ROBO-6912VG2AR is based on Intel® C246 or Q370 chipset to support Intel® 8th/9th Gen processors. Built with flexible PCI express expansions, ROBO-6912VG2AR is suitable for Medical, Industrial Automation, and Digital Signage applications.

**FEATURES**
- Intel® 8th/9th Gen Coffee Lake-S processor in LGA1151
- Delivers up to 64GB DDR4 2666 MT/s ECC SO-DIMM on two sockets
- High speed dual Gigabit Ethernet and high bandwidth I/O interface
- Rich I/O connections such as serial port, USB ports and SATA ports, supports RAID 0, 1, 5
- Supports on board TPM 2.0

**ORDERING GUIDE**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB1-3J42Z</td>
<td>(R)ROBO-6912VG2AR PICMG 1.3(PCI-E+PCI), LGA1151, C246 PCH, Intel® Xeon® E processors. SHB, w/ DVI-D miniDP™/2Dual GbE/Audio/USB 3.1/COM</td>
</tr>
<tr>
<td>AB1-3J43Z</td>
<td>(R)ROBO-6912VG2AR-Q370 PICMG 1.3(PCI-E+PCI), LGA1151, Q370 PCH, Intel® Core/Pentium/Celeron processors. SHB, w/DVI-D miniDP™/2Dual GbE/Audio/USB 3.1/COM</td>
</tr>
</tbody>
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**PACKING LIST**

- Standard: B8983650 Installation CD
- B8981980 PICMG SBC Handling and Installation Notice
- B6902022 SATA III cable

Optional:
- B8903090 USB 3.0 cable with bracket
- B8902230 USB port cable with bracket

**GENERAL**

- **Processor**: Intel® Xeon® E series / 8th/9th Gen Coffee Lake™/Pentium®/Celeron® processors up to 3.4 GHz (35-65W) with Cache in LGA 1151 package
- **Chipset**: Intel® C246 / Q370 PCH
- **Memory**:
  - AMI UEFI BIOS (SPI ROM)
  - Supports up to 64GB DDR4-2666 MT/s SDRAM on two 260-pin SO-DIMM sockets
  - Supports ECC
- **Storage Devices**: 2 x SATA III ports
- **Watchdog Timer**: Programmable via S/W from 0.5 sec. to 255 sec
- **Hardware Monitoring**: System monitor (Voltage, Fan Speed and Temperature)

**I/O INTERFACE**

- **Expansion Interface**:
  - 1x PCIe x16 or 2x PCIe x8
  - 1x PCIe x4 or 4x PCIe x1 by jumper setting or BIOS (Gen 3 up to 8.0 GT/s)
- **Super I/O (Embedded Controller)**: IT5121E-I
- **Audio**: Realtek ALC888S-V92-GR HDA codec, 7.1 channels
  - 1x on-board audio pin header
- **Ethernet**: Intel® WGI219LM + WGI210AT Gigabit Ethernet controller
  - Dual 10BASE-T / 100BASE-TX / 1000BASE-T Ethernet
  - Dual RJ-45 connector with two LED indicators
- **Serial Port**: 1x RS-232/422/485 selectable by BIOS
- **USB**: 4x USB 3.0 ports
  - 2x USB 3.1 Gen 2 ports on bracket
- **Keyboard & Mouse**: 2x USB3.1 ports on bracket dedicated to keyboard & mouse
- **GPIO**: N/A

**DISPLAY**

- **Graphic Controller**: Intel® Coffee-Lake-S processors integrated graphics engine
- **Display Interface**: DVI-D on board, resolution up to 1920x1080 @ 60Hz

**Mechanical & Environment**

- **Dimension**: 167.64mm(L) x 126.39mm(W), 6.6” (L) x 4.98”(W)
- **Power Supply**: Typical: +12V, +5V
- **Environment**:
  - Operation Temperature: 0°C to 60°C
  - Storage Temperature: -20°C to 80°C
  - Relative Humidity: 5% to 95%, non-condensing
- **MTBF**: Over 100,000 hours at 40°C