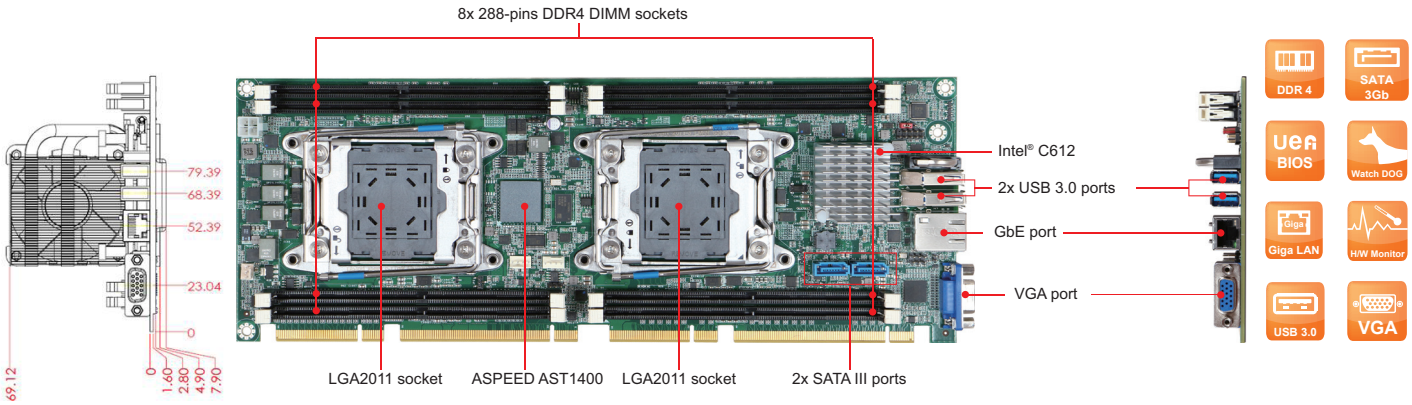
# ROBO-8122VG2R

**Intel® Xeon® E5-2600Lv4 series processor based on PICMG 1.3 SHB with DDR4 REG SDRAM, VGA, Dual Gigabit Ethernet, and SATA/USB**




ROBO-8122VG2R is based on Intel® C612 chipset and dual Xeon® processors. It's a server grade SHB. Build with high conputing power and PCI express expension support, it's suitable for Military, industrial automation, networking, Medical and Digital Signage applications.

## FEATURES

- Support Intel® 8C ~ 14C Xeon® processors with LGA 2011 package
- Delivers up to 256GB DDR4 Registered memory assured the computer reliability and benefited the data swapping process
- Adopt ASPEDD AST1400 graphic engine offers solid 2D performance by VGA port
- High speed Gigabit Ethernet based on PCI express x 1 interface
- Flexible PCI Express configuration on backplane up to total 36 lanes

## ORDERING GUIDE

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|---|---|
| AB1-3D44 | **(R).ROBO-8122VG2R**<br>PICMG 1.3(PCI-E).LGA2011. Dual Intel® Haswell-EP processor with eight DDR4 REG DIMM sockets.SHB.w/VGA/GbE/SATA III/USB 3.0 ports |

## PACKING LIST

| | |
|---|---|
| **Standard** | B6902932 SATA III cable |
| | B8981980 PICMG SBC Handling and Installation Notice |
| | B8983670 Installation CD |
| **Optional** | B9971490 CPU cooler for single processor(for 4U system) |
| | B9971510 CPU cooler for single processor(for 2U system) |

## GENERAL

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|---|---|
| Processor | - Intel® 8C~14C Xeon® E5-2600Lv3/v4 series processor (50W ~ 75W) with 15~30MB Cache in LGA2011 package (support up to 75W per CPU)<br>- Intel® QPI transfer rates: 6.4, 8 and 9.6GT/s (depends on CPU socket)<br>- DMI x4 Link: 5 GT/s<br>- Supports Intel® Hyper-Threading, Virtualization Technology (VT-x), and QuickPath Technology |
| Chipset | Intel® C612 PCH |
| BIOS | AMI UEFI BIOS (SPI ROM) |
| Memory | - Supports up to 256GB DDR4 2133/1866 SDRAM on Eight 288-pin DIMM sockets<br>- Supports Register |
| Storage Devices | - 4x SATA III drives (Dual ports via Backplane)<br>- RAID 0, 1 |
| 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 per CPU: 1x PCIe x16 or 2x PCIe x8 or 1x PCIe x8 + 2x PCIe x4 by different bios support (Gen3 up to 8.0 GT/s)<br>- From PCH: 1x PCIe x4 or 4x PCIe x1 by different bios support (Gen 3 up to 8.0 GT/s) |
| Non-standard Gold Finger definition | - Section A/B: PICMG 1.3 Standard PCI Express definition, total 20 lanes<br>- Section D: PCIe x16 from 2nd CPU (Dedicated backplane for ROBO-8122VG2R) |

## I/O INTERFACE

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|---|---|
| Super I/O | ITE IT8772E |
| Audio | N/A |
| Ethernet | - On-board Intel® WGI217LM + WGI210AT Gigabit Ethernet controller<br>- Dual 10BASE-T / 100BASE-TX / 1000BASE-T Ethernet<br>- PCI Express x1 interface based on Gigabit Ethernet<br>- Single RJ-45 connector with two LED indicators for WGI217LM on bracket, the other port route to Golden finger section C on BP for WGI210AT |
| Serial port | 2x Tx/Rx signal route to Golden finger section C on BP (4 pins) |
| USB | - 4x USB 2.0 ports ( through backplane)<br>- 480Mb/s bus capable of high-speed/full-speed/low-speed data ranges<br>- 2x USB 3.0 ports on bracket<br>- 5Gbps bus capable of high-speed/ full-speed/low-speed data ranges |
| Keyboard & Mouse | 2x USB 3.0 ports on bracket dedicated to keyboard & mouse |
| GPIO | N/A |

## DISPLAY

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|---|---|
| Graphic Controller | ASPEED AST1400 |
| Display Interface | CRT on bracket:up to 1920x1200@60Hz |

## Mechanical & Environment

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|---|---|
| Dimension | 338.5mm(L) x 126.39mm(W), 13.33"(L) x 4.98"(W) |
| Power Supply | Typical: +12V, +5V<br>-Support ATX mode |
| Environment | Operatin Temperature:0°C ~ 50°C(for 75W CPU limitation)<br>Storage Temperature:-20°C ~ 80°C<br>Relative Humidity:5~90%,non-condensing<br>Thermal Solution depends on chassis design and system fan selection |
| Certification | CE,FCC Class A |
| MTBF | Over 100,000 hours at 40°C |