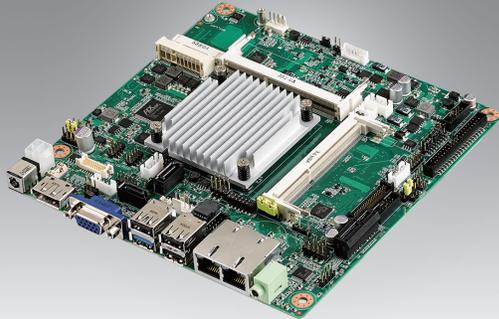# AIMB-215

Intel® Celeron® Quad Core J1900/N2930 Mini-ITX with CRT/LVDS/DP++, 6 COM, and Dual LAN

NEW

Features

- Supports Intel Celeron Quad Core J1900/N2930 processor
- Two 204-pin SO-DIMM up to 8 GB DDR3L 1333 MHz SDRAM
- Supports VGA/DP1.2 /24-bit dual channel LVDS
- Supports 1 PCIE x1 and 2 mini-PCIE expansion slot, 6 COMs, 9 USB 2.0, and 1 USB 3.0
- Lower total cost of ownership with DC12V support and onboard TPM1.2(optional)
- Supports SUSIAccess and Embedded Software APIs
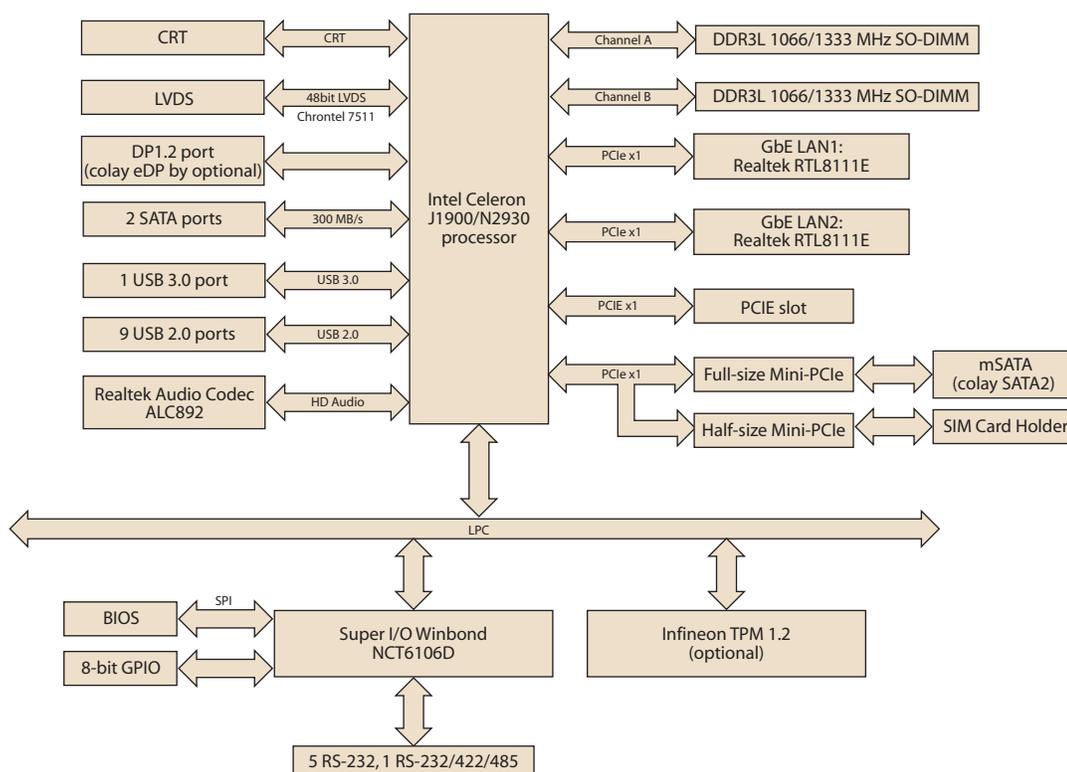
Software APIs:
H/W Monitor   Brightness   Watchdog   GPIO

Utilities:
BIOS flash   Monitoring

Windows Embedded

SUSIAccess   RoHS COMPLIANT 2002/95/EC   CE FCC

Specifications

		Intel J1900	Intel N2930
Processor System	CPU (32nm)	Intel J1900	Intel N2930
	Max. Speed	2.0 GHz (Quad core)	1.83 GHz (Quad core)
	L2 Cache	2 MB	2 MB
	BIOS	AMI 16 Mbit SPI	AMI 16 Mbit SPI
Expansion Slot	PCI	-	
	Mini-PCIe	2 (F/S x 1 support mSATA, H/S x 1 with SIM card holder)	
	PCIe	PCI Express x1 (Gen2)	
Memory	Technology	Dual channel DDR3L 1066/1333 MHz SDRAM	
	Max. Capacity	8 GB/4 GB per SO-DIMM	
	Socket	2 x 204-pin SO-DIMM (Non-ECC)	
Graphics	Controller	Intel Gen 7 Graphics Engines and media encode/decode engine; GPU Frequency: 688 MHz for J1900; 313 MHz for N2930	
	VRAM	Shared system memory up to 224 MB SDRAM	
	VGA	Supports up to 2560 x 1600	
	LVDS	Supports dual channel 48-bit up to 1920 x 1200	
	Display Port 1.2	1, Supports DP++, resolution up to 2560 x 1600 colay eDP port (optional)	
	Dual Display	VGA+DP1.2, VGA+LVDS, LVDS+DP1.2, VGA+eDP (optional), LVDS+eDP (optional), Supports extended mode and clone mode	
Ethernet	Interface	10/100/1000 Mbps	
	Controller	GbE LAN1: Realtek 8111E GbE LAN2: Realtek 8111E	
	Connector	RJ-45 x 2	
SATA	Max Data Transfer Rate	300 MB/s	
	Channel	2, SATA 2 colay mSATA (optional); SATA 1 support SATA-DOM device	
Rear I/O	CRT	1	
	DP1.2	1	
	Ethernet	2	
	USB	4 (3 x USB 2.0/1 x USB 3.0)	
	Audio	1 (Mic-in or Line out)	
	DC jack	1 (2.5 mm)	
Internal Connector	LVDS & Inverter	1/1	
	eDP	1 (optional)	
	USB	6 (USB 2.0 compliant)	
	Serial	6 (5 x RS-232, 1 x RS-232/422/485; COM 3 support RS-232/422/485 auto flow control; COM 6 support 5V/12V by jumper selection)	
	IDE	None	
	SATA	2	
	SATA PWR Connector	2	
	Parallel	None	
	GPIO	8-bit	
	PS/2 KB & MS	1	
Watchdog Timer	Output	System reset	
	Interval	Programmable 1 ~ 255 sec/min	
Power	Power Type	Single voltage 12V DC input; 1 x External DC jack; 1 x Internal 4-pin (2x2) power connector; Supports AT/ATX mode	
	Typical Power Consumption	Win Idle 10.17 W (Intel Celeron J1900 2.0 GHz / DDR3L 1600 MHz 4GB x 2)	
Environment		Operating	Non-Operating
	Temperature	0 ~ 60° C (32 ~ 140° F)	-40 ~ 85° C (-40 ~ 185° F)
Physical Characteristics	Dimensions	170 mm x 170 mm (6.69" x 6.69")	

Block Diagram

Ordering Information

Part Number	CPU	DP++/eDP	CRT	LVDS	GbE LAN	COM	SATA II	USB3.0/2.0	MiniPCIe	TPM	AMP	PCIex1	Thermal Solution
AIMB-215D-S6A1E	J1900	1 (1)	1	1	2	6	2	1/9	2 (1 x F/S; 1 x H/S)	(1)	(2 x 6W)	1	Passive
AIMB-215N-S6A1E	N2930	1 (1)	1	1	2	6	2	1/9	2 (1 x F/S; 1 x H/S)	(1)	(2 x 6W)	1	Passive
AIMB-215L-S6A1E	J1900	1 (1)	1	0	1	2	1	1/3	1 x F/S (PCIe/SATA signal only)	(1)	(2 x 6W)	1	Passive

Note: Passive = fanless
* () BOM options available on MP version

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	1
1700018785	SATA power cable	1
1700008876	1-to-4 serial ports cable kit, 35 cm	1
1700100250	1-to-1 serial port cable, 25 cm	2
1920000569T000	I/O port bracket	1
2006021500	Startup manual	1
2066021500	Driver CD	1
1960064228N001	Fanless heatsink	1

Optional Accessories

Part Number	Description
1757003995	Adapter AC100-240V 60W +12V/5A
1757003064	Adaptor AC100-240V 84W, 12V/7A
1700018699	KBMS cable 1*6P-2.5/DIN-6P(F)*2, 25 cm

Optional Chassis

Part Number	Description
AIMB-B2000-00YE	Mini-ITX chassis with optional DC Adaptor

I/O View

Embedded OS/API

OS/API	Part No.	Description
WES8	TBD	Windows Embedded 8
WES7	TBD	Windows Embedded 7

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