

SBC-4227-Q170

Industrial PICMG1.3 Series



SBC-4227-Q170

PRODUCT HIGHLIGHTS

- ▶ Intel 6th/7th Gen Intel® Core™ with Intel® Q170
- ▶ 2 DDR4 up to 32GB
- ▶ Supports multiple display by DVI-I (DVI-D+ VGA) and HDMI
- ▶ High speed dual Gigabit Ethernet based on PCIe x 1, high bandwidth I/O interface
- ▶ On-board six SATAIII ports
- ▶ Rich I/O connections such as four serials ports, USB 3.0/2.0, SATA III ports
- ▶ 10-Year Life Cycle Support Until Q2' 29



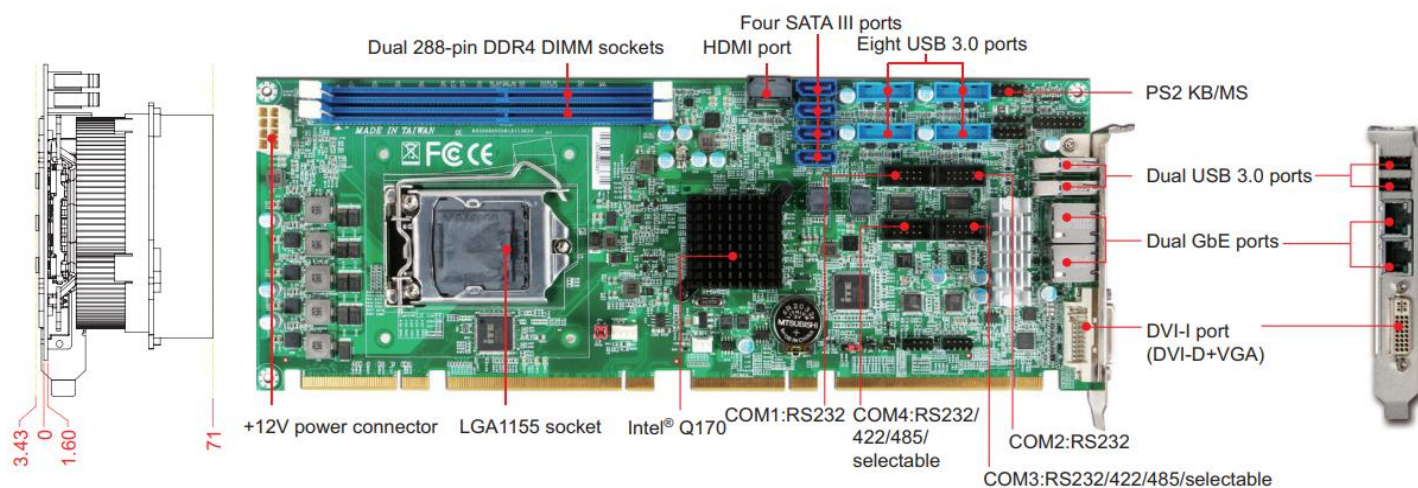
TECHNICAL INFORMATION

SYSTEM	PROCESSOR	Intel® Core i3/i5/i7 Pentium®/Celeron® processors up to 3.4 GHz (35~65W) with (8MB) Cache in LGA-1151 package DMI x4 Link: 5.0GT/s Supports Intel® Turbo Boost , Hyper-Threading, Virtualization, Thermal Monitoring, Trusted Execution and SpeedStep Technology (based on CPU model)
	CHIPSET	Intel® Q170 PCH
	BIOS	AMI UEFI BIOS (SPI ROM)
	MEMORY	Supports up to 32GB DDR4 2133/1866 SDRAM on two 288-pin DIMM sockets Supports non-ECC memory
	STORAGE DEVICES	6x SATAIII drives (Dual ports via Backplane) RAID 0, 1, 5, 10
	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 Core i5/i7 CPU: 1 x PCIe x16 or 2 x PCIe x8 or 1 x PCIe x8 + 2 x PCIe x4 by jumper setting From PCH: 1 x PCIe x4 or 4 x PCIe x1 by BIOS support 4 x PCI devices at 32bit 33MHz
I/O INTERFACE	EMBEDDED CONTROLLER	ITE IT8528E
	AUDIO	Intel® PCH built-in High Definition Audio up to 192-kHz 32-bit Realtek ALC886-GR HDA codec, 5.1 channels One on- board audio pin header
	ETHERNET	Intel® WGI219LM + WGI210AT Gigabit Ethernet controller Dual 10BASE-T / 100BASE-TX / 1000BASE-T Ethernet PCI Express x1 interface based on Gigabit Ethernet Dual RJ-45 connector with two LED indicators
	SERIAL PORTS	2 x RS-232 ports 2 x RS-232/422/485 selectable LPC to COM port IC: Fintek F81216DG
	USB	4 x USB 2.0 ports (through backplane) 480Mb/s bus capable of high-speed/full-speed/low-speed data ranges 10 x USB 3.0 ports on board (eight ports on board, dual ports on bracket) 5Gbps bus capable of high-speed/full-speed/low-speed data ranges
	KEYBOARD & MOUSE	2 x USB 3.0 ports on bracket dedicated to keyboard & mouse (on bracket) 1 x 10 pin box header for external PS/2 KB & MS
	GPIO	On board programmable 8-bit Digital I/Os

► TECHNICAL INFORMATION (CONTINUED)

DISPLAY	GRAPHICS CONTROLLER	Intel® Core i5/i7 processors integrated graphics engine Provides improved 3D multimedia capabilities including Microsoft DirectX 12, OCL 2.x and OpenGL 4.3/4.4
	DISPLAY INTERFACE	Supports independent triple display: CRT on bracket: up to 1920 x 1200 @ 60Hz DVI-D on bracket: up to 1920 x 1200 @ 60Hz CRT + DVI-D on bracket by DVI-I port HDMI: up to 4096 x 2160 @ 24Hz
MECHANICAL	DIMENSIONS	338.5mm (L) x 126.39mm (W), 13.33" (L) x 4.98" (W) PCB: 8 layers
	POWER SUPPLY	Typical: +12V, +5V Support ATX mode
	ENVIRONMENT	Operating Temperature: 0°C ~ 60°C Storage Temperature: -20°C ~ 80°C Relative Humidity: 5 ~ 90%, non-condensing
	MTBF	Over 100,000 hours at 40°C
	CERTIFICATIONS	CE,FCC Class A
PACKING LIST	STANDARD	SATA III cable PICMG SBC Handling and Installation Notice DVI-D + VGA cable Dual Head COM port cable with bracket Installation CD
	OPTIONAL	PS/2 Keyboard / Mouse Cable with bracket USB port cable with bracket USB 3.0 cable with bracket

► SINGLE BOARD COMPUTER LAYOUT



► Company Address

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