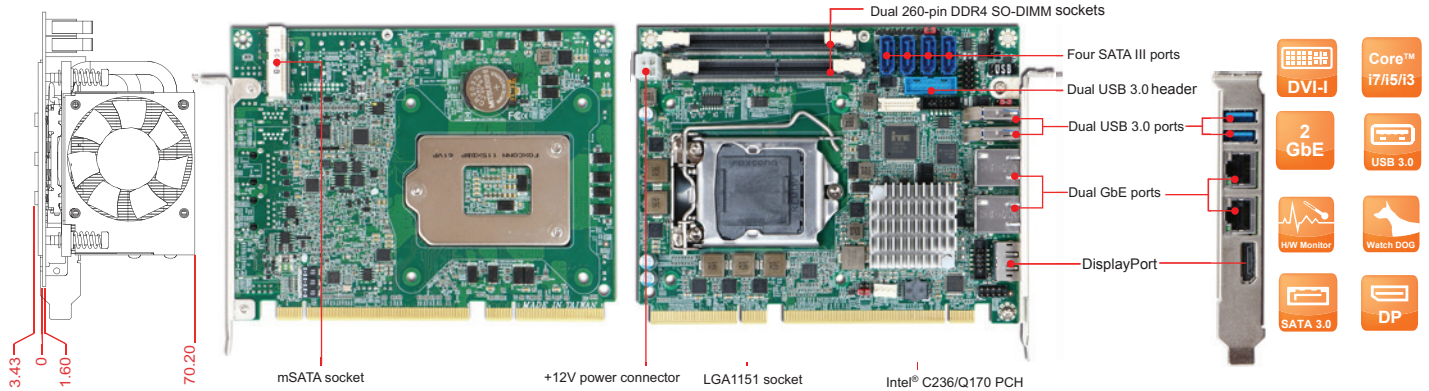# ROBO-6911VG2AR-KBL

Intel® Xeon®/ 7th Gen Core™ Processor Based PICMG® 1.3 Half-Size SHB with DDR4 SDRAM, DisplayPort, DVI-I, Dual GbE LAN, mSATA, Audio, USB

Dual 260-pin DDR4 SO-DIMM sockets
Four SATA III ports
Dual USB 3.0 header
Dual USB 3.0 ports
Dual GbE ports
DisplayPort

mSATA socket
+12V power connector
LGA1151 socket
Intel® C236/Q170 PCH

DVI-I | Core™ i7/i5/i3
2 GbE | USB 3.0
H/W Monitor | Watch DOG
SATA 3.0 | DP

ROBO-6911VG2AR-KBL is based on Intel® C236/Q170 chipset to support both workstation and desktop processors. With flexible PCI Express configuration, it is suitable for medical, industrial automation, and digital signage applications.

FEATURES

- Intel® Xeon® and 7th Gen Core™ i3/i5/i7 processors
- DDR4 2133/1866 MHz ECC/non-ECC memory, 2x 260-pin SODIMM sockets, up to 32 GB
- Triple independent display by DVI-D, DisplayPort, and VGA
- Dual Gigabit Ethernet
- 4x SATA III, support RAID 0, 1, 5, 10

ORDERING GUIDE

ROBO-6911VG2AR-KBL	PICMG® 1.3 hafl-size SHB based on Intel® Xeon® E3-1275 v6 and 7th Gen Core™ i3 processor and Intel C236 chipset
ROBO-6911VG2AR-Q170-KBL	PICMG® 1.3 half-size SHB based on 7th Gen Intel® Core™ i5/i7 processor and Intel® Q170 chipset

OPTIONAL ITEMS

B6903090	USB 3.0 cable with bracket
AB9-2066	PA-M1AU multimedia kit (Mic-in, Line-in, Line-out, 2x USB 2.0)

PACKING LIST

	1x ROBO-6911-KBL Half-Size SHB
B8981980	1x SHB handling and installation notice
B8983650	1x driver CD
B6902932	1x SATA III cable

General

Processor	C236: Intel® Xeon® E3-1275 v6 series / Core™ i3 processors up to 3.6 GHz (35~80W) in LGA1151 package Q170: Intel® Core™ i5/i7 processors up to 3.4 GHz (35~65W) in LGA1151 package Intel® Turbo Boost, Hyper-Threading, Virtualization, Thermal Monitoring, Trusted Execution, and SpeedStep Technology (depend on processor SKU)
Chipset	Intel® C236 or Q170
BIOS	AMI UEFI BIOS (SPI ROM)
Memory	Dual-channel DDR4 2133/1866 MHz memory (C236: ECC; Q170: non-ECC) 2x 260-pin SODIMM sockets, up to 32 GB
Storage Devices	4x SATA III ports 1x mSATA socket
Watchdog Timer	Programmable 0.5 to 254.5 seconds interval
Hardware Monitoring	System monitor (voltage, fan speed, and temperature)
Expansion Interface	From CPU (Xeon®/Core™ i3): - 1x PCIe x16 or 2x PCIe x8 or 1x PCIe x8 + 2x PCIe x4 (Gen3, by jumper setting) From CPU (Core™ i5/i7): - 1x PCIe x16 (Gen3) From chipset: - 1x PCIe x4 or 4x PCIe x1 (Gen3, by different BIOS support)

I/O Interface

Super I/O	ITE IT8772E
Audio	Intel® High Definition Audio interface Realtek® ALC886-GR High Definition Audio 1x audio pin header (2.54 mm pitch)
Ethernet	2x Gigabit Ethernet (Intel® I219-LM and Intel® I210-AT) 2x RJ45 connectors with LED on rear bracket
Serial Port	1x RS-232/422/485 on pin header (selectable by BIOS; 2.00 mm pitch)
USB	2x USB 3.0 on rear bracket 2x USB 3.0 on pin header (2.00 mm pitch) 2x USB 2.0 on pin header (2.54 mm pitch)
Keyboard & Mouse	N/A
GPIO	8-bit

Display

Graphic Controller	Integrated Intel® HD graphics Supports DirectX 11/12, OpenGL 4.3/4.4, ES 2.0, OpenCL 2.x
Display Interface	Triple independent display by: 1x DisplayPort on rear bracket, resolution up to 4096 x 2304 @ 60Hz 1x VGA on pin header*, resolution up to 1920 x 1200 @ 60Hz 1x DVI-D on pin header*, resolution up to 1920 x 1200 @ 60Hz *optional cable required

Mechanical & Environmental

Dimension	167.6 x 126.4 mm (6.6" x 5.0")
Power Supply	Typical: +12V, +5V Support ATX mode
Environment	Operating temperature: 0°C to 60°C Storage temperature: -20°C to 80°C Relative humidity: 5~90%, non-condensing
MTBF	Over 100,000 hours at 40°C

All product specifications are subject to change without notice.