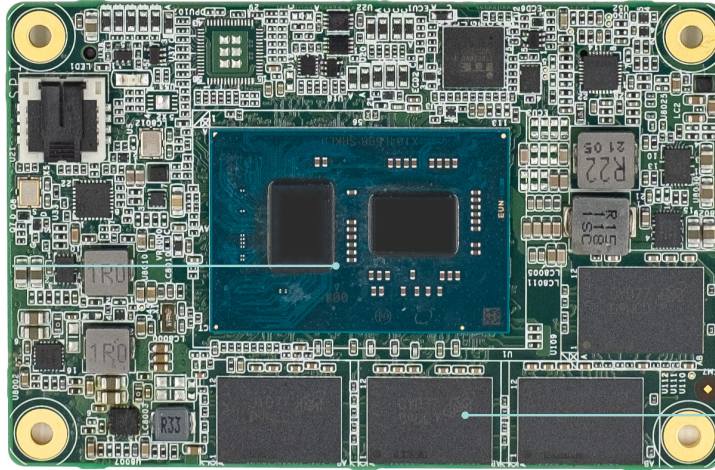
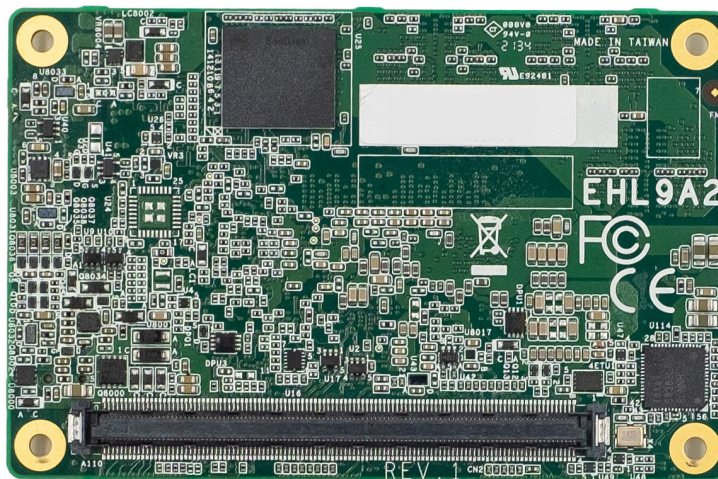


Intel® Atom® Processor
Elkhart Lake Series



LPDDR4X SODIMM

Top View



Bottom View

KEY FEATURES



DDR4

LPDDR4X-3200 up to 16GB
LPDDR4X-4267 up to 8GB



4K High Resolution

Supports 4K/ 2K resolution



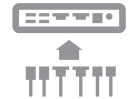
High Speed Ethernet

Supports 100M/1000M/2.5Gbps



Multiple Expansion

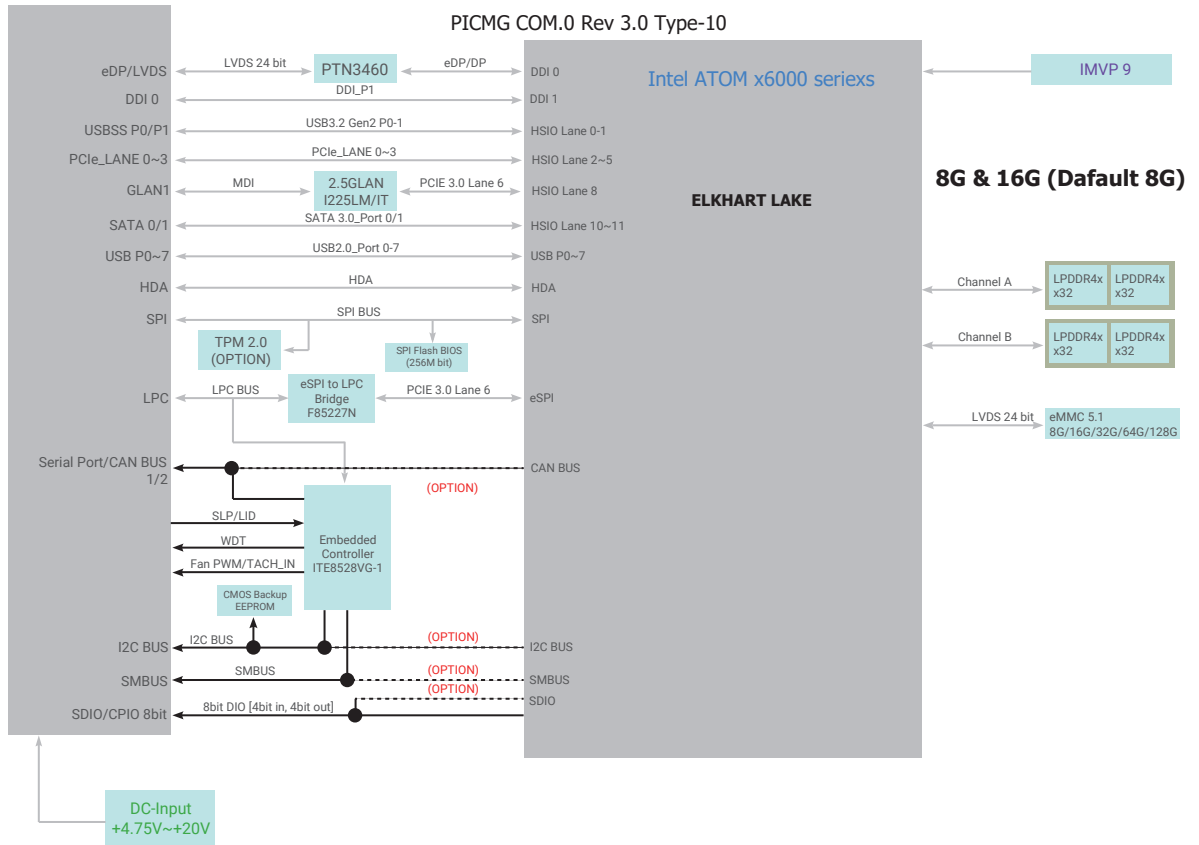
4 PCIe x1, 1 SMBus, 1 I²C, 1 eMMC, 1 CANbus



Rich I/O

2 USB 3.1 Gen2, 8 USB 2.0, 1 SD 3.0

BLOCK DIAGRAM



MECHANICAL DRAWING



SPECIFICATION

SYSTEM	Processor	Intel® Atom® Processor Elkhart Lake Series
	Memory	LPDDR4X up to 16GB Dual Channel LPDDR4X 3200MHz/4267MHz
	BIOS	AMI SPI 256Mbit
GRAPHICS	Controller	Intel® HD Graphics
	Feature	OpenGL 5.0, DirectX 12, OpenCL 2.1 HW Decode: AVC/H.264, MPEG2, VC1, WMV9, JPEG/MJPEG, HEVC/H.265, VP8, VP9, MVC HW Encode: AVC/H.264, JPEG/MJPEG, HEVC/H.265, VP8, VP9, MVC
	Display	1 x DDI 1 x LVDS/eDP LVDS: single channel 24-bit, resolution up to 1920x1200 @ 60Hz eDP: resolution up to 4096x2160 @ 60Hz HDMI: resolution up to 4096x2160 @ 30Hz DP++: resolution up to 4096x2160 @ 60Hz, 3840x2160 @60Hz
	Interface	4 x PCIe x1 (Gen 3) 1 x SDIO (available upon request) 1 x I2C 1 x SMBus 1 x LPC 1 x CAN BUS 1 x Speaker 1 x SD 3.0 1 x SPI 2 x UART (TX/RX)
AUDIO	Interface	HD Audio
ETHERNET	Controller	1 x Intel® I225IT (10/100/1000Mbps/2.5Gbps)
I/O	USB	4 x USB 3.1 Gen2 8 x USB 2.0
	SATA	2 x SATA 3.0 (up to 6Gb/s)
	eMMC	1 x 8GB/16GB/32GB/64GB/128GB eMMC 5.1 (available upon request)
	DIO	1 x 8-bit DIO
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds
SECURITY	TPM	FTPM
POWER	Type	4.75V~20V, 5VSB, VCC_RTC (ATX mode) 4.75V~20V, VCC_RTC (AT mode)
	Consumption	TBD
OS SUPPORT	OS Support (UEFI Only)	Windows: Windows 10 IoT Enterprise 64-bit
		Linux
ENVIRONMENT	Temperature	Operating: -5 to 65°C, -40 to 85°C Storage: -40 to 85°C
	Humidity	Operating: 5 to 90% RH Storage: 5 to 90% RH
	MTBF	TBD
MECHANISM	Dimensions	COM Express® Mini 84mm (3.3") x 55mm (2.16")
	Compliance	PICMG COM Express® R3.0, Type 10
STANDARDS AND CERTIFICATIONS	Certifications	CE, FCC