# **ROBO-8114VG2AR-Q370**

Intel<sup>®</sup> Core™ i3/i5/i7 Pentium<sup>®</sup>/ Celeron<sup>®</sup> processor based on PICMG 1.3 SHB with DDR4 SDRAM, HDMI, DVI-I, Dual Gigabit Ethernet, Audio and USB.



ROBO-8114VG2AR-Q370 is based on Intel<sup>®</sup> Q370 chipset and desktop processors. Built with flexible PCI express expansions, ROBO-8114VG2AR-Q370 is suitable for Medical, Industrial automation, and Digital Signage application.

## **FEATURES**

- Supports Intel Core<sup>™</sup> i3/i5/i7/ Pentium / Celeron processors in LGA 1151 package
- Delivers up to 128GB maximum DDR4 2133 Non-ECC SO-DIMM on four sockets 10.
- Supports mutiple display by DVI-I(DVID+VGA) н. and HDMI
- High speed dual Gigabit Ethernet based on PCI ×. express x 1, high bandwidth I/O interface
- Rich I/O connections such as four serials ports, USB 3.2(Gen1)/3.2(Gen2), SATA III ports
- Support on board TPM2.0

## **PACKING LIST**

Standard	TBD Installation CD
	B6902932 SATA III cable
	B8981980 PICMG SBC Handling and Installation Notice
	B6902350 dual head COM port cable with bracket
	B6903351 DVI-D + VGA cable
Optional	B6902980 PS/2 Keyboard / Mouse Cable with bracket

#### GENERA

<ul> <li>-Intel<sup>®</sup> Core<sup>™</sup> i3/i5/i7/ Pentium<sup>®</sup>/ Celeron<sup>®</sup> processors up to 3.6 GHz (35~95W) in LGA-1151 package</li> <li>- DMI x4 Link: 5.0GT/s</li> <li>- Support Intel<sup>®</sup> Turbo Boost, Hyper-Threading, Virtualization, Thermal Monitoring, Trusted Execution and Speed Step Technology (depends on CPU sku)</li> </ul>
Intel <sup>®</sup> Q370 PCH
AMI UEFI BIOS (SPI ROM)
- Supports up to 128GB DDR4 2133 SDRAM on four 260-pin SO-DIMM sockets - Supports non-ECC
<ul> <li>- 5x SATAIII drives (Dual ports via Backplane)</li> <li>- Supports RAID 0, 1, 5, 10</li> <li>- 1x M.2 Type M 2280 (on bottom side)</li> </ul>
Programmable via S/W from 0.5 sec. to 255 sec
System monitor(Voltage, Fan Speed and Temperature)
Programmable via S/W from 0.5 sec. to 255 sec

## I/O INTERFACE

Expansion Interface	<ul> <li>From CPU: 1x PCIe x16 or 2x PCIe x8 or 1x PCIe x8 + 2x PCIe x4 by jumper setting (Gen3 up to 8.0 GT/s)</li> <li>From PCH: 1x PCIe x4 or 4x PCIe x1 by different bios support (Gen 3 up to 8.0 GT/s)</li> <li>4x PCI devices at 32bit 33MHz</li> </ul>
Super I/O(Embedded Controller)	ITE IT5121E-I-128
Audio	<ul> <li>Intel<sup>®</sup> PCH built-in High Definition Audio up to 192-kHz 32-bit</li> <li>Realtek ALC886 HDA codec, 7.1 channels</li> <li>one on board audio pin header</li> </ul>
Ethernet	<ul> <li>Intel<sup>®</sup> WGI219LM + WGI225LM Gigabit Ethernet controller</li> <li>Dual 10BASE-T / 100BASE-TX / 1000BASE-T Ethernet</li> <li>PCI Express x1 interface based on Gigabit Ethernet</li> <li>Dual RJ-45 connectors with two LED indicators</li> </ul>
Serial Port	<ul> <li>2x RS-232 ports</li> <li>2x RS-232/422/485 ports selectable</li> <li>LPC to COM port IC: Fintek F81216DG</li> </ul>
USB	<ul> <li>- 4x USB 2.0 ports (through backplane)</li> <li>480Mb/s bus capable of high-speed/full-speed/low-speed data ranges</li> <li>- 8x USB 3.2(Gen2) ports on board</li> <li>10Gbps bus capable of high-speed/full-speed/low-speed data ranges</li> <li>- 2x USB 3.2(Gen1) ports on bracket</li> <li>5Gbps bus capable of high-speed/ full-speed/low-speed data ranges</li> </ul>
Keynoard & Mouse	- 1x 10 pin box header for external PS/2 KB & MS
GPIO	On board programmable 8-bit Digital I/Os

### DISPLAY

Graphic Controller - Intel<sup>®</sup> Core i3<sup>™</sup> processors integrated graphics engine - Provides improved 3D multimedia capabilities including Microsoft DirectX 12, OCL 2.x and OpenGL 4.3/4.4

#### **Mechanical & Environment** Display Interface Support inde ndent triple display b

	Display interface	- VGA on bracket: Resolution up to 1920x1200 @ 60Hz - DVI-D on bracket: up to 1920x1200 @ 60Hz (VGA + DVI-D on bracket by DVI-I port) - HDMI on board: up to 4096x2160 @ 24Hz	
	Dimension	- 338.5mm(L) x 126.39mm(W), 13.33"(L) x 4.98"(W) - PCB: 8 layers	
Power Supply		- Typical: +12V, +5V - Support ATX mode	
	Environment	- Operation Temperature: 0~60°C - Storage Temperature: -20~80°C - Relative Humidity: 5 95 - on condensing	
1	hE	Rotts (Intel Alliance CC IC	

DVI-