ROBO-8110VG2AR
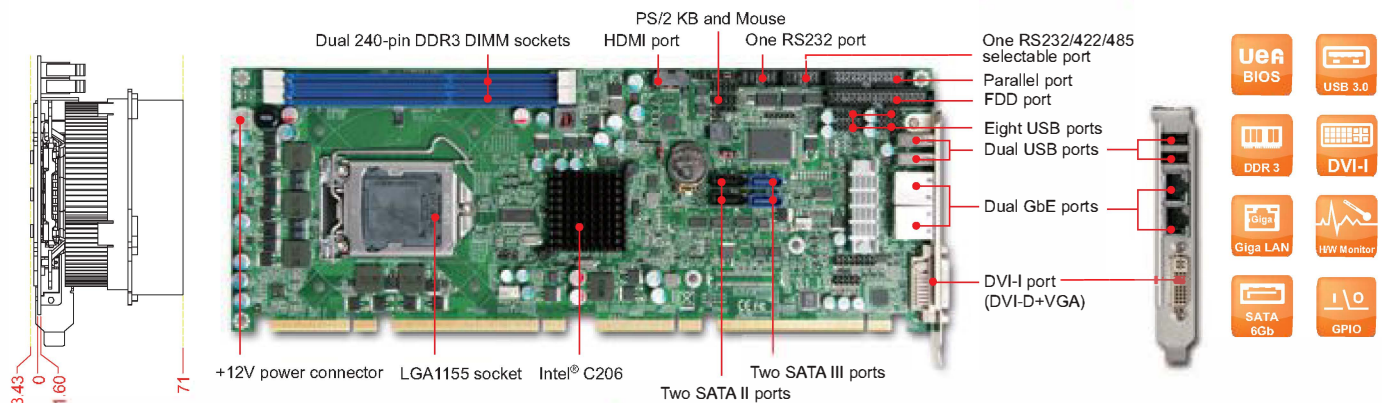
Intel® Xeon® and Core™ processor based on PICMG 1.3 SHB with DDR3 SDRAM, VGA, Dual Gigabit Ethernet, Audio and USB

Dual 240-pin DDR3 DIMM sockets
PS/2 KB and Mouse
HDMI port
One RS232 port
One RS232/422/485 selectable port
Parallel port
FDD port
Eight USB ports
Dual USB ports
Dual GbE ports
DVI-I port (DVI-D+VGA)
+12V power connector
LGA1155 socket
Intel® C206
Two SATA III ports
Two SATA II ports

UEFI BIOS | USB 3.0 | DDR 3 | DVI-I | Giga LAN | H/W Monitor | SATA 6Gb | GPIO

ROBO-8110VG2AR is based upon the Intel® C206 chipset and workstation processor sku like Xeon® and Core™ i3. Built with flexible PCI express expansion, it's suitable for medical, industrial automation, and Digital Signage applications.

FEATURES

- Supports Intel® Xeon® E3-1200 series and Core™ i3 processors in LGA1155 package

- Delivers up to 16GB maximum DDR3 1333/1066 ECC SDRAM on two DIMM sockets

- Supports multiple display with DVI-I (DVI-D+ VGA) and HDMI

- Supports iAMT 7.0 on Xeon® E3-1200 series processors

- High speed dual Gigabit Ethernet based on PCI Express x1, high bandwidth I/O interface

- Rich I/O connections such as FDD, two Gigabit Ethernet, serial ports, parallel port, USB 2.0

- On-board two SATA II and two SATA III ports support RAID 0,1,5,10

ORDERING GUIDE

| AB1-3600 | ROBO-8110VG2AR |
| | PICMG 1.3(PCI-E+PCI). LGA1155.Core 2 Quad.SHB.w/VGA/Dual GbE/Audio |

PACKING LIST

Standard	B6901990 SATA II cable
	B6902930 SATA III cable (Black)
	B690021S cable kit for FDD+PRN with bracket
	B6903240 Dual head COM port cable with bracket
	B6903350 DVI-D + VGA cable
	B8981980 PICMG SBC Handling and Installation Notice
	B3751400 Installation CD
Optional	B6902980 PS/2 Keyboard/Mouse Cable with bracket
	B6902230 USB port cable with bracket
	AB9-2066 PA-M1AU Multiple Media kit

GENERAL

Processor	- Intel® Core™ i3 and Xeon® E3-1200 series processor up to 3.4 GHz (65~95W) with (3~8MB) Cache in LGA1155 package - DMI x4 Link: 5.0 GT/s - Supports Intel® Turbo Boost , Hyper-Threading, Virtualization, Thermal Monitoring,Trusted Execution and SpeedStep Technology (depends on CPU sku)
Chipset	Intel® C206 PCH (6.6W)
BIOS	AMI UEFI BIOS
Memory	- Supports up to 16GB DDR3 1066/1333 SDRAM on two 240-pin ECC DIMM sockets
Storage Devices	- 2x SATA III drives and 4x SATA II drives (Dual SATA II ports via Backplane) - RAID 0,1,5,10 - 1x FDD channel on board box header
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 CPU (Xeon/Core i3): 1x PCI Express x16 or 2x PCI Express x8 or 1x PCI Express x8 + 2x PCI Express x4 by jumper setting - From PCH: 1x PCI Express x4 or 4x PCI Express x1 by different bios support - 4x PCI devices at 32 bit 33 MHz

I/O INTERFACE

Super I/O	ITE IT8728F
Audio	- Intel® BD82C206 PCH built-in High Definition Audio up to 192-kHz 32-bit - Realtek ALC662-GR HDA codec, 5.1 channels
Ethernet	- Intel® 82579LM+82574L gigabit ethernet controller - Dual RJ-45 connector with two LED indicators
Serial Port	- 1x RS232 on bracket - 1x Selectable RS232/422/485 on bracket
USB	- 14x USB 2.0 ports (Four ports through backplane) - 480 Mb/s bus comprehends the high-speed/full-speed/low-speed data ranges
Keyboard & Mouse	2x USB 2.0 ports on bracket dedicated to keyboard & mouse
GPIO	On board programmable 8-bit Digital I/Os
Others	1x parallel port on board box header

DISPLAY

| Graphic Controller | - Intel® Xeon® and Core™ i3 processors integrated graphic engine P3000
- Provided improved 3D multimedia capabilities including Microsoft DirectX 10.1, Shader Model 4.0, MPEG-2 and OpenGL 3.0'' |
| Display Interface | - VGA on bracket: Resolution up to 2048x1536 @ 75Hz
- DVI-D: up to 1920x1200 @60Hz
- HDMI: up to 1920x1200 @60Hz
  (VGA + DVI-D on bracket by DVI-I port) |

Mechanical & Environment

Dimension	- 338.5(L) x 126.39(W)mm; 13.33''(L) x 4.98''(W) - PCB: 8 layers
Power Supply	- Typical: +12V@4.85A; +5V@3.4A - Supports ATX mode
Environment	- Operation Temperature: 0~60 °C (with better performance on 50 °C) - Storage Temperature: -20~80 °C - Relative Humidity: 5~90%, non-condensing
MTBF	Over 100,000 hours at 40°C