ROBO-8780VG2A
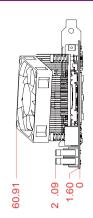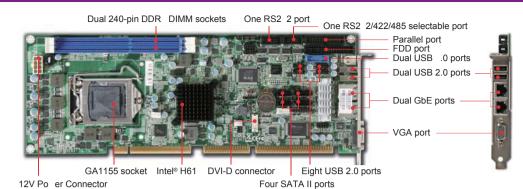
Intel® Core™ i7/i5/i3 processor based on PICMG 1.0 SBC with DDR3 SDRAM, VGA, Dual Gigabit Ethernet, Audio and USB

Dual 240-pin DDR | DIMM sockets | One RS2 2 port | One RS2 2/422/485 selectable port
Parallel port
FDD port
Dual USB .0 ports
Dual USB 2.0 ports
Dual GbE ports
VGA port

GA1155 socket | Intel® H61 | DVI-D connector | Eight USB 2.0 ports
12V Po er Connector
Four SATA II ports

DDR 3 | Watch DOG
Giga LAN | H/W Monitor
SATA 3Gb | GPIO
USB 3.0 | VGA

ROBO-8780VG2A is based on Intel® H61 chipset and Intel® Core™ i3/i5/i7 processors. It supports VGA and on board DVI-D display. It's suitable for Medical, Industrial automation, and digital signage applications.

FEATURES

- Supports Intel® Core™ i7/i5/i3 processors in LGA1155 package

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

- Supports dual display by VGA and on board DVI-D

- Supports two USB 3.0 ports on board

- High speed Intel® Dual Gigabit Ethernet 82579LM and 82583V based on PCI Express x1, high bandwidth I/O interface

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

- On-board four SATA II ports and ten USB 2.0 ports (dual ports on bracket)

ORDERING GUIDE

| AB1-3798 | **ROBO-8780VG2A** |
| | PICMG 1.0(PCI+ISA).LGA1155.SBC.up to Core™ i7 processors. w/VGA/Dual GbE/Audio/USB 3.0 |

PACKING LIST

Standard	B6901990 SATA II cable
	B690021S cable kit for FDD+PRN with bracket
	B6900270 dual head COM port cable with bracket
	B8981980 PICMG SBC Handling and Installation Notice
	B3751540 Installation CD
Optional	B6902980 PS/2 Keyboard/Mouse Cable with bracket
	B6903090 USB 3.0 port cable with bracket
	AB9-2066 PA-M1AU Multiple Media kit

GENERAL

Processor	- Intel® Core™ i3/i5/i7 processor up to 3.4GHz (65~95W) with (3~8MB) Cache in LGA1155 package - DMI x4 Link: 5.0 GT/s
Chipset	Intel® BD82H61 PCH (6.1W)
BIOS	AMI EFI BIOS
Memory	- Supports up to 16GB DDR3 1333/1066 MT/s SDRAM on 2x 240-pin non-ECC DIMM sockets (dual channel)
Storage Devices	- 4x SATA support 3Gb/s data transfer rate on board - Supports 16-bit ISA via golden finger
Watchdog Timer	Programmable via S/W from 0.5 sec. to 255 min.
Hardware Monitoring	System monitor (fan, temperature, voltage)
Expansion Interface	4x PCI devices at 32-bit 33MHz

I/O INTERFACE

Super I/O	ITE IT8728F
Audio	- Intel® BD82H61 PCH built-in High Definition Audio up to 192-kHz 24-bit - Realtek ALC886-GR HDA codec
Ethernet	- Intel® 82579LM and Intel® 82583V dual gigabit ethernet controllers - Dual RJ-45 connectors with two LED indicators on bracket
Serial Port	- 1x RS232 on board box header - 1x RS232/422/485 on board box header - 1x internal FDD connector
USB	- 2x USB 3.0 ports on board (5Gbps) - 10x USB 2.0 ports on borad (480 Mb/s) - Capable of high-speed/full-speed/low-speed data ranges
Keyboard & Mouse	Two USB 2.0 on bracket dedicated to keyboard & mouse
GPIO	One 10-pin header for 8 programmable input/output
Others	- 1x parallel port on board box header

DISPLAY

| Graphic Controller | - Intel® Core™ i processors integrated Graphics Engine
- Providing delivers optimized 3D graphics performance and support for 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 on board: Resolution up to 1920x1200 @60Hz |

Mechanical & Environment

Dimension	- 338.5(L) x 122(W)mm; 13.33"(L) x 4.8"(W) - PCB: 8 layers
Power Supply	- +12V@4.6A; +5V@3.8A - Supports ATX mode
Environment	- Operation Temperature: 0°C to 60°C (with better performance on 50°C) - Storage Temperature: -20°C to 80°C - Relative Humidity: 5% to 90%, non-condensing
MTBF	Over 100,000 hours at 40°C