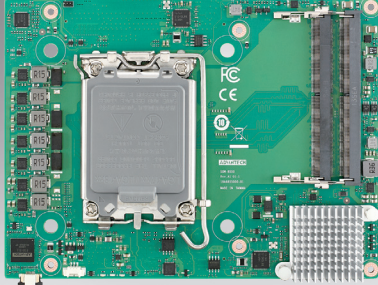


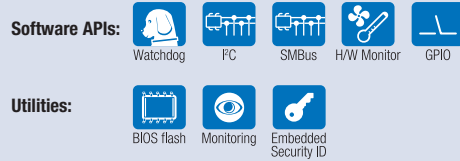
# SOM-C350

## Intel® 12th Gen Core Processors COM-HPC® Client Size C Module



### Features

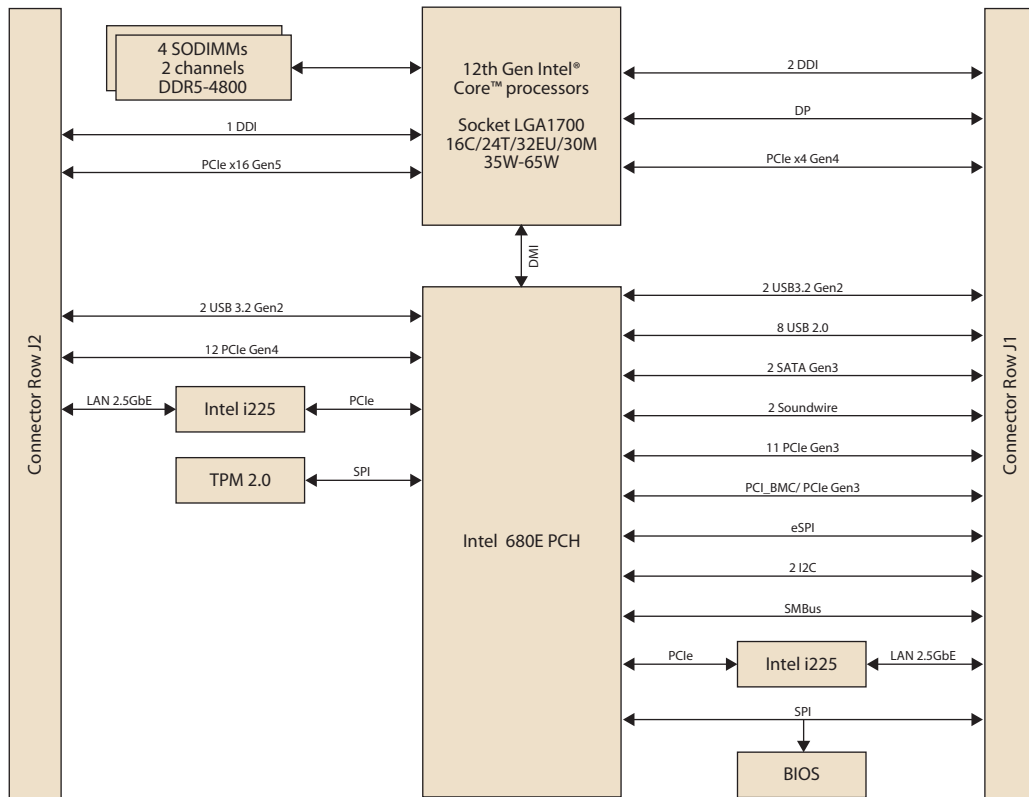
- COM-HPC® client size C module pin out
- High scalability with socket type LGA 1700 CPU + R680E PCH
- 4 SODIMM DDR5 w/ ECC/non-ECC, max. 128GB
- High performance iRIS Xe graphic engine and PCIe x16 Gen5
- High speed Ethernet 2.5GbE with TSN and USB 3.2 Gen2x2
- Supports iManager, WISE-PaaS/DeviceOn and embedded software APIs



### Specifications

Form Factor	Form Factor	COM-HPC® Size C Module	
	Pin-out Type	Client pin out	
Processor System	CPU	Intel Alder Lake-S Desktop CPU	
	Core Number	Up to 16C/24T/32EU/30M	
	Socket Type	LGA 1700	
	Platform Controller Hub	Intel 680E	
	BIOS	AMI UEFI 256Mbit	
Memory	Technology	DDR5 4800 MT/s	
	ECC Support	ECC or non-ECC	
	Max. Capacity	up to 128GB	
	Memory Type	4 U-DIMM sockets	
Display	Interface	2 ports DDI and 1 port eDP	
	Resolution	Up to 8k	
Expansion	PCI Express x16	1 PCIe x16 Gen5, and bifurcatable to 2 x8, 1 x8 & 2 x4, or 4 x4	
	PCI Express x1 (Gen4)	1 port PCIe x4 Gen4 (from CPU) and 12 ports PCIe x1 Gen4 (from PCH)	
	PCI Express x1 (Gen3)	9 ports PCIe x1 Gen3 and 1port PCIe x1 Gen3 reserved for BMC	
Serial Bus	SMBus	Yes	
	I <sup>2</sup> C Bus	Yes. 1 port from EC (100kb/s & 400kb/s master mode support) and 1 port from PCH	
Ethernet	2.5GbE	2 port 2.5GbE with TSN support	
I/O	SATA	2 ports support SATA III 6.0Gb/s	
	USB3.2 Gen2x2	4 Ports	
	USB2.0	8 ports	
	SPI Bus	2 ports (for BIOS ROM and GP_SPI)	
	GPIO	4 ports GPI and 4 ports GPO	
	Watchdog	65536 level, 0 – 65535 sec	
	COM Port	2 Ports (2-Wire)	
	TPM	TPM 2.0 (Infineon 9670)	
	Smart Fan	2 Ports (for COM Module and carrier board. support 12V Fan)	
	Power	Type	ATX: Vin, VSB, AT: Vin
		Supply Voltage	Vin: 8~20V, VSB: 5V±5%, RTC Battery: 2.0-3.3V
Power Consumption (Max.)		N/A	
Power Consumption (Idle)		N/A	
Environment	Temperature	Operating Standard: 0 ~ 60° C (32 ~ 140° F), Extend: -40 ~ 85° C (-40 ~ 185° F) with 0.7m/s air flow. 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	160 x 120 mm (6.30" x 4.73")	

## Block Diagram



## Ordering Information

Part No.	CPU	Core	Freq.	CPU TDP	LLC	Memory	SSD	Giga LAN	10GBase-KR	PEG x16	PCIe x8	PCIe x1	USB 2.0	USB 3.0	SATA III	LPC	Power	Thermal solution	Operating Temp.
N/A																			

\* Other combination is project based support. Please contact sales for details.

## Optional Accessories

Part No.	Description
N/A	Semi-Cooler

## Development Board

Part No.	Description
N/A	

## Packing List

Part No.	Description	Quantity
N/A	SOM-C350 COM-HPC module	1
N/A	Heatspreader	1

## Embedded OS

OS	Part No.	Description
N/A		