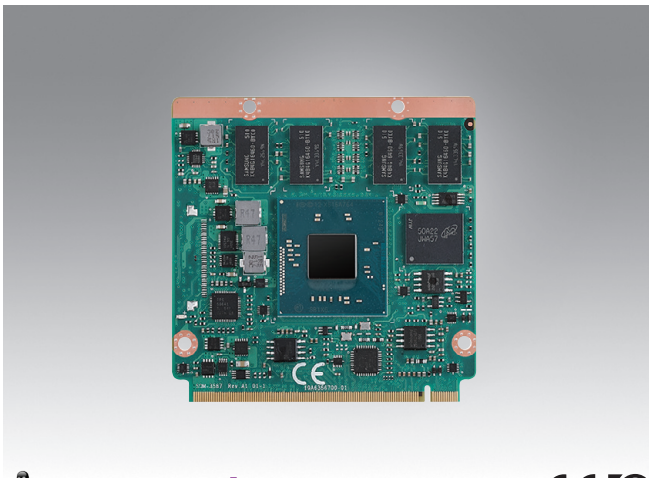
SOM-3567

Intel® Atom™ E3800 & Celeron® Processor QSeven CPU Module



Windows Embedded iManager WISE-PaaS/RMM CE FC

Features

- Intel® Atom® E3800 and Celeron® Processor Series
- Qseven® 2.1 Specification Compatible
- Onboard Dual Channel DDR3L-1333 up to 8GB, eMMC up to 32GB
- LVDS and HDMI/DP support H.264, MPEG2 HW Decode/Encode
- GbE, 3 PCIe x1, 1 USB3.0, 6 USB2.0
- iManager WISE-PaaS/RMM, and Embedded Software APIs

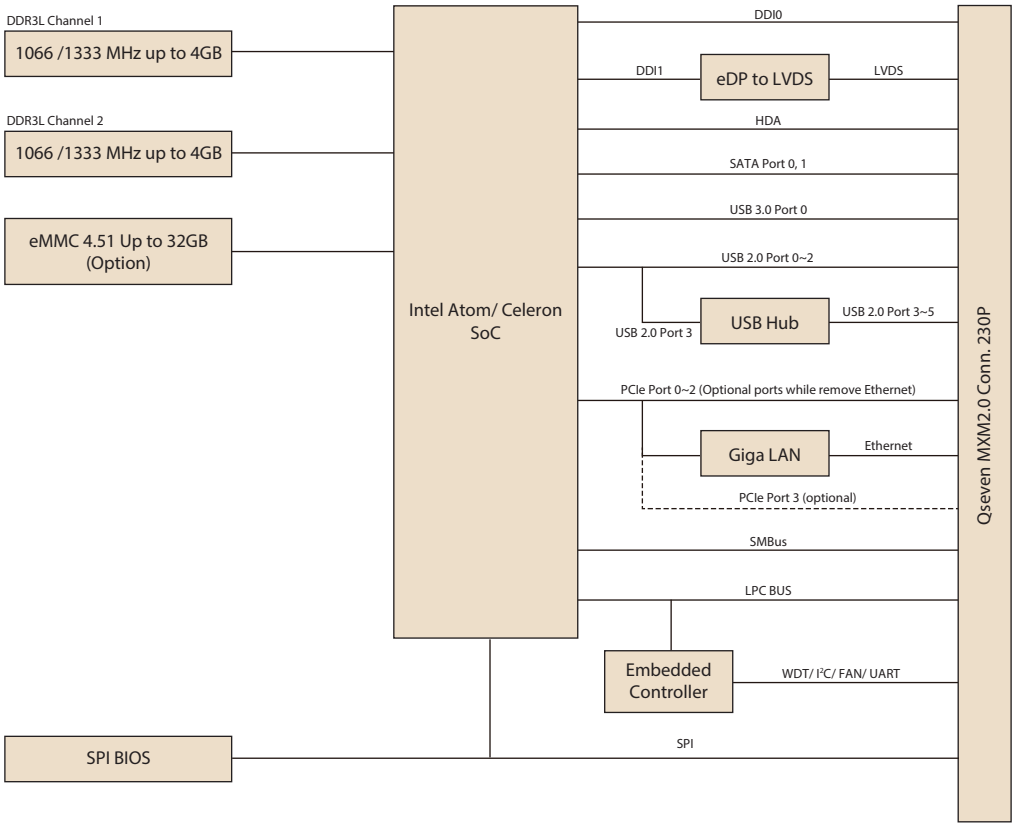
Software APIs: Watchdog, I²C, SMBus, H/W Monitor, GPIO, Brightness

Specifications

Compliance	Form-Factor	QSeven 70 x 70 mm						
	Pin-out Type	QSeven 2.1						
Platform	CPU	Atom® E3845	Atom® E3827	Atom® E3825	Atom® E3815	Atom® E3805	Celeron® J1900	Celeron® N2807
	Base Frequency	1.91GHz	1.75GHz	1.33GHz	1.46GHz	1.33GHz	2.00GHz	1.58GHz
	Burst Frequency	-	-	-	-	-	2.42GHz	2.16GHz
	Core/Thread	4/4	2/2	2/2	1/1	2/2	4/4	2/2
	LLC	2MB	1MB	1MB	512KB	1MB	2MB	1MB
	CPU TDP	10W	8W	6W	5W	3W	10W	4.3W
	Chipset	N/A						
	BIOS	AMI EFI BIOS						
Memory	Technology	DDR3L-1333	DDR3L-1333	DDR3L-1066	DDR3L-1066	DDR3L-1066	DDR3L-1333	DDR3L-1333
	ECC Support	Not support						
	Channel/Socket	Onboard Single/Dual Channels						
	Max. Capacity	Up to 8GB						
Graphics	Controller	Intel® Gen 7				No graphic		
	Base/Turbo Freq.	542MHz	542MHz	533MHz	400 MHZ	No graphic	688 MHZ	313MHz
	Graphics Burst Frequency	792MHz	792MHz	-	-	No graphic	854 MHZ	750MHz
	Graphics Memory	Up to 1720MB DVMT				No graphic		
	3D/HW Acceleration	DX11, OGL3.2, OCL1.1, and H.264/AVC, VC-1, MPEG2 HW Decode/Encode				No graphic		
Display	LCD	LVDS: Dual channel 18/24-bit, up to 1920 x 1080						
	DDI	1 DDI support HDMI/DVI/DP configurable HDMI 1.4b: 3840 x 2160 @ 30Hz or 2560 x 1600 @ 60Hz, 24 bpp DVI: up to 1920 x 1080 @ 60Hz DP 1.1a: 3840 x 2160 @ 30Hz or 2560 x 1600 @ 60Hz, 24 bpp						
	Multiple Display	Dual display (LCD + DDI)						
Expansion	PCI Express	3 PCIe x1, optional 4 ports while remove Ethernet; Support x1, x2, x4 configurable						
	Audio Interface	HD Audio						
	LPC	Yes						
Serial Bus	SMBus	Yes						
	I²C Bus	Yes						
Ethernet	Controller	Intel® i210IT						
	Speed	10/100/1000 Mbps						
Onboard Storage	eMMC	eMMC4.51 up to 32GB						
I/O	SATA	2 Ports, Support Gen3.1 (6Gb/s) and Gen2 (3 Gb/s) or Gen 1(1.5 Gb/s)						
	USB3.0	1 Port						
	USB2.0	6 ports						
	SPI Bus	Support SPI BIOS EEPROM						
	GPIO	Not support GPIO mux with LPC						
	Watchdog	Multi-stage Watchdog Timer Output, 65536 level, 0 ~ 65535 sec						
	COM Port	4-wire COM 2 Ports (1 on MFG pins), optional support GPIO						
	Smart Fan	1 port						
Power	Type	ATX: Vin, VSB, AT: Vin						
	Supply Voltage	Vin: 5V±5%, VSB: 5V±5%, RTC Battery: 2.0-3.3V						
	Power Consumption	TBD						
Environment	Temperature	0 ~ 60° C (32 ~ 140° F)						
	Humidity	Operating: 40° C @ 95% relative humidity, non-condensing Storage: 60° C @ 95%relative humidity, non-condensing						
	Vibration Resistance	3.5 Grms						
Mechanical	Dimensions	70 x 70 mm (2.75" x 2.75")						

All product specifications are subject to change without notice.

Block Diagram



Ordering Information

Part No.	CPU	Freq.	Core	CPU TDP	Memory	eMMC	Thermal Solution	Operating Temperature
SOM-3567CS0CB-S9A2	Atom E3845	1.91GHz	4C	10W	4GB	N/A	Passive	0 ~ 60 °C
SOM-3567CS0CB-U0A2	Celeron J1900	2.00GHz	4C	10W	4GB	N/A	Passive	0 ~ 60 °C
SOM-3567CMBXB-S9A2	Atom E3845	1.91GHz	4C	10W	4GB	32GB	Passive	-40 ~ 85 °C
SOM-3567BS0XB-S7A2	Atom E3827	1.75GHz	2C	8W	2GB	N/A	Passive	-40 ~ 85 °C
SOM-3567BS0XB-S3A2	Atom E3825	1.33GHz	2C	6W	2GB	N/A	Passive	-40 ~ 85 °C

*Any other sku or combination is project based support. Please contact sales for details.

Packing List

Part No.	Description	Quantity
-	SOM-3567 Qseven CPU Module	1
1960076583N000	Heatspreader	1

Optional Accessories

Part No.	Description
1960058145N001	Semi-Heatsink, 70L x 63W x 13.2H (0 ~ 60° C)
1960061089N001	Semi-Heatsink, 70L x 63W x 34H (-40 ~ 85° C)

Development Board

Part No.	Description	Quantity
SOM-DB3520-00A1E	Qseven Development Board	1

Embedded OS

OS	Part No.	Description
WES7	2070014541	img WES7E SOM-3567 X64 V5.7.0 Eng