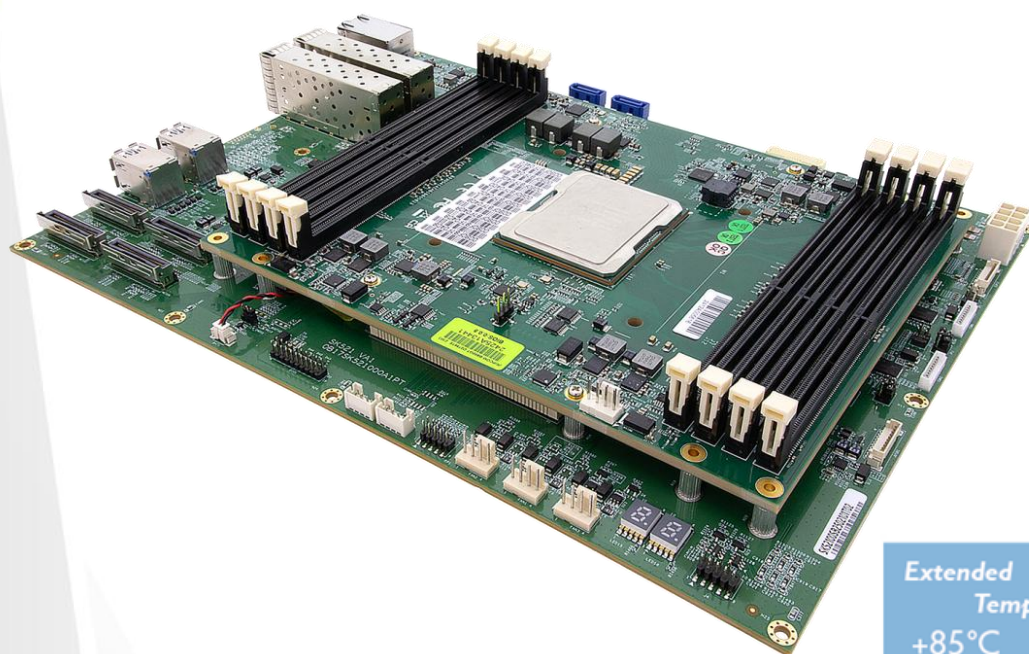




SKS21-027

COM-HPC SERVER TYPE D CARRIER BOARD
WITH MXM, MCIOs EXPANSIONS
EXTREME TEMPERATURE -40°C TO 85°C



Extended
Temperature
+85°C
-40°C

- COM-HPC Server (D) Support Intel ICE-Lake D HCC
- MXM GPU Expansion Slot for Rugged Stack PC
- Multi-Expansion Slots :
 - 4x MCIO(Vertical) (4 x PCIe Gen4 x8)
 - 1x mPCIe(Full Size)
 - 1x M.2 2280 M-Key(PCIe Gen4 x 4)
- I/O : 2x GbE, 4x 25GbE, 2x SATAIII, 1x COM(RS232), 4x USB3.0, 2x USB2.0, 1x DIO(6in/6out)
- 12V DC Input
- Extreme Temperature -40°C to 85°C

Specifications

SYSTEM

CPU	Intel ICE-Lake HCC D-2700 Series : D-2796TE, 20C / 40T, 2.0/3.1GHz, 30M Cache, TDP : 118W D-2775TE, 16C / 32T, 2.0/3.1GHz, 25M Cache, TDP : 100W D-2752TER, 12C / 24T, 1.8/2.8GHz, 20M Cache, TDP : 77W
Memory type	DDR4 R-DIMMs up to 512GB; LR-DIMMs up to 1024GB
Chipset	None
Storage	MCIO/M.2/SATA interface
Watchdog	On CPU module :

EXPANSION SLOT

MCIO(Vertical)	4x (4*PCIe Gen4 x 8)
MiniPCIe(Full Size)	1x (PCIe Gen3 x 1)
M.2	1x (M.2 2280 M-Key)(PCIe Gen4 x 4)
MXM	1x MXM GPU slot

DISPLAY

DP	2x (From MXM)
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ETHERNET

Chipset	1x Intel® I210iT 1x C827-AM
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EXTERNAL I/O

USB3.0	4x
25GbE	4x
GbE	2x (One from CPU Module)

INTERNAL I/O

USB2.0	2x (Header)
DIDO	1x (6in/6out)
SATAIII	2x
SATA Power	2x
Serial	2x (RS232)
I2C	1x
System Fan	1x

CPU Fan	1x
Front Panel Control	1x
Power Connector	1(2 x 4-pin terminal block)

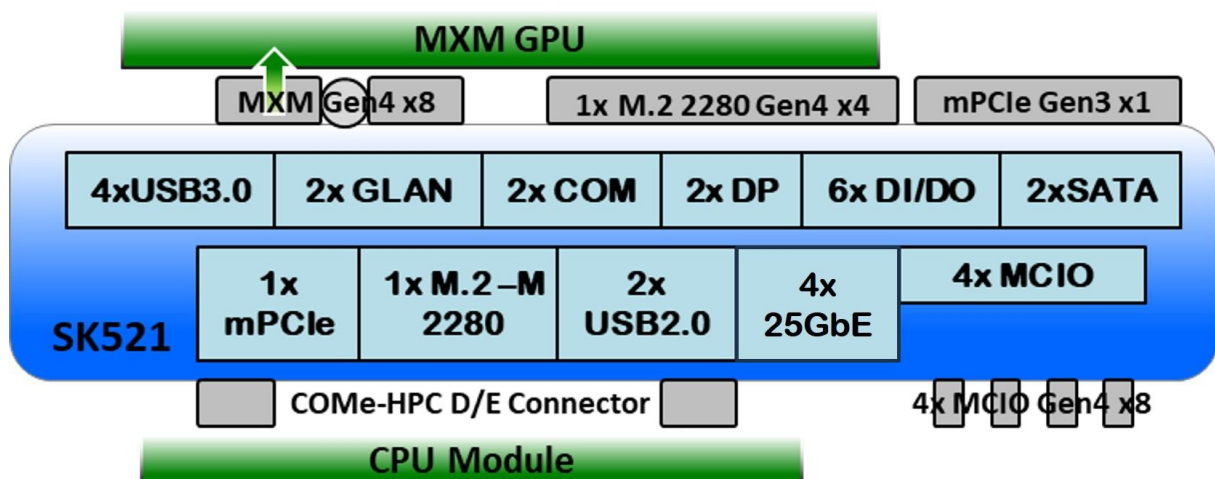
MECHANICAL AND ENVIRONMENTAL

Form Factor	COM-HPC Carrier Server Type D
Power Type	DC-IN 12V
Dimension	280mm x 210mm
Operating Temperature	-40°C to 85°C
Storage Temperature	-40°C to 85°C
Relative humidity	10% to 90%, non-condensing

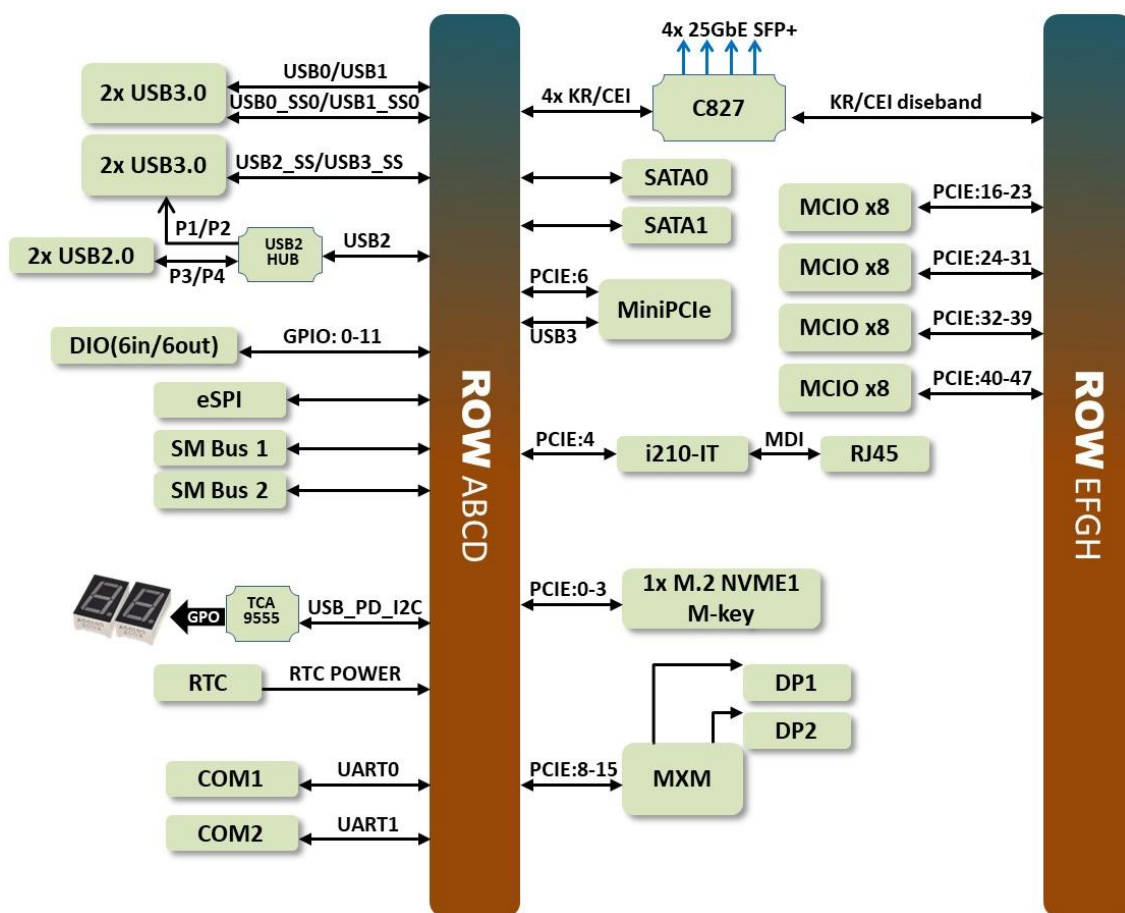
OS

OS	Windows 10 IoT Enterprise LTSC; Windows Server 19H1/2, 20H1; Linux Red Hat 7.6 or latest; Ubuntu19.04 or latest VMWare ESXi; Windows Hyper-V: Windows Server 19H1/2, 20H1
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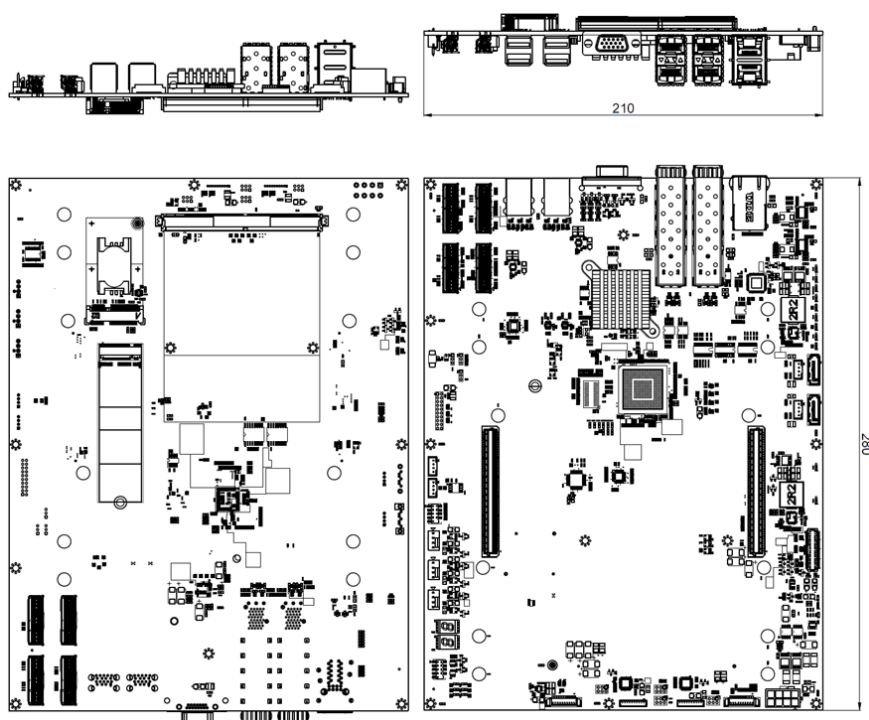
System Block Diagram



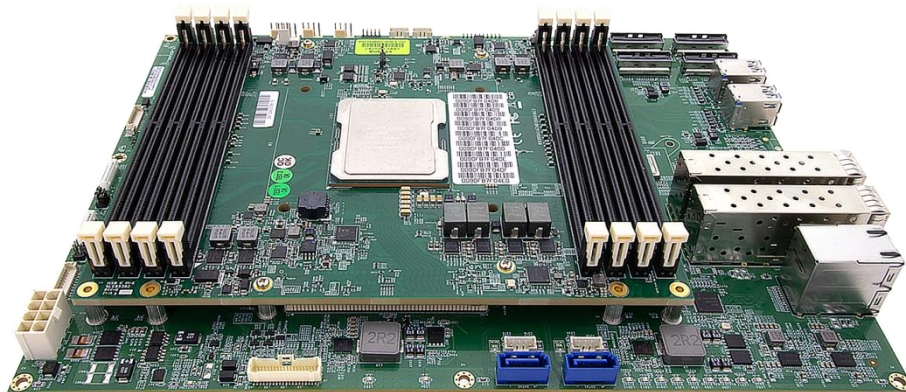
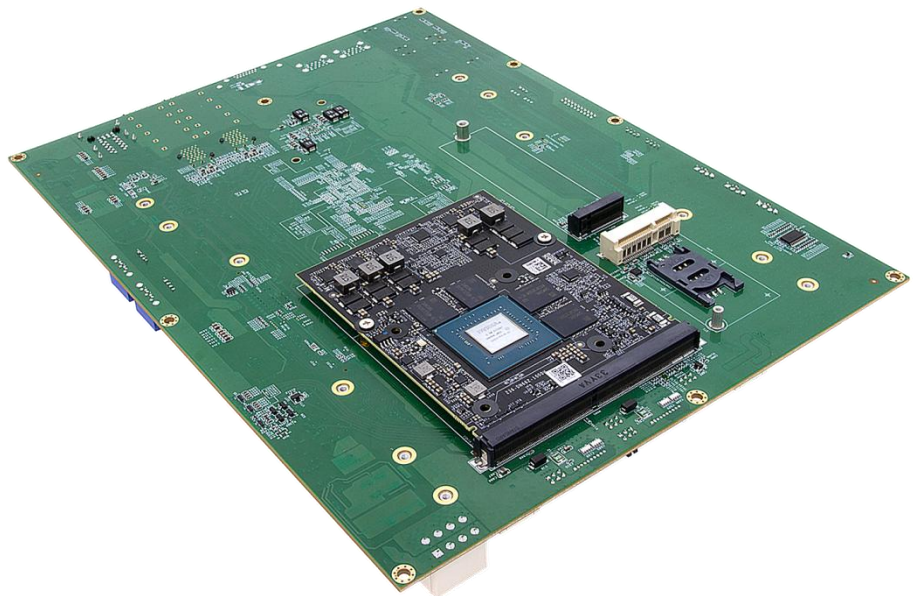
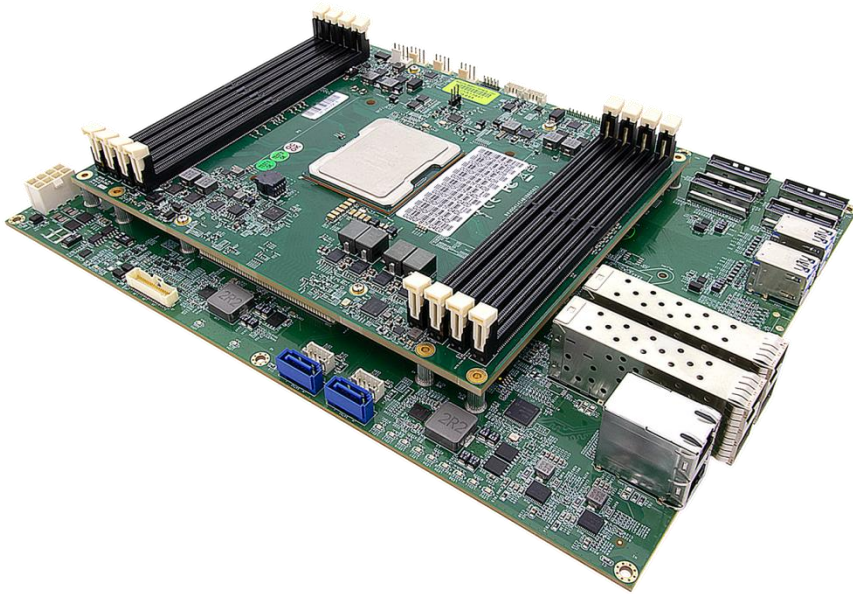
Block Diagram



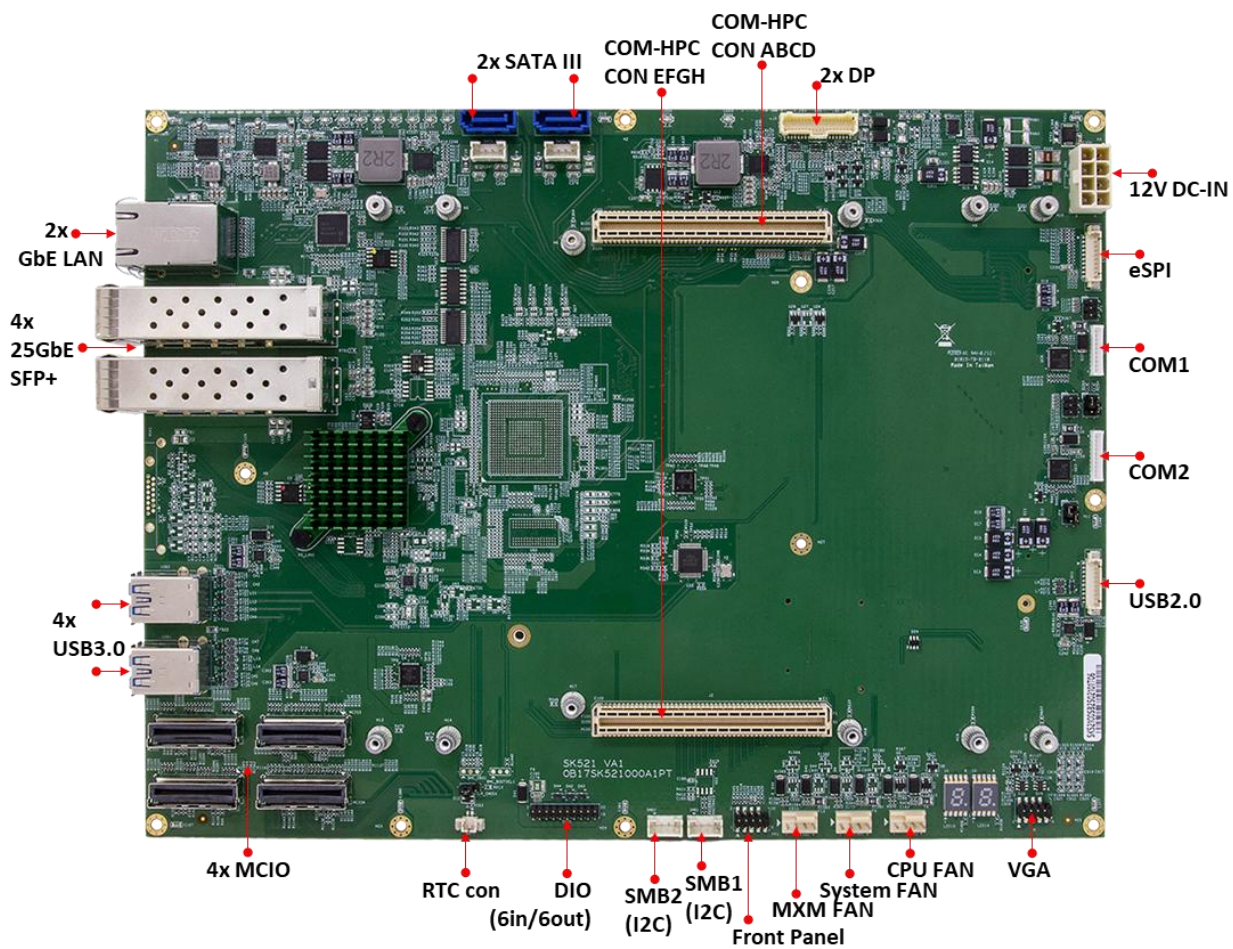
Dimension



Appearance



SK521 BD Line Diagram



CPU/GPU Table

CPU Products List

	CPU	SPEC
Intel	D-2796TE	20C / 40T, 2.0/3.1GHz, 30M Cache, TDP : 118W
	D-2775TE	16C / 32T, 2.0/3.1GHz, 25M Cache, TDP : 100W
	D-2752TER	12C / 24T, 1.8/2.8GHz, 20M Cache, TDP : 77W

GPU Products List

GPU	CUDA Cores	Memory	TDP
NVIDIA® RTX 5000Ada	9,728 CUDA Core	GDDR6 16GB	80W
NVIDIA® RTX A4500	5,888 CUDA Core	GDDR6 16GB	80W
NVIDIA® RTX A2000	2,560 CUDA core	GDDR6 8GB	60W

Ordering Information

COMe Type	CPU	Model Name	Configuration
COM-HPC	D-2796TE 20C, TDP: 118W	SK521-D2796TE-50A	CPU: D-2796TE / MXM GPU: RTX 5000Ada
		SK521-D2796TE-A45	CPU: D-2796TE / MXM GPU: RTX A4500
	D-2775TE 16C, TDP: 100W	SK521-D2775TE-50A	CPU: D-2775TE / MXM GPU: RTX 5000Ada
		SK521-D2775TE-A45	CPU: D-2775TE / MXM GPU: RTX A4500
		SK521-D2775TE-A20	CPU: D-2775TE / MXM GPU: RTX A2000
	D-2752TER 12C, TDP: 77W	SK521-D2752TER-A45	CPU: D-2752TER / MXM GPU: RTX A4500
		SK521-D2752TER-A20	CPU: D-2752TER / MXM GPU: RTX A2000