

APLMA-IM-A

With Intel® Apollo Lake Atom® E3900 series SoC. On Board LPDDR4 MEM up to 8GB, provides LVDS/eDP, HDMI/DP with 4K resolution. And supports PCIe1, USB 3.0, USB 2.0 and 2x SATAIII devices.

Features

- Intel® Atom® Processor E3900 Series (Apollo Lake)
- On Board LPDDR4 SDRAM up to 8GB
- On Board optional eMMC up to 64GB
- Low Power Consumption (6 to 12W)
- Supports Wide Operating Temperature and Wide Voltage



Specifications

Processor System	Processor	Intel® Atom® E3950	Intel® Atom® E3940	Intel® Atom® E3930	Intel® Pentium® N4200	Intel® Celeron® N3350
	Core	4	4	2	4	2
	Base Freq. @ TDP/cTDP	1.6 GHz	1.6 GHz	1.3 GHz	1.1 GHz	1.1 GHz
	Turbo	2.0 GHz	1.8 GHz	1.8 GHz	2.5 GHz	2.4 GHz
	Cache	2MB	2MB	2MB	2MB	2MB
	Processor Graphics	Intel® HD Graphics 505	Intel® HD Graphics 505	Intel® HD Graphics 500	Intel® HD Graphics 505	Intel® HD Graphics 500
	Graphics Max Dynamic Frequency	650 MHz	600 MHz	550 MHz	750 MHz	650 MHz
	HW Decoding	HEVC/H.265, H.264, MVC, VPS, MPEG2, VC-1, WMV9, JPEG/MJPEG				
	Processor TDP	12W	9.5W	6.5W	6W	6W
	Chipset	N/A	N/A	N/A	N/A	N/A
Memory	Technology	On board LPDDR4 2133MT/s , WO ECC MEM Support				
	Max.	Up to 8GB				
	Channel	Dual Channel				
Display	HDMI	up to 3840x 2160 @ 30Hz				
	Display Port	up to 4096x 2160 @ 60Hz				
	LVDS	Dual Channel, up to 1920x 1200 @ 60Hz				
	eDP	up to 4096x 2160 @ 60Hz				
	VGA	N/A				
Expansion Slot	PEG	N/A				
	PCIe	1 x PCIe 2.0x4 or 4 x PCIe 2.0x1				
Ethernet	Connector	Intel® Ethernet Controller I210T				
Audio	Interface	Intel HD Audio				
Serial Bus	SMBus	Yes, Baud Rate : 100KHz				
	I2C	Yes, Baud Rate : 400KHz				
	UART	2 Ports (TX/RX)				
I/O	SATA	2 x SATA III				
	USB3.0	2 Ports				
	USB2.0	8 x USB 2.0, (Option 1 x OTG)				
	GPIO	8 x GPIO				
	SPI Bus	For BIOS EEPROM				
	Watchdog	Support				
	TPM	N/A				
Power	Type & Voltage	+4.75VDC to +20VDC, AT/ATX Mode				
Environment	Operating Temperature	0°C to 60°C				
	Storage Temperature	-40°C to 80°C (Selected SKU)				
	Storage Temperature	-40°C to 80°C				
OS	Windows	Windows 10 support				
	Linux	Linux Fedora/Tizen/Yocto, RTOS Windriver				
Mechanical	Dimension	84 x 55 mm				

Block Diagram

