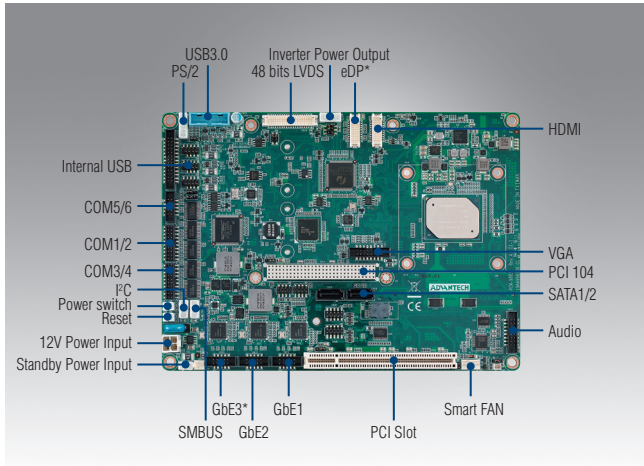


# PCM-9563

**Intel® Pentium N4200 Celeron N3350 & Atom™E3950/E3940/E3930 EBX with VGA/LVDS/HDMI\*, 3 GbE, 8 USB, 1 SATA, Audio, 1 Mini PCIe, 1 M.2 E key, 1 m.SATA, 6 COMs**



## Features

- Embedded Intel® Pentium N4200 & Celeron N3350, Atom™E3950, E3940, E3930, DDR3L 1867 MHz, up to 8GB
- DirectX11, OpenGL3.2, OpenCL1.2, multi-display: VGA+LVDS/eDP+ HDMI\*/DP\*
- Supports up to 3 Intel GbE, 6 COM, 1 Mini PCIe, 1 M.2 E-key, 1 mSATA, PCI-104 and 1 PCI Slot
- High transfer speed COM port design (Transfer rate up to 1 Mbit/s)
- Design complies with CE/FCC
- Supports iManager, WISE-PaaS/RMM, Embedded Software APIs

### Software APIs:



### Utilities:

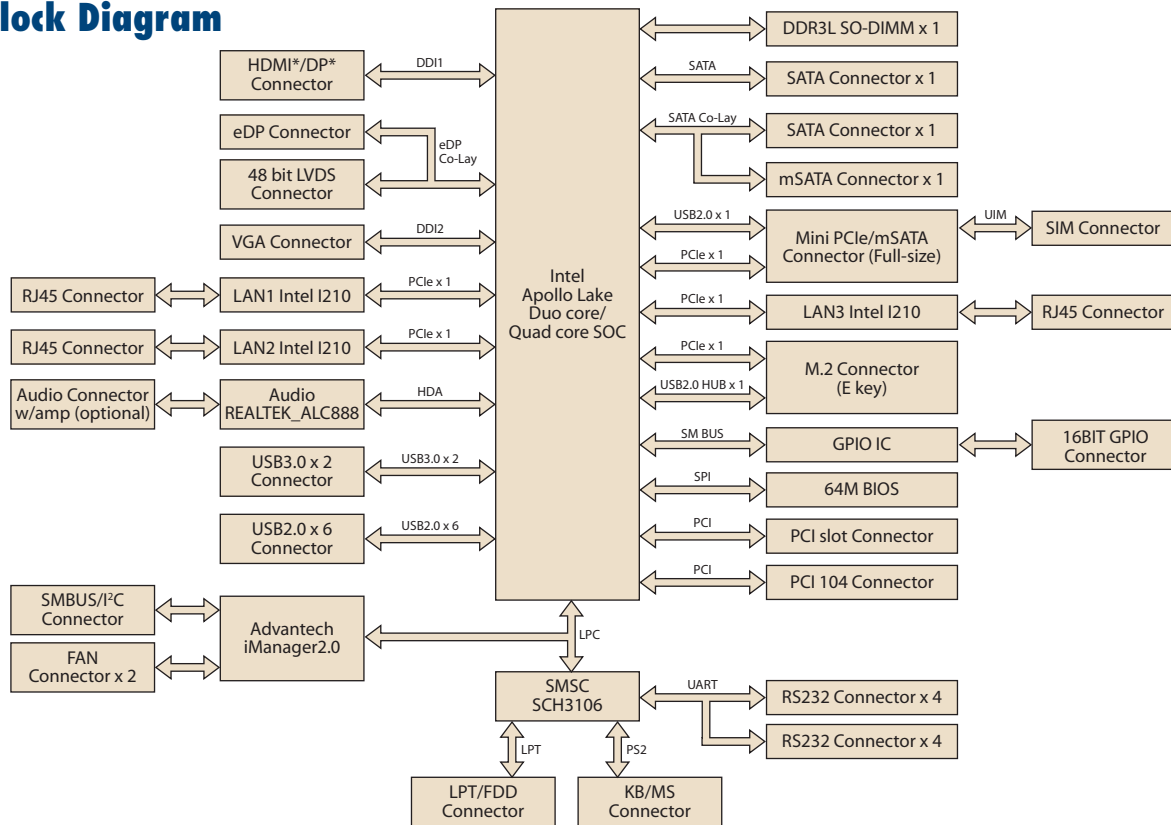


## Specifications

Processor System	CPU	Intel Pentium N4200 Celeron N3350 & Atom™E3950/E3940/E3930
	Core	4/2/4/2
	Frequency	1.1/1.1/1.6/1.6/1.3
	L2 Cache	2MB
Memory	BIOS	AMI 64 Mbit
	Technology	DDR3L 1867MHz
	Max. Capacity	8 GB
Display	Socket	1 x 204 pin SODIMM
	VRAM	Optimized Shared Memory Architecture up to 224 MB
	Graphics Engine	Gen-9Low Power; 18 Execution Units54K Codec Decode& Encode for HEVC4, H.264, VP8, SVC, MVC
	HDMI	1.4b(1920x1200@30Hz)
	DP	1.2a (1920x1200@60Hz)
	eDP	v1.4 (1920x1200@ 60Hz)
	LVDS	Single channel 48-bit LVDS up to 1920 x 1200
	VGA	Maximum Resolution up to 1920 x 1200
Ethernet	Multi Display	VGA+ LVDS/eDP*+ HDMI*/DP*
	Interface	Up to 3 (the 3th GbE by request)
	Controller	Intel I210
Audio	Connector	Box header
	Chipset	ALC888 HD Codec, Speaker out, CD-input, Line-out, Line-in, Mic-in
WatchDog Timer	Amplifier	Max 2.2W/ch Stereo into a 3Ω Load
	Output	System reset
Storage	Internal	Watchdog timer: monitor the system status before OS is ready (programmable 10ms, disable, 1s, 60s)
	mSATA	1 x full size mSATA
	SATA	2* SATAIII (Max. Data Transfer Rate up to 6.0 Gb/s)
	Floppy	Share with LPT (Optional)
	SPI Flash	64 Mbit
Internal I/O	HDMI	(Support by request)
	DP	(Support by request)
	LVDS	1 x 48bit LVDS
	Serial	4 x RS-232 (Transfer rate up to 1 Mbit/s) 2 x RS-422/485
	Ethernet	Up to 3 GbE (the 3th GbE by request)
	PS/2 KB/Mouse	1
	VGA	1
	eDP	(Support by request)
	Reset Button	1
	USB	6 x USB2.0 + 2 x USB3.0
	Parallel (LPT)	1
	GPIO	16-bit GPIO
	SMBUS	1
	IFC	1
Expansion	PCI-104	1
	Full-size Mini PCIe with SIM card holder	1
	PCI Slot	1
	mSATA	1
	M.2 E key	1
Power	Power Type	AT / ATX (Both AT/ATX can support ACPI)
	Power Supply Voltage	ATX: 12V ±10% AT: 12V ±10% only
	Power Consumption (Typical)	PCM-9563N-S2A1E with N4200: 0.44 @ 12V (5.28W) PCM-9563N-S1A1E with N3350: 0.48 @ 12V (5.76W)
	Power Consumption (Max, test in HCT)	PCM-9563N-S2A1E: 1.32 @ 12V (15.84W) PCM-9563N-S1A1E: 1.36 @ 12V (16.32W)
Environment	Operating	0 ~ 60° C (32 ~ 140° F) (Operating humidity: 40° C @ 95% RH non-condensing)
	Non-Operating	-40° C ~ -85° C and 60° C @ 95% RH non-condensing
Physical Characteristics	Dimensions (L x W)	203 x 146 mm (8" x 5.75")
	Weight	0.7 kg (1.54 lb) (with heatsink)
	Total Height (with cooler + PCB + Bottom)	29mm

\*It will not be supported in default, please contact to Advantech if this function is needed.

## Block Diagram



## Ordering Information

Model Name	CPU	Memory	VGA	LVDS	HDMI*	DP*	eDP*	GbE 1	SATAIII	mSATA	HD Audio	RS-422/485	RS-232	USB3.0	USB2.0	miniPCIe	M.2 E key	PCI-104
PCM-9563N-S1A1E	Intel Celeron N3350	SODIMM	1	1	-	-	-	2	1	1	V	2	4	2	6	1	1	Yes
PCM-9563NF-S2A1E	Intel Pentium N4200	SODIMM	1	1	-	-	-	3	2	-	V	2	4	2	6	1	1	Yes
PCM-9563NF-S1A1E	Intel Celeron N3350	SODIMM	1	1	-	-	-	3	2	-	V	2	4	2	6	1	1	Yes

\* Support by request

## Packing List

Part No.	Description	Quantity
	PCM-9563 SBC	1
9689000002	Mini Jumper Pack	1
2006956300	Startup Manual	1
1960074974N001	Heatsink for PCM-9563	1

## Optional Accessories

Part No.	Description
PCM-10586-9563	Wiring kit for PCM-9563
1703100260	USB cable
170304015K	AT cable 4P x 2/4200-H-4P 15 cm
TBD	Heatspreader

## Embedded OS/API

Embedded OS/API	Part No.	Description
Win 10	2070015275	Win10 64 bit