gen1 up to 2.5 GT/s</li> <li>2x PCI Express x8 Gen1 up to 2.5 GT/s</li> <li>4x PCI Express x4 Gen1 up to 2.5 GT/s</li> <li>4x PCI devices at 32 bit 33 MHz</li> <li>(Optional for PCI Express Gen 2 support)</li> </ul>

## **I/O INTERFACE**

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Super I/O	Winbond W83627DHG
Audio	NA
Ethernet	<ul> <li>Intel® WG82574L gigabit ethernet controller x2</li> <li>Dual RJ-45 connector with two LED indicators on bracket</li> </ul>
Serial Port	- 1x RS232 port on rear IO - 1x Selectable RS232/422/485 on board box header
USB	<ul> <li>- 12x USB 2.0 ports (Four ports through backplane)</li> <li>- 480 Mb/s bus comprehends the high-speed / full-speed / low-speed data ranges</li> </ul>
Keyboard & Mouse	2x USB 2.0 ports on bracket dedicated to keyboard & mouse
GPIO	On board programmable 8-bit Digital I/Os
Others	1x parallel port on board box header

DISPLAY	
Graphic Controller	XGI Z11
Display Interface	<ul> <li>VGA on bracket: Resolution up to 1600x1200 @ 16M colours 70Hz</li> <li>Optional second VGA or DVI-D display interface</li> </ul>

Mechanical & Environment		
Dimension	- 338.5mm(L) x 126.39mm(W) / 13.33"(L) x 4.98"(W) - PCB: 12 layers	
Power Supply	- Typical: +12V@6.96A;+5V@0.32A - Support ATX mode	
Invironment	<ul> <li>Operation Temperature: 0~60 °C (For 80W CPU limitation)</li> <li>Storage Temperature: -20~80 °C</li> <li>Relative Humidity: 5~90%, non-condensing</li> </ul>	
ITBF	Over 100,000 hours at 40°C	