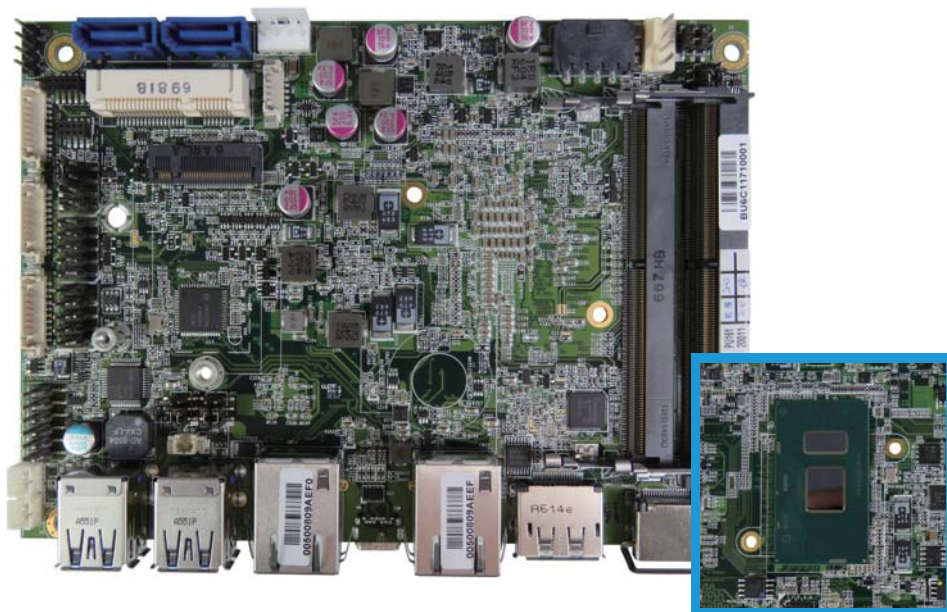


ECX-SLU0 / KLU0 Series

Single Board Computer in 3.5" ECX Form Factor
with Intel® Skylake / Kaby Lake U-Series Processors



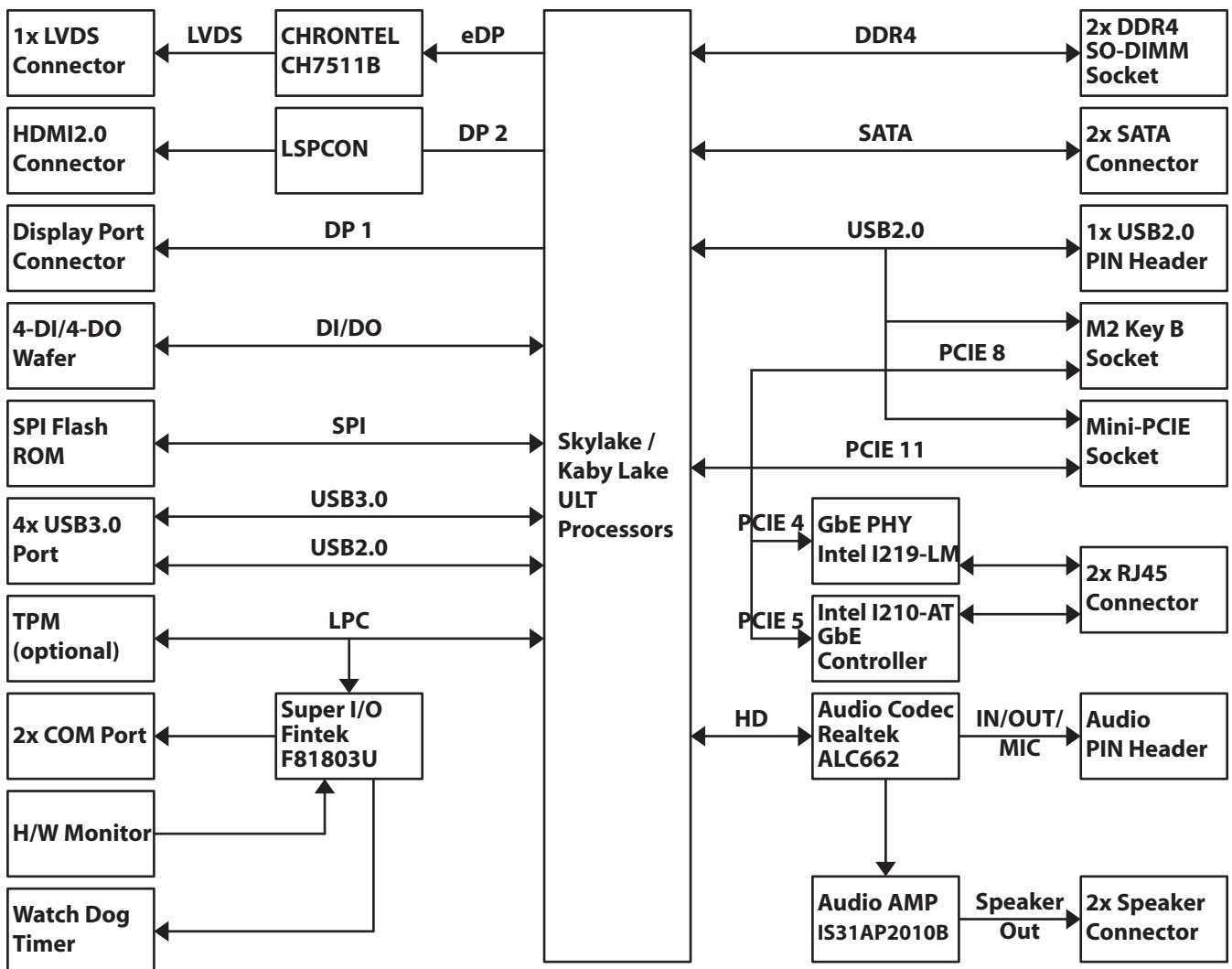
- Intel® Skylake / Kaby Lake U-Series Processors
- 2x DDR4 SO-DIMM
- 1x LVDS, 1x HDMI2.0, 1x DP for video output
- Triple display support
- 2x GbE LAN for Ethernet
- 4x USB3.0, 2x USB2.0, 2x RS-232/422/485, 1x DIO for peripherals
- 2x SATA3.0 for storage
- 1x mPCIe, 1x M.2 for expansion

Product Overview

ECX-SLU0 / KLU0 Series is a 3.5" ECX form factor single board computer based on Intel's Skylake / Kaby Lake ULT Processors, providing an upgraded option for high performance platform finders. It has 3 shining features to make it distinguish from other counterparts, including

(a) 2x SATA3.0 doubling read and write speeds; (b) 1x HDMI2.0 supporting 4K Ultra HD resolutions; and (c) 1x M.2 enabling multi-functional integration, such as Wi-Fi, Bluetooth, satellite navigation, NFC, digital radio, WiGig, WWAN, and SSDs.

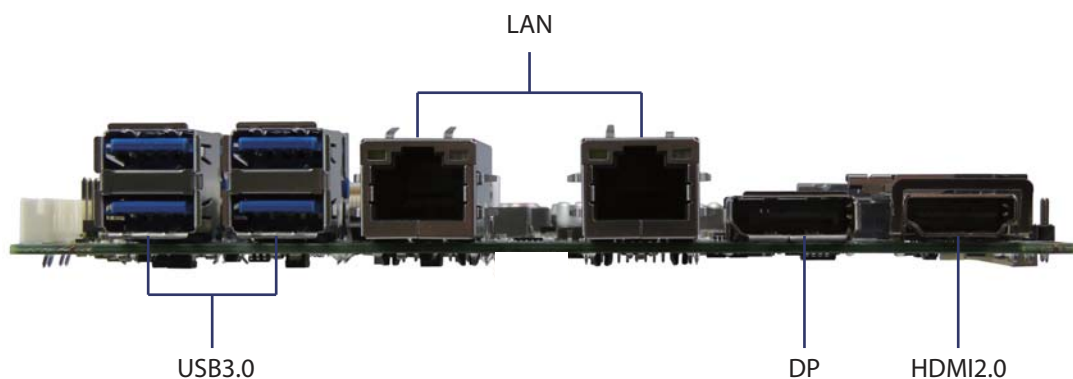
Block Diagram



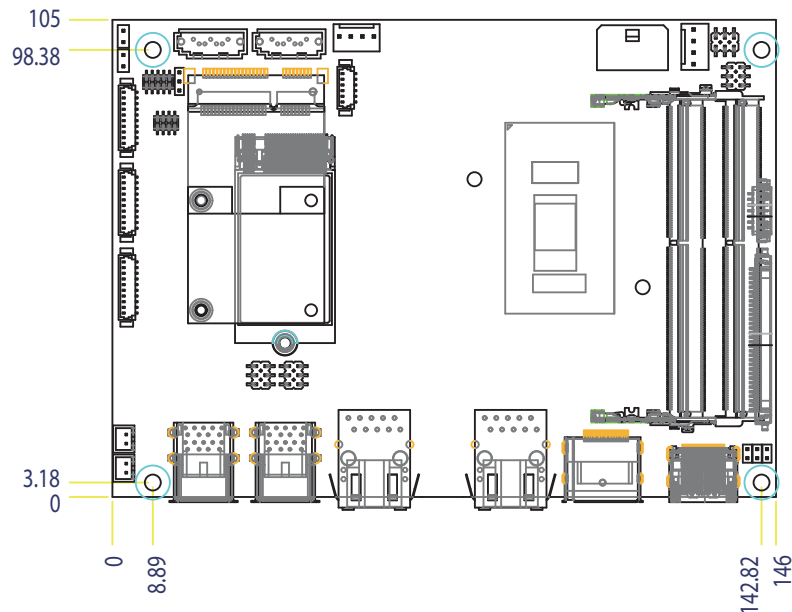
Technical Information

CPU Support		Serial Ports	
ECX-SLU1: Intel® Skylake ULT Processor, Core™ i7-6600U (Dual Core, 4M Cache, up to 3.40 GHz, FCBGA1356 Socket, 15W TDP)		2x RS-232/422/485 (by header, w/ auto flow control for RS-485)	
ECX-SLU2: Intel® Skylake ULT Processor, Core™ i5-6300U (Dual Core, 3M Cache, up to 3.00 GHz, FCBGA1356 Socket, 15W TDP)		Other I/O Ports	
ECX-SLU3: Intel® Skylake ULT Processor, Celeron® 3955U (Dual Core, 2M Cache, 2.00 GHz, FCBGA1356 Socket, 15W TDP)		1x 8-bit DIO (by header)	
ECX-KLU0: Intel® Kaby Lake ULT Processor, Core™ i3-7100U (Dual Core, 3M Cache, 2.40 GHz, FCBGA1356 Socket, 15W TDP)		Storage & Expansion	
ECX-KLU1: Intel® Kaby Lake ULT Processor, Core™ i7-7600U (Dual Core, 4M Cache, up to 3.90 GHz, FCBGA1356 Socket, 15W TDP)		2x SATA3.0	
ECX-KLU2: Intel® Kaby Lake ULT Processor, Core™ i5-7300U (Dual Core, 3M Cache, up to 3.50 GHz, FCBGA1356 Socket, 15W TDP)		1x mPCIe (full size)	
ECX-KLU3: Intel® Kaby Lake ULT Processor, Celeron® 3965U (Dual Core, 2M Cache, 2.20 GHz, FCBGA1356 Socket, 15W TDP)		1x M.2 Key B Socket (mixed w/ USB2.0 or SATA)	
		1x SIM Card Cage (by wafer, switchable for mPCIe or M.2)	
Memory		Power Supply	
2x DDR4 2133 SO-DIMM up to 16GB		Connector: 1x4-pin Wafer (Straight & Right Angle dual-footprint)	
Graphic Controller		Input Voltage: DC 12V	
Intel® HD Graphics 510 (ECX-SLU3)		Firmware	
Intel® HD Graphics 520 (ECX-SLU1/2)		BIOS: AMI uEFI BIOS w/ 128Mb SPI Flash	
Intel® HD Graphics 610 (ECX-KLU3)		Watchdog: Programmable WDT to generate system reset event	
Intel® HD Graphics 620 (ECX-KLU0/1/2)		H/W Monitor: Voltages, Temperatures	
Display Interfaces		Real Time Clock: Processor integrated RTC	
1x LVDS (24-bit, 2-ch)		TPM: Supportive for ECX-SLU1/2 & ECX-KLU1/2, optional for others	
1x HDMI2.0 (on rear, 3840 x 2160 @ 60Hz)		Infineon SLB 9660 TPM1.2 for ECX-SLU0 Series	
1x DP (on rear, 4096 x 2304 @ 60Hz)		Infineon SLB 9665 TPM2.0 for ECX-KLU0 Series	
Multiple Display		iAMT: Only for ECX-SLU1/2, ECX-KLU1/2	
Triple		System Control & Monitoring	
Audio Chipset		1x Header for Reset button, HDD LED & External Speaker	
Realtek ALC662		1x Header for Power button, Power LED & SM bus	
Audio Interfaces		1x Header for mPCIe activity LED	
2x Speaker-out (3W)		1x Header for M.2 activity LED	
1x Line-in (by header)		Cooling	
1x Line-out (by header)		1x header for System Fan	
1x Mic-in (by header)		OS Support	
Ethernet		Windows 7, Windows 8, Windows 10, Linux	
2x LAN (RJ-45 on rear, 1x Intel® I219-LM, 1x Intel® I210-AT)		Dimensions	
USB		ECX (146 x 105 mm / 5.75" x 4.13")	
4x USB3.0 (Type A on rear)		Environmental Characteristics	
2x USB2.0 (by header)		Operation Temp.: 0°C ~ 60°C / 32°F ~ 140°F	
		Storage Temp.: -20°C ~ 80°C / -4°F ~ 176°F	
		Humidity: 0% ~ 95%	
		Certification	
		CE, FCC Class A	

ECX-SLU0 / KLU0 Series Rear I/Os



Mechanical Dimensions



Ordering Information

Article	Part No.	Description
ECX-SLU1	B3EXSLU0-010000T	Intel® Core™ i7-6600U, 2x DDR4 SO-DIMM, 1x LVDS, 1x HDMI2.0, 1x DP, 2x GbE LAN, 4x USB3.0, 2x USB2.0, 2x RS-232/422/485, 1x 8-bit DIO, 2x SATA3.0, 1x mPCIe, 1x M.2 Key B, w/ TPM, w/ iAMT
ECX-SLU2	B3EXSLU0-020000T	Intel® Core™ i5-6300U, 2x DDR4 SO-DIMM, 1x LVDS, 1x HDMI2.0, 1x DP, 2x GbE LAN, 4x USB3.0, 2x USB2.0, 2x RS-232/422/485, 1x 8-bit DIO, 2x SATA3.0, 1x mPCIe, 1x M.2 Key B, w/ TPM, w/ iAMT
ECX-SLU3	B3EXSLU0-030000T	Intel® Celeron® 3955U, 2x DDR4 SO-DIMM, 1x LVDS, 1x HDMI2.0, 1x DP, 2x GbE LAN, 4x USB3.0, 2x USB2.0, 2x RS-232/422/485, 1x 8-bit DIO, 2x SATA3.0, 1x mPCIe, 1x M.2 Key B, w/o TPM, w/o iAMT
ECX-KLU0	B3EXKLU0-000000T	Intel® Core™ i3-7100U, 2x DDR4 SO-DIMM, 1x LVDS, 1x HDMI2.0, 1x DP, 2x GbE LAN, 4x USB3.0, 2x USB2.0, 2x RS-232/422/485, 1x 8-bit DIO, 2x SATA3.0, 1x mPCIe, 1x M.2 Key B, w/o TPM, w/o iAMT
ECX-KLU1	B3EXKLU0-010000T	Intel® Core™ i7-7600U, 2x DDR4 SO-DIMM, 1x LVDS, 1x HDMI2.0, 1x DP, 2x GbE LAN, 4x USB3.0, 2x USB2.0, 2x RS-232/422/485, 1x 8-bit DIO, 2x SATA3.0, 1x mPCIe, 1x M.2 Key B, w/ TPM, w/ iAMT
ECX-KLU2	B3EXKLU0-020000T	Intel® Core™ i5-7300U, 2x DDR4 SO-DIMM, 1x LVDS, 1x HDMI2.0, 1x DP, 2x GbE LAN, 4x USB3.0, 2x USB2.0, 2x RS-232/422/485, 1x 8-bit DIO, 2x SATA3.0, 1x mPCIe, 1x M.2 Key B, w/ TPM, w/ iAMT
ECX-KLU3	B3EXKLU0-030000T	Intel® Celeron® 3965U, 2x DDR4 SO-DIMM, 1x LVDS, 1x HDMI2.0, 1x DP, 2x GbE LAN, 4x USB3.0, 2x USB2.0, 2x RS-232/422/485, 1x 8-bit DIO, 2x SATA3.0, 1x mPCIe, 1x M.2 Key B, w/o TPM, w/o iAMT

Accessories

Product Name	Part No.	Description
SATA Cable	0C5020000004240L	7-pin connector with lock, L=46cm
DC In Cable	0C5020000001580L	MX3.0 1x4P 3.0pitch to DC-025BM 5.5x2.5 , L=30cm
COM Port Cable *	0C5020000000910L	10-pin pitch=1.25mm to DB-9 connector, L=35cm
DIO Cable *	0C5020000002060L	D-SUB-9P (Female) to MX51021-10P 1x10P 1.25pitch, L=8cm
USB Cable *	0C502USB0201010L	2.54mm 10-pin to 2xUSB connectors with bracket, L=30cm
SATA Cable w/ PWR *	0C5020000002370L	SATA7+15P 1x22P 1.25pitch to Sata7P 1x7P 1.25pitch+Small 4P 2.54pitch, L=300mm
Audio Cable *	0C5020000002050L	WL6008H 2x6P 2.54pitch to EAR phone jack x3 pitch:3.5mm, L=35cm
3G/4G Mini SIM Card Holder Kit *	0ZHK12003GSIM003	W/ SIM CARD HOLDER *1, SIM CARD Cable *1

(Note: the asterisk (*) means that this item is optional.)