## MB-8508G2V

Intel® 7<sup>th</sup>/6<sup>th</sup> Generation Core® Processor Q170 Chipset Based Industrial ATX Motherboard with 12x USB/6x COM Ports/2x DP/DVI-D/VGA/ Dual Gigabit LAN







## **FEATURES**

- Intel® 7<sup>th</sup>/6<sup>th</sup> Generation Intel® Core® Processor in Socket 1151
- Four 288-pin DIMM sockets Dual-channel DDR4 1866/2133
   SDRAM. Max. up to 64GB memory
- Intel<sup>®</sup> Q170 Express chipset
- Intel® I210AT & I219LM on board for Dual GbE LAN
- Integrated Intel<sup>®</sup> HD Graphics with VGA/DVI/2x DP connectors
- Realtek® ALC887 5.1 Channel High Definition Audio chip onboard
- Multi I/O: 12 x USB, 6 x COM ports, 5 x SATA 3.0, 1x mSATA socket
- Expansion Slot: 1 PCIe x16, 6 PCI slots & 2x Mini PCie socket

Mechanical & Environment		
Form Factor	12" x 9.6" (307mm x 244mm)	
Operation temperature	0°C to 60°C (32° F to 140° F)	
Storage temperature	-20°C to 80°C (-68° F to 176° F)	
Relative humidity	10% to 90% (Non-Condensing)	
Ordering Informatio	n	
MB-8508G2V	Intel® 7 <sup>th</sup> /6 <sup>th</sup> Generation Core® Processor Q170 Chipset Based	
	Industrial ATY Motherhoard with 12y USR/6y COM	

Ports/2xDP/DVI-D/VGA/ Dual Gigabit LAN

## Introduction

Industrial Motherboard MB-8508G2V based on the Intel® Q170 Chipset, supports Intel®  $7^{th}/6^{th}$  Generation Core™ i7/5/3 Processor. Integrated with Intel® HD Integrated Gen 9 Graphic Controller, 6 x Com Port, 12 x USB, 5 x SATA 3.0 with RAID.

MB-8508G2V is ideal for developing high-performance systems for Factory Automation, Machine Automation, Test & Measurement Control & Machine Vision control.

**Specification** 

System

System	
Processor	LGA 1151 socket for:
	- 7 <sup>th</sup> /6 <sup>th</sup> generation Intel <sup>®</sup> Core <sup>®</sup> processors
	: Intel® Core™ i7-6700 Processor, 8M Cache, 3.4GHz (4.0GHz), 65W
	: Intel® Core™ i5-6500 Processor, 6M Cache, 3.2GHz (3.6GHz), 65W
	: Intel® Core™ i3-6100 Processor, 3M Cache, 3.7GHz, 47W
	: Intel® Pentium® Processor G4400, 3M Cache, 3.3GHz, 47W
	: Intel® Pentium® Processor G4400TE, 3M Cache, 2.4GHz, 35W
BIOS	• UEFI
System Memory	Four 288-pin DDR4 DIMM sockets
-,,	Supports up to 64GB non ECC RAM
	Dual Channel DDR4 1866/2133MHz
Chipset	Intel® Q170 Express Chipset
Video	Intel® HD Gen 9 Graphics
	<ul> <li>VGA display resolution up to 1920x1200 pixels with 24-bit color @</li> </ul>
	60Hz
	DVI-I supports up to 1920x1200 @ 60Hz resolution
	Intel® Clear Video Technology
	One VGA, One DVI-I, Dual DP
Ethernet	Intel® I210 PCI Express Gigabit Ethernet controller
	• Intel® I219LM with iAMT9.0 Gigabit Ethernet Phy
	Integrated 10/100/1000 transceiver
	Fully compliant with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab
On Board I/O	1x Connector for PS/2 Mouse/Keyboard
on Board 40	• 6 x Serial ports
	(2 x RS-232/422/485 ,0V/5V/12V, 4 x RS-232C , 0V/5V/12V)
	• 5 SATA 3.0 ports with data transfer rate up to 6Gb/s
	Supports RAID 0/1/5/10
	Supports Intel® Smart Response Technology
	Integrated Advanced Host Controller Interface (AHCI) controller
	• 12 USB: 6 USB 3.0, 6 USB 2.0 ports
	• 1 Parallel Port
	• 1x 8 bit GPIO
TPM function	• 1 x TPM module expansion (optional)
Watchdog Timer	• Programmable watchdog timer for 1~255 seconds.
CMOS	On-board RTC with 242 bytes of Battery-back CMOS RAM.
Audio	Realtek® ALC887 5.1-channel High Definition Audio
	Audio outputs: Mic-in/Center+Subwoofer, line-in/surround and
	line-out
Power	One 24pins power connector for system power.
	One ATX-12V 8-pins connector for CPU power.
	Support both AT and ATX mode.
Cooling	One CPU cooling FAN connector nearby CPU socket
Packing List	
item	Description / Quantity
Motherboard	MB-8508G2V / 1
Driver	DVD driver disk with Guide / 1
Shield	I/O shield / 1
SATA	Serial ATA data cables / 1
USB	Two USB port cable with bracket / 1
COM	COM port cables with bracket / 1
PS/2	PS2 Y-cable / 1

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