



SPEC SHEET

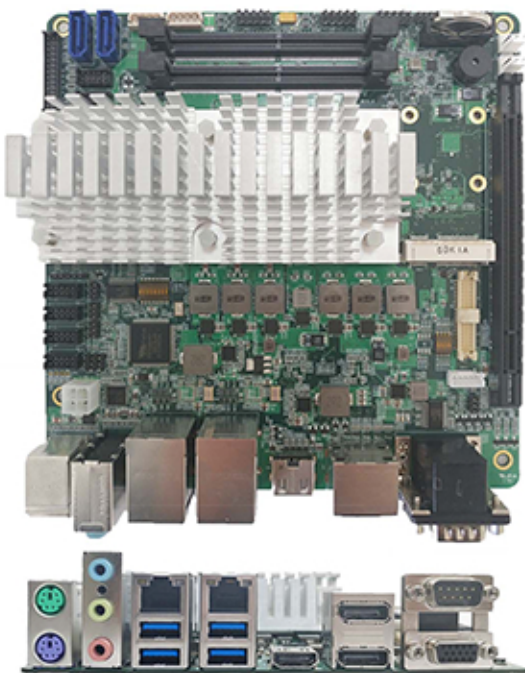
# SYNCUSTECH

## EMB - QM170

# Intel® Core™ i7/i5/i3 Skylake(6th) Processor Embedded mini-ITX Motherboard

## EMB - QM170

EMB-QM170 is a mini ITX board based on Intel's latest processor, the 6th generation Skylake, and is a low-powered fanless-type ODM motherboard. The product is engineered to overcome harsh shock and vibration, as well as other rugged environmental factors, and designed for long-term use in the industrial field, which allows it to be implemented in various applications such as AGV (automated guided vehicles), fanless industrial computers, portable compact server, and broad casting control system. Based on the Intel® QM170 chipset, EMB-QM170 supports DDR4 RAM up to 32GB. Installed with up to 3.5 GHz Quad-Core and 6th Generation Intel® Core™ i7/i5/i3/Celeron Processors, the board is capable of responding to high-performance demands.



### Features

- 6th Generation Intel® i7/i5/i3/Celeron processors[Skylake]
- 2x DDR4-2133 SO-DIMM sockets, supporting up to 32GB SDRAM
- 4xUSB 3.0, 4xUSB 2.0/1.1
- 6xRS232 (1x RS422/485 included)
- Display: DP, HDMI, VGA, LVDS
- 1 x PCIe(x16), 1x mPCIe / mSATA selectable
- 2 x GbE LAN

Module	Function	Descriptions
Processor System	CPU	Intel® Core™ i7-6820EQ, Intel® Core™ i7-6822EQ, Intel® Core™ i5-6440EQ, Intel® Core™ i5-6442EQ, Intel® Core™ i3-6100E, Intel® Core™ i3-6102E
	Core Number	Up to 4
	L3 Cache	Dependent upon Processor
	Chipset	Intel® QM170
	BIOS	AMI UEFI
	OS	Windows10, Windows8, Windows7, Linux



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Module	Function	Descriptions
Memory	Technology	2 x DDR4-2133 SO-DIMM
	Max. Capacity	Up to 32GB
	Socket	2 x 260-pin SO-DIMM
Graphics	Controller	Integrated Intel® HD Graphics 530
	VGA/DP/HDMI/LVDS	Analog RGB, eDP 1.3, DP1.2, HDMI 1.4 (1 x eDP, 3 x DDI ports)
	Graphics Engine	Support Direct 3D(DX)12, OpenGL4.3/4/4
Ethernet	Interface	PCI-e 10/100/1000 Mbps Ethernet
	Controller	RTL8111F PCIe GbE PHY
Audio	HD Codec	Realtek ALC269Q HD Audio codec
Storage	SATA III	2 x ports upto 600MB/s HDD transfer rate
Expansion	PCI-e x16	1 x PCIe x16 Genertaion 3.0
	mPCI-e x1	1 x mPCI-E / mSATA selectable
Rear I/O	Serial	1 x RS232
	VGA	1 x 15P VGA
	HDMI	1 x 19P Type A
	DisplayPort(DP)	2 x 20P Type A
	Ethernet	2 x RJ45
	USB	4 x USB 3.0 ports (w/ USB 2.0 ports)
	Audio	1 x audio Jack [Line-out,Line-in, Mic]
	PS2	1 x Keyboard & Mouse
Internal I/O	Serial	5 x RS232 Header ( 1 x 422/485 Connector : COM3 Selectable)
	USB	4 USB 2.0/1.1 Header pin Support
	LPT	1 x 26P LPT Header pin Support
	SATA	2 x SATA III connector (w/ 600MB/s)
	DIO(GPIO)	1 x 8-bit DIO(GPIO) Header pin Support
	LVDS	1 x 40P 18/24 LVDS connector
	TPM	1 x 19P TPM Header pin Support
	Fan	2 x System Fan connector
Power Requirements	Input Power	12VDC
Environment	Operating Temperature	0℃ ~ 60℃
	Operating Humidity	10% ~ 95%, non-condensing
Physical	Dimensions	Mini-ITX (170mm x 170mm)





This motherboard has been developed as a reference product and can be customized to your needs.

To ask for a customized solution, please contact our team at:

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