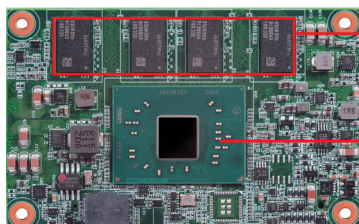
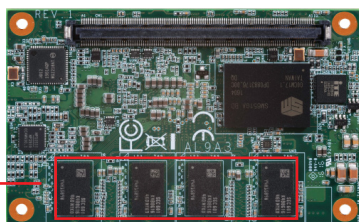


AL9A3

Atom



TOP



BOTTOM

DDR3L
Intel® Atom™
Processor E3900
Series

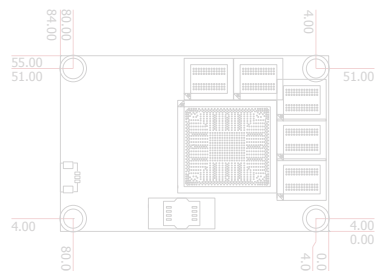
DDR3L

Features

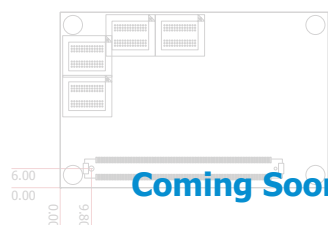
- Dual Channel DDR3L 1600MHz Memory Down up to 8GB
- 1 LVDS/eDP, 1 DDI (HDMI/DVI/DP)
Supports dual displays: DDI + LVDS/eDP
- eDP resolution supports up to 4096x2304 @ 60Hz
- Multiple expansions: 4 PCIe x1
- Rich I/O: 1 Intel GbE, 2 USB 3.0, 8 USB 2.0



Mechanical Drawing

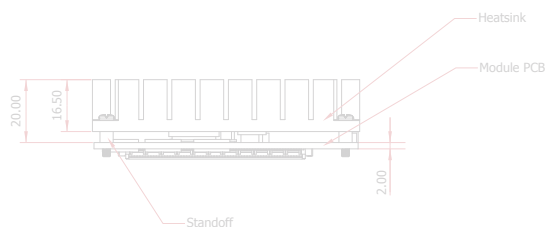
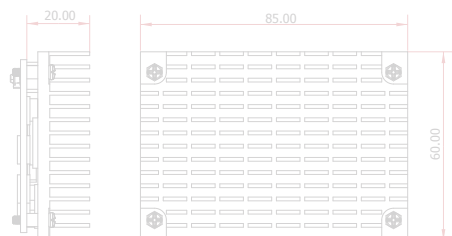


Top View

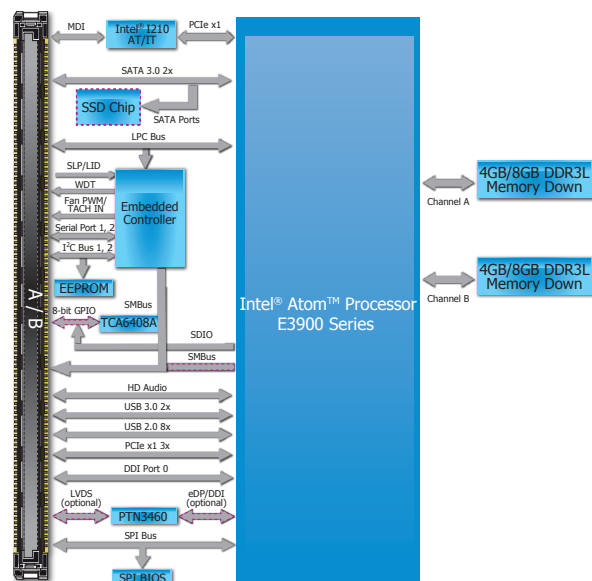


Bottom View

Coming Soon



Block Diagram



Specifications

SYSTEM	Processor	Intel® Atom™ Processor E3900 Series, BGA 1296 Intel® Atom™ x7-E3950 Processor, Quad Core, 2M Cache, 1.6GHz (2.0GHz), 12W Intel® Atom™ x5-E3940 Processor, Quad Core, 2M Cache, 1.6GHz (1.8GHz), 9.5W Intel® Atom™ x5-E3930 Processor, Dual Core, 2M Cache, 1.3GHz (1.8GHz), 6.5W Intel® Pentium® Processor N4200, Quad Core, 2M Cache, 1.1GHz (2.5GHz), 6W Intel® Celeron® Processor N3350, Dual Core, 2M Cache, 1.1GHz (2.4GHz), 6W	
	Memory	4GB/8GB Memory Down	Dual Channel DDR3L 1600MHz
	BIOS	AMI SPI 128Mbit	
	Controller	Intel® HD Graphics	
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 (HDMI/DVI/DP++) 1 x LVDS/eDP	LVDS: single channel 24-bit, resolution up to 1366x768 @ 60Hz HDMI: resolution up to 3840x2160 @ 30 Hz DP++: resolution up to 4096x2160 @ 60Hz eDP: resolution up to 4096x2160 @ 60Hz
	Dual Display	DDI + LVDS	DDI + eDP
	Interface	4 x PCIe x1 (Gen 3) 1 x SDIO (available upon request) 1 x LPC 1 x I ² C 1 x SMBus 1 x SPI 2 x UART (TX/RX)	
AUDIO	Interface	HD Audio	
ETHERNET	Controller	1 x Intel® I211AT (10/100/1000Mbps) (0°C to 60°C) 1 x Intel® I210IT (10/100/1000Mbps) (-40°C to 85°C)	
I/O	USB	2 x USB 3.0 8 x USB 2.0	
	SATA	2 x SATA 3.0 (up to 6Gb/s)	
	SSD	1 x 4GB/8GB/16GB/32GB/64GB SSD (available upon request)	
	GPIO	1 x 8-bit GPIO	
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds	
POWER	Type	4.75V~20V, 5VSB, VCC_RTC (ATX mode)	4.75V~20V, VCC_RTC (AT mode)
	Consumption	TBD	
OS SUPPORT		Windows 10 IoT Enterprise 64-bit	Ubuntu 15.10 (Intel® graphic driver available) Yocto Project v2.0 Fedora 24 (Intel® graphic driver available)
ENVIRONMENT	Temperature	Operating: 0 to 60°C -40 to 85°C	Storage: -40 to 85°C
	Humidity	Operating: 5 to 90% RH	Storage: 5 to 90% RH
	MTBF	TBD	
MECHANICAL	Dimensions	COM Express® Mini	84mm (3.30") x 55mm (2.16")
	Compliance	PICMG COM Express® R2.1, Type 10	

Packing List

- 1 AL9A3 board
- 1 DVD
- 1 Heat sink: TBD

Optional Items

- COM100-B carrier board kit: 770-COM102-000G
- Heat spreader: TBD