

ATX-SKL-S

RICH EXPANSION SLOTS



ATX INDUSTRIAL MOTHERBOARD WITH 6TH GEN INTEL® CORE™ / CELERON® S-SERIES PROCESSORS

- ▶ 1x DP, 1x HDMI, 1x DVI-D, 1x VGA for display output
- ▶ 2x GbE LAN for Ethernet
- ▶ 6x USB 3.0, 6x USB 2.0, 2x RS232/422/485, 4x RS232, 16-bit DIO
- ▶ 4x SATA 3.0, up to 2x mSATA for storage
- ▶ Up to 2x mPCIe, 4x PCI, 1x PCIe x16, 2x PCIe x4 for expansion

POSSIBILITIES START HERE



ATX-SKL-5

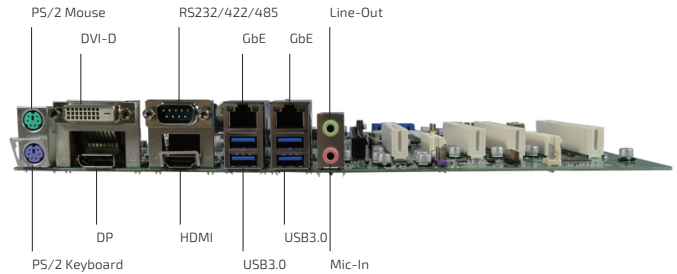
ATX INDUSTRIAL MOTHERBOARD WITH 6TH GEN INTEL® CORE™ / CELERON® S-SERIES PROCESSORS

ATX-SKL-5 is an ATX (Advanced Technology eXtended) form factor industrial-grade motherboard equipped with powerful 6th Generation Intel® Core™ / Celeron® S-Series Processors. It delivers greatly improved graphics performance, power efficiency and wireless connectivity in comparison with the models powered by the previous generation processors.

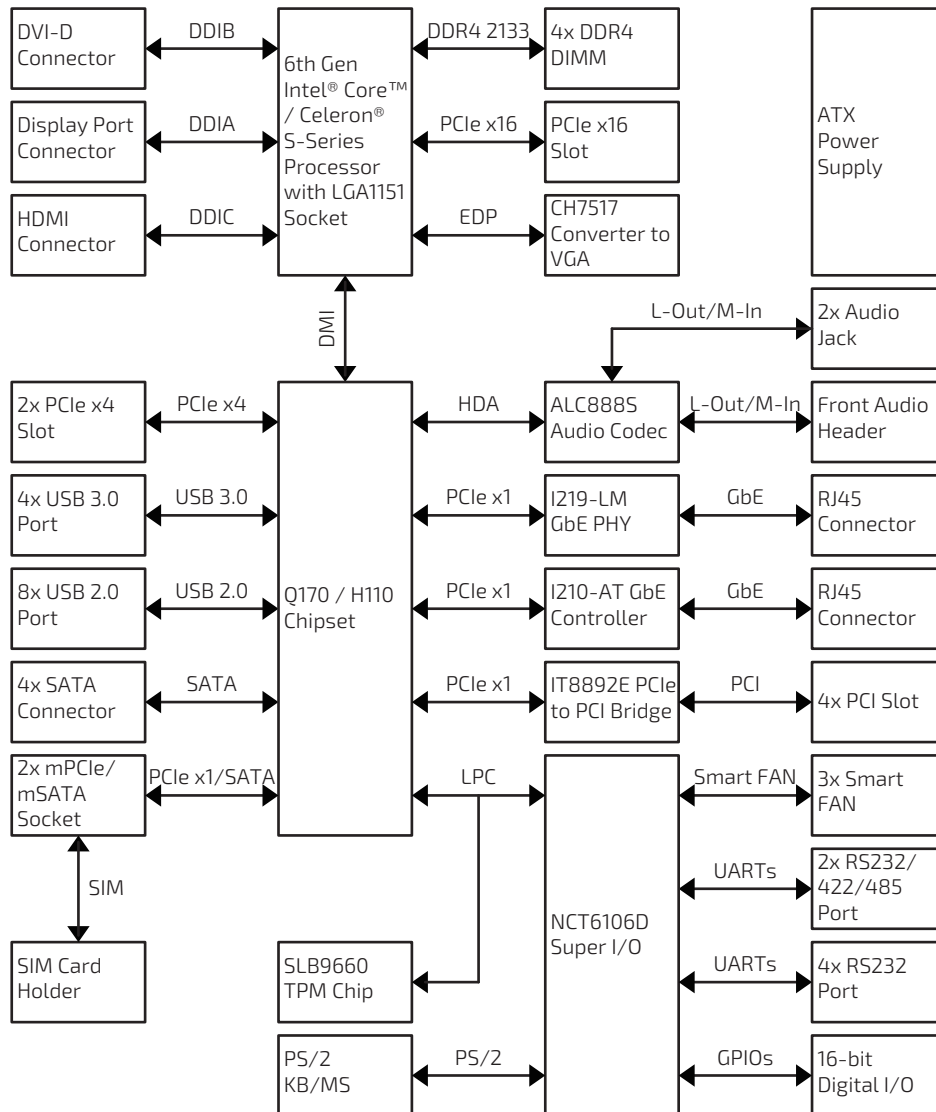
In addition to 1x HDMI, 1x DP, 1x DVI-D, 1x VGA, 6x USB 3.0, 6x USB 2.0, 2x RS232/422/485, 4x RS232, 16-bit DIO and 2x GbE LAN for display support, peripheral applications and wired networking, it features a great number of expansion slots / sockets for wireless functionality, storage expansion and industrial legacy device connection, including PCI, PCIe x16, PCIe x4, mPCIe, SATA, mSATA slots / sockets.

PRODUCT HIGHLIGHTS

- ▶ 6th Gen Intel® Core™ / Celeron® S-Series CPU (FCLGA1151 Socket)
- ▶ Intel® Q170 Express Chipset
- ▶ 4x DDR4 UDIMM memory socket
- ▶ 1x DP, 1x HDMI, 1x DVI-D, 1x VGA for display support
- ▶ 2x GbE LAN for Ethernet
- ▶ 6x USB 3.0, 6x USB 2.0 for USB device connection
- ▶ 2x RS232/422/485, 4x RS232 for serial device connection
- ▶ 16-bit DIO for device / signal control
- ▶ 4x SATA 3.0, up to 2x mSATA for storage
- ▶ RAID support
- ▶ Up to 2x mPCIe, 4x PCI, 1x PCIe x16, 2x PCIe x4 for expansion



BLOCK DIAGRAM



► TECHNICAL INFORMATION

SYSTEM	PROCESSOR CHIPSET MEMORY	6th Gen Intel® Core™ / Celeron® S-Series Processors (FCLGA1151 Socket) Intel® Q170 4x DDR4 2133 UDIMM up to 64 GByte (Core™) 4x DDR4 1866 / 2133 UDIMM up to 64 GByte (Celeron®)
VIDEO	GRAPHICS DISPLAY INTERFACE MULTIPLE DISPLAY	Intel® HD Graphics 530 (Core™) Intel® HD Graphics 510 (Celeron®) 1x DP (on rear, 4096 x 2304 @ 60 Hz) 1x HDMI (on rear, 2560 x 1600 @ 60 Hz / 4096 x 2160 @ 24 Hz) 1x DVI-D (on rear, 1920 x 1200 @ 60 Hz) 1x VGA (by header, 1920 x 1200 @ 60 Hz) Triple
AUDIO	AUDIO CODEC AUDIO INTERFACE	Realtek ALC888S 2x Line-out (1x on rear, 1x by header) 2x Mic-in (1x on rear, 1x by header)
NETWORK CONNECTION	ETHERNET	2x GbE LAN (RJ45 on rear, 1x Intel® I219-LM, 1x Intel® I210-AT)
PERIPHERAL CONNECTION	USB SERIAL PORT OTHER I/Os	6x USB 3.0 (4x Type A on rear, 2x by header) 6x USB 2.0 (by header) 2x RS232/422/485 (1x DB9 on rear, 1x by header, w/ power selection) 4x RS232 (by header, 2x w/ power selection) 1x PS/2 Keyboard (Mini-DIN on rear) 1x PS/2 Mouse (Mini-DIN on rear) 1x 16-bit DIO (by header)
STORAGE & EXPANSION	SATA mSATA / mPCIe PCI PCIe SIM CARD HOLDER	4x SATA 3.0 (RAID support) 2x mSATA / mPCIe (1x full size, 1x half size) 4x PCI (32-bit/33 MHz) 2x PCIe x4 1x PCIe x16 1x SIM Card Cage (Mini type)
POWER	CONNECTOR & INPUT VOLTAGE	2x12-pin ATX connector (DC +5 V / -5 V / +12 V / -12 V / +3.3 V / 5 VSB) 2x4-pin ATX connector (DC 12 V)
FIRMWARE	BIOS WATCHDOG H/W MONITOR REAL TIME CLOCK TPM iAMT	AMI uEFI BIOS w/ 128 Mb SPI Flash Programmable WDT to generate system reset event Input & Core Voltages, CPU & System Temperatures Chipset integrated RTC TPM 1.2 (Infineon SLB 9660) Depending on CPU
SYSTEM CONTROL & MONITORING	FRONT PANEL HEADER	1x Header for Reset button, HDD LED & External Speaker 1x Header for Power button, Power LED & SM bus
COOLING	FAN	1x Wafer for CPU Smart Fan 1x Wafer for System Smart Fan 1x Wafer for AUX Smart Fan
SOFTWARE	OS SUPPORT	Windows 7, Windows 8, Windows 10, Linux
MECHANICAL	DIMENSIONS (L x W)	ATX (304.8 mm x 244 mm / 12" x 9.6")
ENVIRONMENTAL	OPERATING TEMPERATURE STORAGE TEMPERATURE HUMIDITY	0 °C ~ 60 °C / 32 °F ~ 140 °F -20 °C ~ 80 °C / -4 °F ~ 176 °F 0 % ~ 95 %
CERTIFICATION	EMC & SAFETY	CE Class A, FCC Class A

▶ ORDERING INFORMATION

ARTICLE	DESCRIPTION
ATX-SKL-S-Q170	Intel® Q170 Chipset, 4x DDR4 UDIMM, 6x USB 3.0, 6x USB 2.0, 2x mPCIe / mSATA, 2x PCIe x4 (x4 / x2 / x1 signal), w/ TPM, w/ RAID, Operating temperature: 0 °C ~ 60 °C

ACCESSORIES

ARTICLE	PART NO.	DESCRIPTION
I/O SHIELD	0F0000000000280L	SUS304 T = 0.2 mm
COM PORT CABLE*	0C5020000003660L	DP-2.54-10P 2*5P Pitch: 2.54 mm, L = 300 mm
USB 3.0 CABLE*	0C5020000004280L	Internal DP 2.0 20 pin 2x10P to Type A, L = 450 mm
USB 2.0 CABLE (2 PORT)*	0C5040000000110L	2.54 mm 2x5P to 2x USB connectors, L = 34 cm
SATA CABLE*	0C5020000004240L	With Lock, SATA 1x7P Pitch: 1.27 mm, L = 460 mm
VGA CABLE*	0C5020000002870L	WL2004H-2x8P 2x8P 2.0 pitch to D-SUB 15P, L = 300 mm

(* : Optional)

▶ PRODUCT CONTACT POINT

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