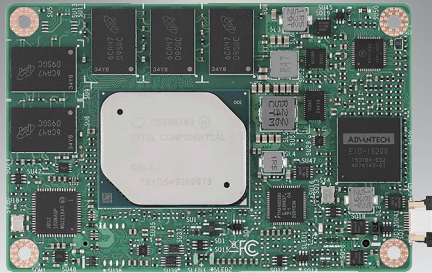


# SOM-7569

## Intel® Atom™ E3900 & Pentium® / Celeron® Processor COM-Express Mini Module

Preliminary



### Features

- COM R.2.1 Type 10 Mini Module
- Intel® Atom™ E3900 & Pentium® / Celeron® Processor
- One Channel DDR3L 1866 ECC / non-ECC onboard memory up to 8 GB
- Dual Display: LVDS, HDMI/DisplayPort
- Up to 32GB eMMC 5.0 onboard storage
- Supports H.264/AVC, H.265/HEVC, VP9, VP8 HW DECODE
- Supports Wide-range operating temp.
- iManager and Embedded Software APIs

**Software APIs:**

- Watchdog
- I<sup>2</sup>C
- SMBus
- H/W Monitor
- GPIO
- Brightness Control

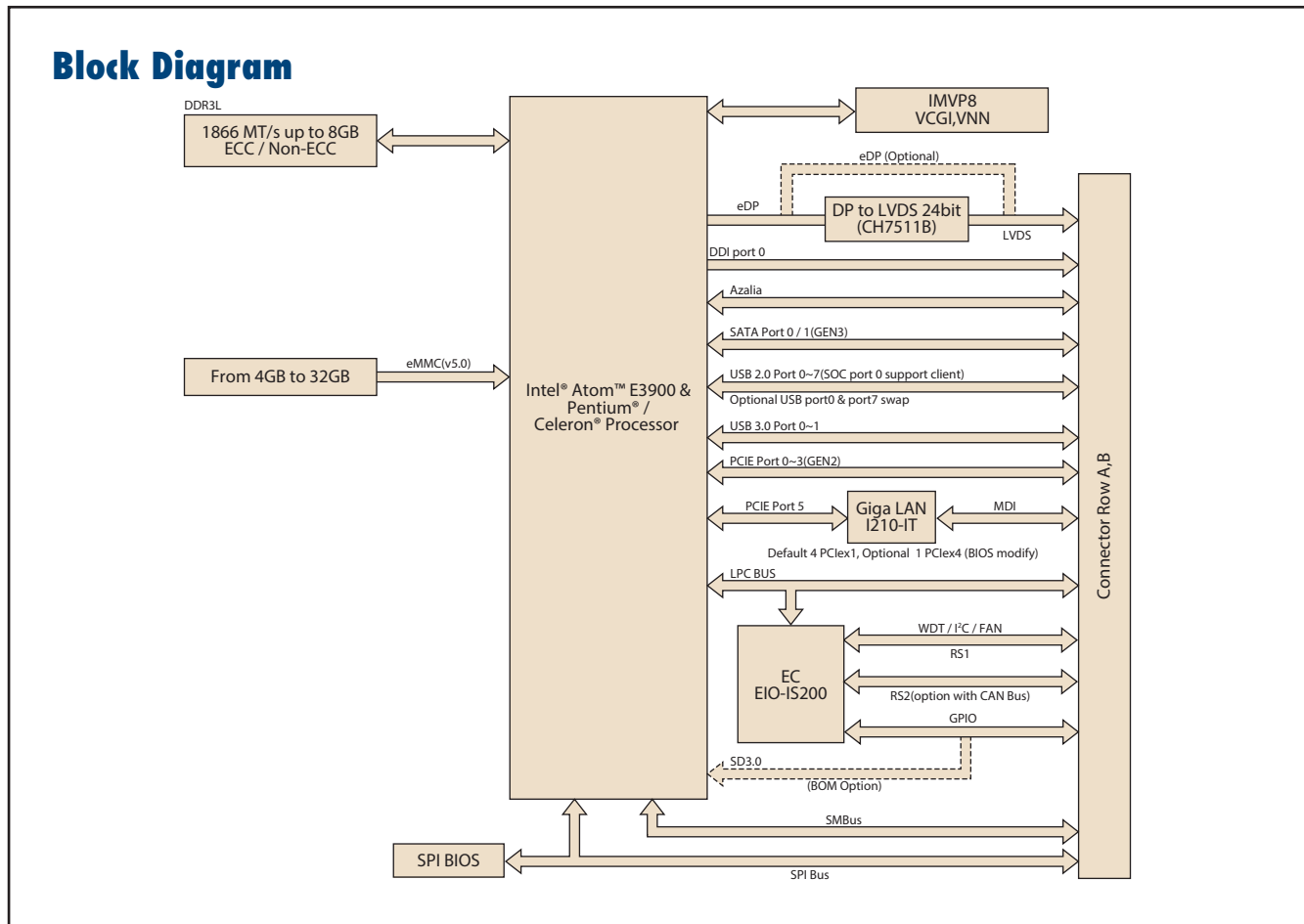
**Utilities:**

- BIOS flash
- Monitoring
- Embedded Security ID

### Specifications

Form Factor	Form Factor	COM-Express 2.1
	Pin-out Type	Mini Module, Type 10 Pin-out
Processor System	CPU	Intel® Atom™ E3900 & Pentium® / Celeron® Processor
	Base Frequency	TBD
	Burst Frequency	TBD
	Core/Thread	TBD
	LLC	TBD
	CPU TDP	TBD
	Chipset	integrated in CPU
	BIOS	AMI UEFI BIOS @ 64Mb
Memory	Technology	One channel DDR3L 1866 MT/s
	ECC Support	Yes
	Max. Capacity	8GB
	Socket	Onboard DDR
Graphics	Controller	Intel 9th generation (Gen 9) LP graphics and media encode/decode engine
	Graphics Burst Frequency	TBD
	Graphic Memory	TBD
	3D/HW Acceleration	DX (9.3, 10, 11.3, 12), OpenGL 4.3, OGL ES 3.0, OpenCL 2.0 HEVC (H.265) @L5, H.264 @5.2, MVC, MPEG2, VP8, VP9, VC-1, WMV9, JPEG/MJPEG HW Decode, HEVC (H.265) @L4, H.264@ 5.2, MVC, VP8, VP9, JPEG/MJPEG HW Encode
Display	LCD (LVDS/eDP)	LVDS: Single-channel 18/24-bit, up to 1366 x 768 eDP: Up to 4096x2160 @ 60 Hz
	DD0 (HDMI/DisplayPort)	HDMI 1.4b: Upto 3840x2160 @ 30 Hz DP 1.2: Upto 4096x160 @ 60 Hz
	Dual Display	LVDS, HDMI/DisplayPort eDP, HDMI/DisplayPort (optional)
Expansion	PCI Express x1	4 PCIe x1, 1 PCIe x4 (optional)
	Audio Interface	HD Audio
	LPC	Yes
Serial Bus	SMBus	Yes
	I <sup>2</sup> C Bus	Yes
Ethernet	Controller	Intel® i210IT
	Speed	10/100/1000 Mbps
I/O	SATA	2 Ports, Support Gen 1(1.5 Gb/s) or Gen2 (3 Gb/s) and Gen3.1 (6Gb/s)
	Onboard Storage	Up to 32GB eMMC 5.0 interface
	USB3.0	2 Ports
	USB2.0	8 Ports
	Audio	Intel® HD Audio
	GPIO	8-bit GPIO
	Watchdog	65536 level, 0 ~ 65535 sec
	COM Port	2 Ports (2-Wire)
	Express Card	Yes
	Smart Fan	2 Ports; 1 Port on COM Module. Support 12V Fan, 1 Port on Carrier Board
Power	Type	ATX, AT
	Supply Voltage	ATX (Vin 4.75-20V, Vsb 4.75-5.25V) AT (Vin 4.75-20V)
	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	CPU TDP	LLC	DDR3 SODIMM	LVDS	VGA	Giga LAN	High AD	PCIe x1	COM	USB3.0	USB2.0	SATA	Thermal Solution	Operating Temperature

## Packing List

Part No.	Description	Quantity
-	SOM-7569 CPU Module	1
TBD	Heatspreader	1

## Development Board

Part No.	Description
SOM-DB5800-U0A2E	COMe Devel. Board Type10 pint-out Rev. A2

## 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