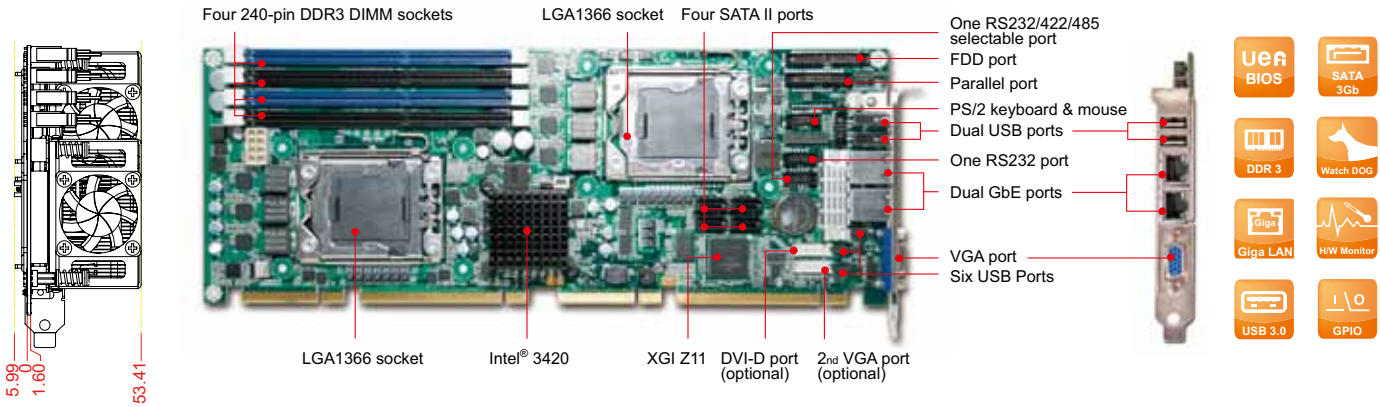


# ROBO-8120VG2R

Intel® Xeon® C5500/C3500 series processor based on PICMG 1.3 SHB with DDR3 SDRAM, VGA, Dual Gigabit Ethernet, Audio and USB



ROBO-8120VG2R is based on Intel® 3420 chipset and dual Xeon® 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

- Supports Intel® Dual/Quad Core™ Xeon® processors with LGA1366 package
- Delivers up to 32GB DDR3 maximum ECC registered memory assured the computer reliability and benefited the data swapping process
- Adopts the XGI Z11 graphics engine and offers solid 2D performance
- Supports 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 x8 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

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

<b>Standard</b>	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
<b>Optional</b>	B6901970 two USB port cable w/bracket B6901610 one DVI-D + one VGA cable with bracket

## GENERAL

<b>Processor</b>	- Intel® Single/Dual/Quad Core™ Xeon® C5500/C3500 series processor up to 2.53 GHz (23~85W) with 2~8MB LLC Cache in LGA1366 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: 2.5 GT/s - Supports Intel® Hyper-Threading, Virtualization Technology (VT-x), and QuickPath Technology
<b>Chipset</b>	- Intel® 3420 (4.8W) - Supports Intel® Rapid Storage Technology
<b>BIOS</b>	AMI UEFI BIOS
<b>Memory</b>	Supports up to 32GB DDR3 1333/1066/800 SDRAM on four 240-pin DIMM sockets, support ECC, registered
<b>Storage Devices</b>	- 6x SATA II drivers (Dual SATA ports via Backplane) - RAID 0,1,5,10 - 1x FDD channel on board box header
<b>Watchdog Timer</b>	Programmable via S/W from 0.5 sec. to 254.5 sec.
<b>Hardware Monitoring</b>	System monitor (Voltage, Fan speed and Temperature)
<b>Expansion Interface</b>	- 1x PCI Express x16 Gen 1 up to 2.5 GT/s - 2x PCI Express x8 Gen 1 up to 2.5 GT/s - 4x PCI Express x4 Gen 1 up to 2.5 GT/s - 4x PCI devices at 32-bit 33 MHz (Optional for PCI Express Gen 2 support)

## I/O INTERFACE

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

## DISPLAY

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

## Mechanical & Environment

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

