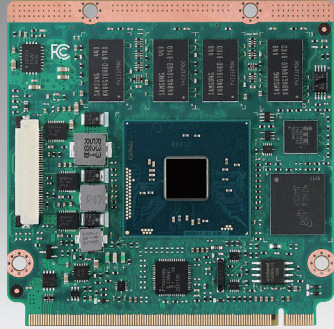


SOM-3568

Intel® Pentium® & Celeron® N3000 Series QSeven CPU Module

Preliminary



Windows Embedded

iManager susiAccess CE FCC

Features

- Intel® Pentium® and Celeron® N3000 Series SoC
- Qseven® 2.0 Specification
- Onboard DDR3L up to 8GB, onboard eMMC up to 32GB
- Support HEVC/H.265, H.264 MPEG2 HW Decode
- GbE, 3 PCIe1, 2 USB3.0, 5 USB2.0, 2 MIPI-CSI
- Supports iManager susiAccess, and Embedded Software APIs

Software APIs:

- Watchdog
- PC
- SMBus
- H/W Monitor
- GPIO
- Brightness Control

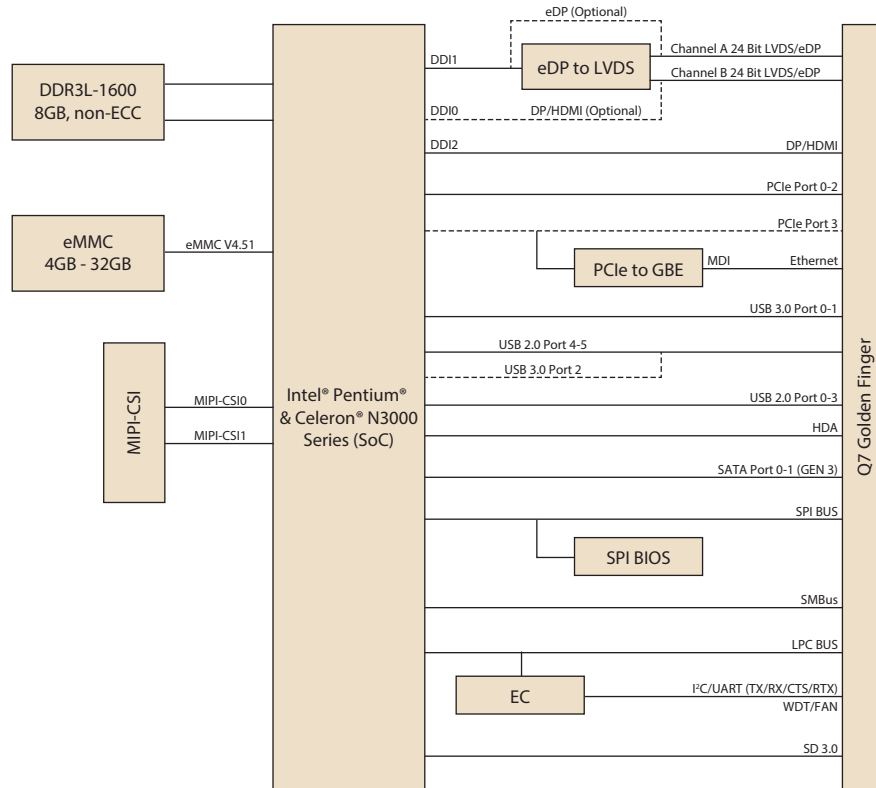
Utilities:

- BIOS flash
- Monitoring
- Embedded Security ID

Specifications

Compliance	Form-Factor	QSeven 70 x 70 mm			
	Pin-out Type	QSeven R2.0			
Platform	CPU + PCH	Pentium® N3700	Celeron® N3150	Celeron® N3050	Pentium® N3000
	Base Frequency	1.6GHz	1.6GHz	1.6GHz	1.04GHz
	Burst Frequency	2.4GHz	2.08GHz	2.16GHz	2.08GHz
	Core/Tread	4/4	4/4	2/2	2/2
	LLC	2MB	2MB	2MB	2MB
	CPU TDP	6W	6W	6W	4W
	Chipset	N/A			
	BIOS	AMI UEFI BIOS @ 64Mb			
Memory	Technology	DDR3L-1600			
	ECC Support	Not support			
	Channel/Socket	Dual Channel / Onboard Memory			
Graphics	Max. Capacity	Up to 8GB			
	Controller	Intel® HD Graphics			
	Base/Turbo Freq.	400MHz	320MHz	320MHz	320MHz
	Graphics Burst Frequency	700MHz	640MHz	600MHz	600MHz
	Graphics Memory	TBD			
Display	3D/HW Acceleration	DX 11.1, OpenGL 4.2, OpenGL ES 3.0, OpenCL 1.2, HW Decode: HEVC (H.265) @ L5, H.264 @ 5.2, MPEG2, MVC, VC-1, WMV9, JPEG/MJPEG, VP8 HW Encode: H.264 @ 5.1, MVC, JPEG/MJPEG			
	LCD	LVDS: Dual channel 18/24-bit, up to 1920 x 1200 Optional eDP 1.4: Up to 2560 x 1440 @ 60Hz 24bpp			
	DDI	1 DDI port supports HDMI/DP/DVI HDMI 1.4b: up to 3840 x 2160 @ 30Hz or 2560 x 1600 @ 60Hz, 24bpp DP 1.1a: up to 3840 x 2160 @ 30Hz or 2560 x 1600 @ 60Hz, 24bpp DVI: up to 1920 x 1200 @ 60Hz			
Expansion	Multiple Display	Triple independent display			
	PCI Express x1	3 PCIe1 (option 1 PCIe4 without LAN)			
Serial Bus	Audio Interface	HD Audio			
	LPC	Yes			
Ethernet	SMBus	Yes			
	I ² C Bus	Yes			
Onboard Storage	Controller	Intel® i210AT			
	Speed	10/100/1000 Mbps			
I/O	eMMC/SATA SSD	eMMC4.51, 4GB to 32GB			
	SATA	2 Ports, Support Gen3.1 (6Gb/s) and Gen2 (3 Gb/s) or Gen 1(1.5 Gb/s)			
	USB3.0	2 Ports			
	USB2.0	5 Ports			
	USB Client	N/A			
	SPI Bus	Support SPI BIOS EEPROM			
	GPIO	N/A			
	SDIO/SDXC	Support SD 3.0			
	Watchdog	65536 level, 0 ~ 65535 sec			
	COM Port	4-wire COM 2 Ports; optional mux with GPIO 8-bit			
	TPM	N/A			
	MIPI-CSI	2 ports; support 1 x4 and 1 x2 MIPI-CSI			
	CAN Bus	N/A			
Smart Fan	1 Ports				
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")			

Block Diagram



Ordering Information

Part No.	CPU	Freq.	Core	Diff. #1	Diff. #2	Diff. #3	Thermal Solution	Operating Temperature

Development Board

Part No.	Description	Quantity
-	SOM-3568 CPU Module	1
TBD	Heatspreader	1

Packing List

Part No.	Description	Quantity

Optional Accessories

Part No.	Description

Embedded OS

OS	Part No.	Description