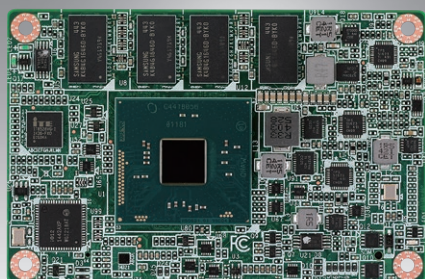


SOM-7568

Intel® Pentium™ & Celeron™ N3000 Series COM Express Mini Module

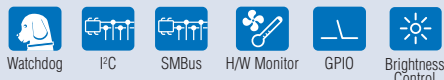
Preliminary



Features

- PICMG COM.0 R2.1 Type 10 Mini Module
- Intel® Pentium™ and Celeron™ N3000 Series SoC
- Dual Channel DDR3L 1600 non-ECC onboard memory up to 4 GB
- Dual Display: LVDS, HDMI/DisplayPort
- 4GB to 32GB eMMC onboard storage
- iManager, SUSIAccess and Embedded Software APIs

Software APIs:



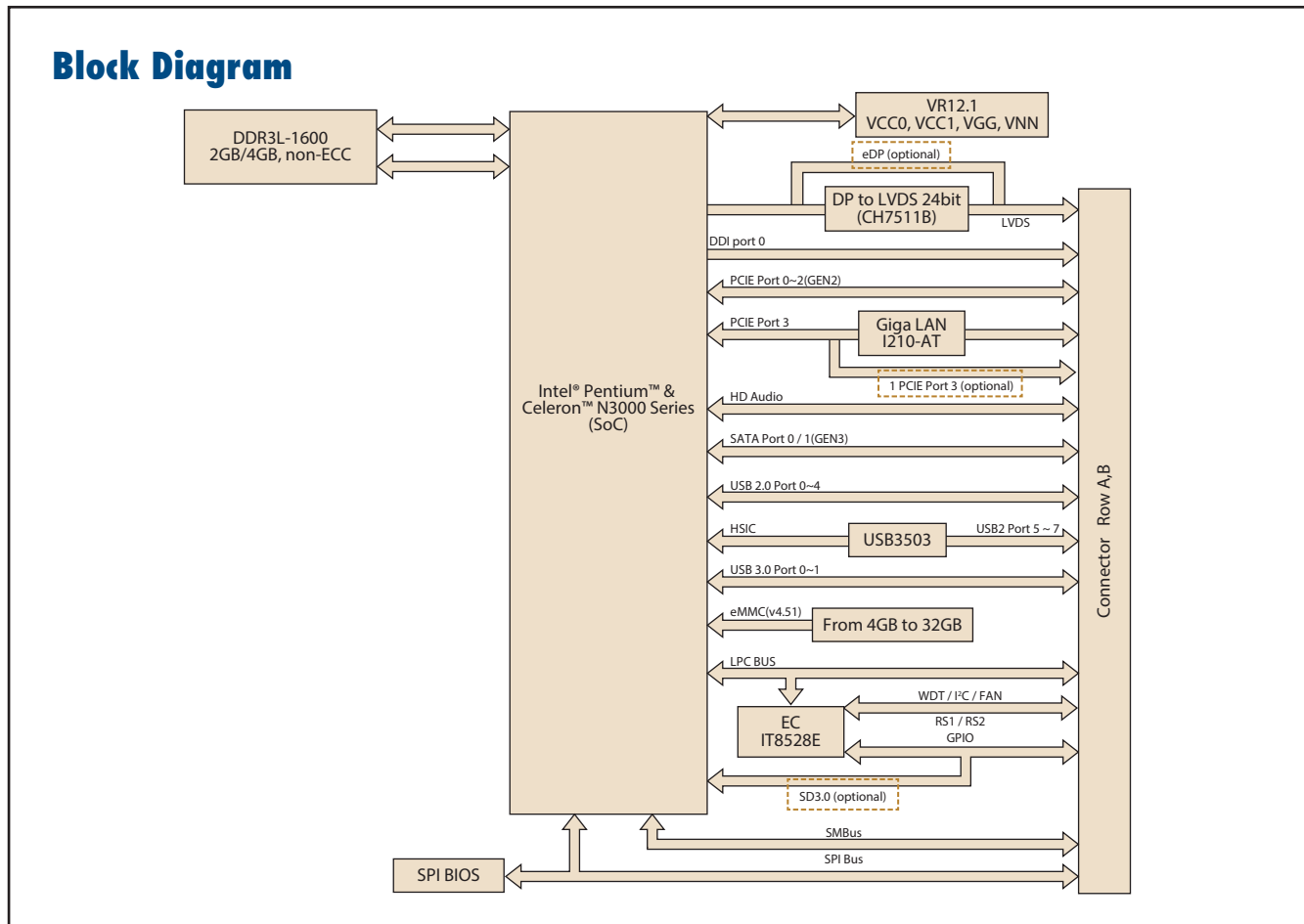
Utilities:



Specifications

Form Factor	Form Factor	COM Express Mini Module Compatible			
	Pin-out Type	COM Express R2.1 Type 10 Pin-out Compatible			
Processor System	SoC	Pentium® N3700	Celeron® N3150	Celeron® N3050	Celeron® N3000
	Base Frequency	1.6GHz	1.6GHz	1.6GHz	1.04GHz
	Burst Frequency	2.4GHz	2.08GHz	2.16 GHz	2.08GHz
	Core/Thread	4/4	4/4	2/2	2/2
	LLC	2MB	2MB	2MB	2MB
	CPU TDP	6W	6W	6W	4W
	BIOS	AMI UEFI BIOS @ 64Mb			
Memory	Technology	Dual Channel DDR3L-1600			
	ECC Support	N/A			
	Max. Capacity	4GB			
	Socket	Onboard memory			
Graphics	Controller	Intel® HD Graphics	Intel® HD Graphics	Intel® HD Graphics	Intel® HD Graphics
	Graphics Burst Frequency	700MHz	640MHz	600MHz	600MHz
	Graphic Memory	TBD			
	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			
Display	LCD	LVDS: Single channel 18/24-bit, up to 1366 x 768 Optional eDP: Up to 3840 x 2160 @ 30Hz or 2560 x 1600 @ 60Hz; eDP Version 1.4			
	DDO (HDMI/DisplayPort)	HDMI & DisplayPort: Up to 3840 x 2160 @ 30Hz or 2560 x 1600 @ 60Hz, 24 bpp; HDMI Version 1.4b; DisplayPort Version 1.1a			
	Dual Display	LVDS, HDMI/DisplayPort Optional: eDP, HDMI/DisplayPort			
Expansion	PCI Express x1	3 PCIe x1; (Optional 1 PCIe x4 without LAN)			
	Audio Interface	HD Audio			
	LPC	Yes			
Serial Bus	SMBus	Yes			
	I2C Bus	Yes			
Ethernet	Controller	Intel® i210AT			
	Speed	10/100/1000 Mbps			
I/O	SATA	2 Ports, Support Gen3.1 (6Gb/s) and Gen2 (3 Gb/s) or Gen 1(1.5 Gb/s)			
	Onboard Storage	eMMC4.51, 4GB to 32GB			
	USB3.0	2 Ports			
	USB2.0	8 Ports			
	GPIO	8-bit GPIO			
	Watchdog	65536 level, 0 ~ 65535 sec			
	COM Port	2 Ports (2-Wire)			
	Express Card	2 Ports			
	Smart Fan	2 Ports; 1 Port on COM Module. Support 12V Fan, 1 Port on Carrier Board			
	Power	Type	ATX: Vin, VSB, AT; Vin		
Supply Voltage		Vin: 4.75 (5-5%) ~ 20V (19+5%), VSB: 5V±5%, RTC Battery: 2.0-3.3V			
Power Consumption (Max.)		TBD			
Power Consumption (Idle)		TBD			
Environment	Temperature	Operating: 0 ~ 60° C (32 ~ 140° F), Storage: -40 ~ 85° C (-40 ~ 185° 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	84 x 55 mm (3.3" x 2.17")			

Block Diagram



Ordering Information

Part No.	CPU+PCH	Frq.	Core	LLC	TDP	Onboard Memory	Onboard Flash	Thermal Solution	Operating Temperature

Packing List

Part No.	Description	Quantity
-	SOM-7568 CPU Module	1
TBD	Heatspreader	1

Development Board

Part No.	Description
SOM-DB5800-U0A2E	COMe Devel. Board Type10 pint-out

Optional Accessories

Part No.	Description
1960056280N001	Semi-Heatsink 84L x 55W x 13.2H mm (0 ~ 60° C)
96LEDK-I057VG50NA1	5.7" LED PANEL 500N 640X480(G)
96LEDK-A084SV45NB2	8.4" LED PANEL 450N 800X600(G) G084SN05 V9
96LEDK-C150XG40NG1	15" LED PANEL 400N 1024X768(G) G150XGE-L04
96LEDK-A170SX35NF1	17" LED 350N 1280X1024(G) G170EG01 V1

Embedded OS

OS	Part No.	Description
WEC	TBD	TBD
WES	TBD	TBD