

SOM-A350

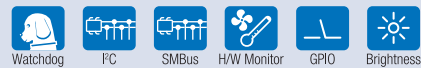
Intel® 14th Gen Core Processors (Code Name: Meteor Lake U/H) COM-HPC® Size A Module

Preliminary

Features

- COM-HPC® Size A Module Client Pinout
- Intel® 14th Gen Core Processors , Up to 14C/20T
- Intel Xe LPG graphic up to 128EU, 4 independent 4K display
- Dual-CH DDR5 5600MT/s up to 96GB SODIMM
- Multiple I/O expansion: 2.5GbE, PCIe Gen5, USB4 & USB3.2 Gen2, SATA3.0
- Support Dual BIOS for failsafe and flexible BIOS configuration
- Supports iManager, Embedded Software APIs and Wise-DeviceOn

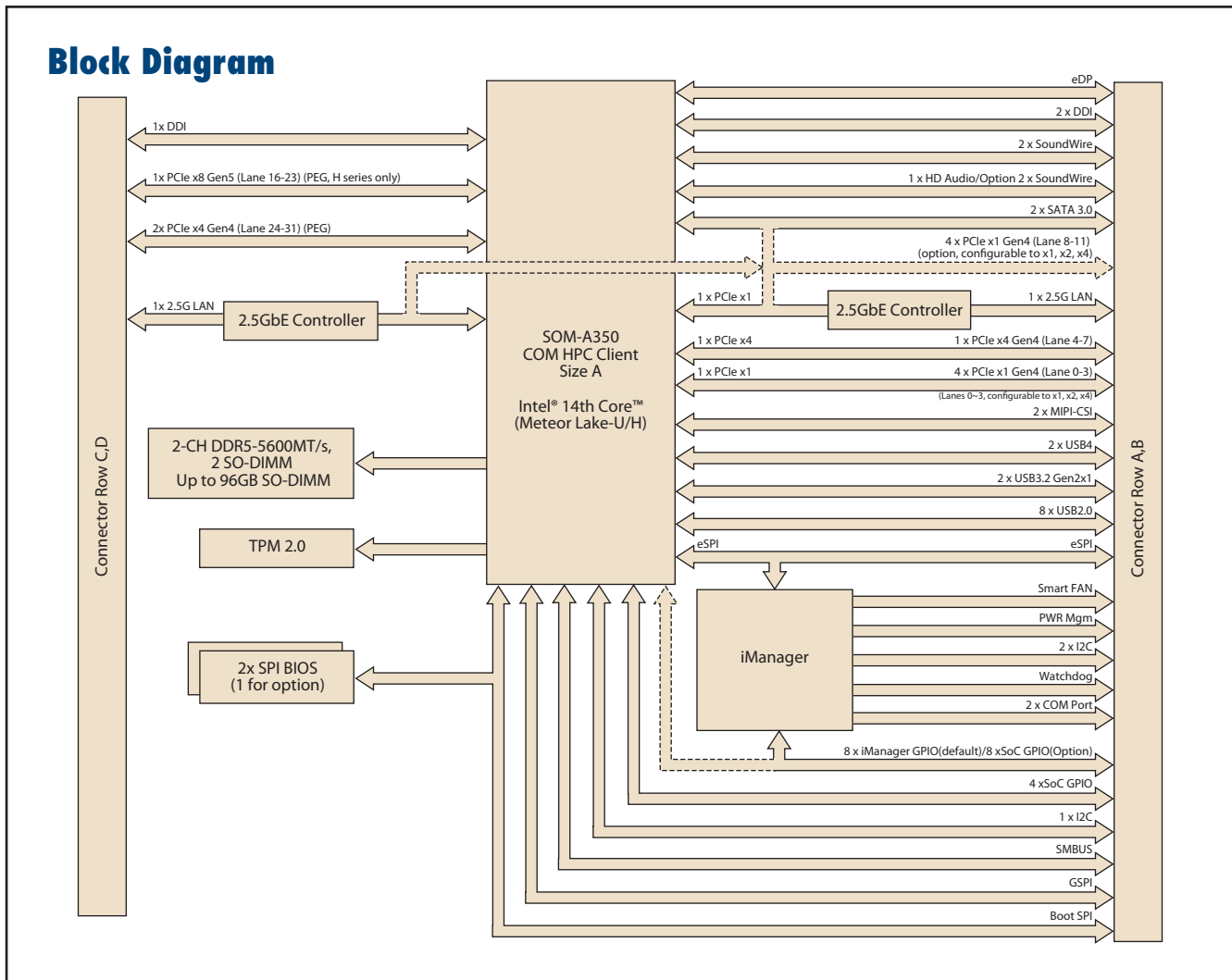
Software APIs:



Specifications

Form Factor	Form Factor	COM-HPC® Size A Module							
	Pin-out Type	COM-HPC® Client							
	Series	H-Series				U-Series			
	CPU	Core™ Ultra 7		Core™ Ultra 5		Core™ Ultra 7		Core™ Ultra 5	
	Cores (P+E)	14C (6P+8E)	14C (6P+8E)	12C (4P+8E)	12C (4P+8E)	10C (2P+8E)	10C (2P+8E)	10C (2P+8E)	10C (2P+8E)
	Base Frequency	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	Max Turbo Frequency	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	LLC	24MB	24MB	18MB	18MB	12MB	12MB	12MB	12MB
	TDP	28W	28W	28W	28W	15W	15W	15W	15W
	vPRO	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A
	BIOS	AMI UEFI 256Mbit							
	Technology	DDR5							
	Speed	5600MT/s							
	Max. Capacity	Up to 96GB							
	Channel/Socket	Dual Channel / 2 Sockets, 1DPC							
	ECC Support	TBD							
	Controller	Intel® Xe LPG Graphics							
	EU	Up to 128EU							
	Base. Frequency	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	Max. Frequency	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	3D/HW Acceleration	TBD							
	eDP	eDP1.4b HBR3							
	DDI (HDMI/DisplayPort)	3 DDI Port Support Configurable HDMI/DisplayPort - DDI1: DP 1.4a, DDI2: DP2.1, DDI3: DP2.1 - HDMI 2.1: 4096 x 2304 @ 60Hz							
	Multiple Display	Quad Simultaneous Independent Display							
	PEG	PEG (H series only): 1 PCIe Gen5 x8 PEG: 2 PCIe Gen4 x4, 8 lanes, bifurcate to 2 x4							
	PCI Express	PCIe: PCIe Gen4, support up to 9 devices - 1 PCIe Gen4 x4 - 4 PCIe Gen4 lanes, bifurcate to x1, x2, x4 - 4 PCIe Gen4 lanes, bifurcate to x1, x2, x4, Optional 2 SATA and 2.5Gb Ethernet							
	SMBus	Yes							
	I2C Bus	Yes							
	Gigabit	Intel I226 (Intel controller) ; Speed: 10M / 100M / 1000M / 2.5G speeds							
	SATA	2 Ports support SATA 3.0 (6Gbps)							
	USB4	2 ports							
	USB3.2 Gen 2x1	2 Ports (10Gbps)							
	USB2.0	8 Ports (480Mbps)							
	SPI Bus	Yes. For BIOS EEPROM, Support Dual BIOS							
	GPIO	8-bit, Default to iManager, Option to CPU							
	Audio Interface	HD Audio							
	Watchdog	65536 level, 0 ~ 65535 sec							
	COM Port	2 Ports (2-Wire)							
	TPM	TPM2.0							
	Smart Fan	2 Ports (for COM Module and carrier board. support 12V Fan							
	Type	ATX: Vin, VSB; AT: Vin							
	Supply Voltage	Vin: 8.5V ~ 20V; VSB: 4.75V ~ 5.25V; RTC Battery: 2.0V ~ 3.3V							
	Power Consumption (Max.)	TBD							
	Power Consumption (Idle)	TBD							
	Operating Temperature	Standard: 0 ~ 60 °C (32 ~ 140 °F) Extend: -40 ~ 85 °C (-40 ~ 185 °F)							
	Storage Temperature	-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							
	Dimensions	95 mm x 120 mm (3.74" x 4.72")							

Block Diagram



Ordering Information

Part No.	CPU	Core	Graphics	Base Freq.	Max. Boost Freq.	GFX HFM	GFX Burst Mode	CPU TDP	EMMC	IBECC	Thermal solution	Operating Temp.
TBD												

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

Development Board

Part No.	Description
SOM-DH3000-00A2	COM-HPC Development Board for Client Pinout with 5mm High Board to Board Connector (Meteor Lake-U/H)

Optional Accessories

Part No.	Description
TBD	Semi-Heatsink
TBD	QFCS

Packing List

Part No.	Description	Quantity
-	SOM-A350 COM-HPC module	1
TBD	Heatspreader	1

Embedded OS

OS	Part No.	Description
Win10	TBD	TBD