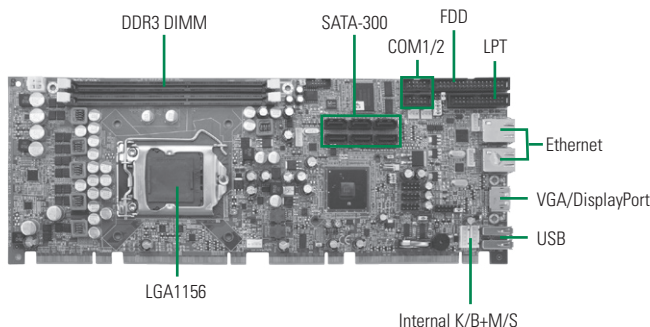


# SHB103

LGA1156 Socket Intel® Core™ i7/i5/i3 & Pentium® Processor PICMG 1.3 Full-size CPU Card with Intel® Q57, VGA, Dual LANs and Audio



## System

CPU	LGA1156 socket for Intel® Core™ i7/i5/i3 and Pentium® processor
System Memory	2 x 240-pin DIMM support DDR3-1066/1333 max. up to 8 GB
Chipset	Intel® Q57
BIOS	AMI UEFI BIOS
SSD	N/A
Watchdog Timer	255 levels, 1~255 sec.
Expansion Interface	1 x PCIe x16 graphics port supports for SDVO or PCIe x1 devices 4 x PCIe lanes support 1 PCIe x4 or 4 PCIe x1 I/O devices 4 x 32-bit PCI bus masters
Battery	Lithium 3V/220 mAh
Power Requirements	Intel® Core™ i5-660 @3.33 GHz, 1 GB DDR3 +5V_SBY @ 23mA, +3.3V @ 1.372A, +5V @ 1.548A, +12V (System) @ 158mA, -12V @ 28mA, +12V (CPU) @ 1.809A
Size	338 x 126 mm
Board Thickness	1.6 mm
Temperature	0° ~ +60°C (32°F ~ 140°F), operation
Relative Humidity	10% ~ 95% relative humidity, non-condensing

## I/O

MIO	1 x FDD 1 x PS/2 keyboard 1 x PS/2 mouse 1 x LPT; with SPP/EPP/ECP supported 1 x RS-232/422/485 (COM 1) 1 x RS-232 (COM2)
SATA	6 x SATA-300 with RAID 0/1/10/5
Hardware Monitoring	Detect CPU/system temperature, voltage and support Smart Fan control
Ethernet	1st port as 10/100/1000Mbps supports iAMT, Wake-on-LAN, RPL/PXE Boot ROM with Intel® 82578DM 2nd port as 10/100/1000Mbps supports Wake-on-LAN, RPL/PXE Boot ROM with Intel® 82583V
Audio	HD Codec audio as MIC-in/Line-in/Line-out/speaker-out with Realtek ALC662
USB	12 x USB 2.0
TPM	Infineon SLB9635 for trusted platform
SMBus	System Management Bus for advanced monitoring/control

## Features

- LGA1156 socket for Intel® Core™ i7/i5/i3 and Pentium® (G6950) processor
- 2 DDR3-1066/1333 DIMM support up to 8 GB memory capacity
- 6 SATA-300 with RAID 0, 1, 10 and 5
- Intel® AMT & TPM supported
- DisplayPort supported (optional)

## Display

Chipset	Intel® HD Graphics
Memory Size	Intel® DVMT 5.0 compliant
Display Interface	1 x VGA 1 x DisplayPort (optional)

## Packing List

Standard		
Quick installation guide, user's manual/utility CD, cable		
Cable		
Part Number	Description	Qty
59380502000E	COM + Print cable w/ bracket	1
593826A0000E	SATA signal cable 500mm	1

## Ordering Information

Standard	
SHB103VGGA (P/N: E38C103101)	LGA1156 socket Intel® Core™ i7/i5/i3 and Pentium® PICMG 1.3 full-size CPU card with VGA, 2 GbE LAN and audio
SHB103PGGA (P/N: E38C103100)	LGA1156 socket Intel® i7/i5/i3 and Pentium® PICMG 1.3 full-size CPU card with DisplayPort and 2 GbE LAN

Optional	
59384500100E	Audio cable w/ bracket, P=2.0 mm, L=450 mm
5938A808010E	2 x USB cable with bracket, P=2.54 mm, L=190 mm
593836A0030E	4-pin power cable to SATA x 2, L=150 mm
59380000290E	PS/2 keyboard and mouse cable with bracket
E9B900C000	LGA1156 cooler 4-pin H=61.4 mm
50761222000E	LGA1156 2U cooler 3-pin H=68.8 mm

\* Discrete graphic card is necessary for display if the chosen CPU doesn't have integrated graphics support.

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Accessories

Appendix