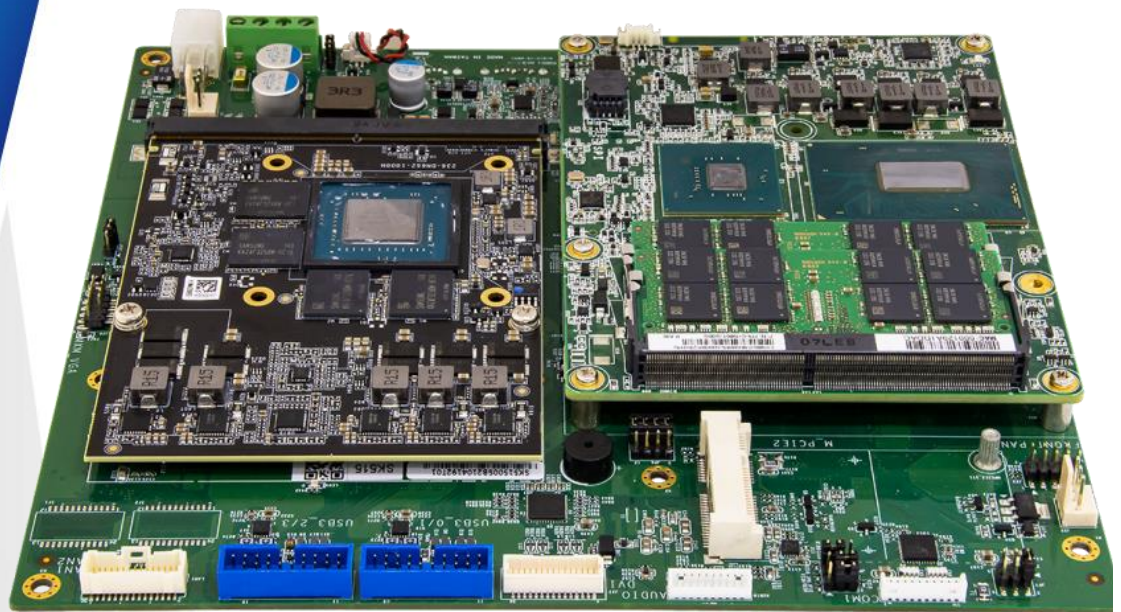




STAR LAKE-TOUCH



Key Feature

- COM Express Type 6 Support 9th Coffee Lake-H Processor
- MXM Type 3.1 Support NVIDIA® GTX® / RTX® GPU
- Support MXM RTX 5000 Ada (9728 CUDA, 16GB RAM)
- PCI/104 Express Expansion Slot for Modular Open Structure
- Multi-Expansion Slots include Dual Mini PCIe Express Slots, 1x M.2 Slot
- 2x SATA, 4x DI/4x DO, 4x USB3.0, 2x USB2.0
- Wide Range DC 9V~36V Input
- Extreme Temperature Support -40°C to 85°C

Specifications

System

COM Express CPU Options(Type6)	Intel® Xeon® E-2276ME 45W Coffee Lake 9 th Gen, 6C, 2.8 /4.5 GHz, 12MB cache Intel® Xeon® E-2276ML 25W Coffee Lake 9 th Gen, 6C, 2.0 / 4.2 GHz,12MB cache Intel® Core™ i7-9850HE 45W Coffee Lake 9 th Gen, 6C, 2.7 / 4.4 GHz, 9MB cache Intel® Core™ i7-9850HL 25W Coffee Lake 9 th Gen, 6C, 1.9 / 4.1 GHz, 9MB cache
GPU Module Options	NVIDIA® Ampere RTX A2000, 80W, 8GB GDDR6, 2,560 CUDA Cores NVIDIA® Ampere RTX A4500, 80W/130W, 16GB GDDR6, 5,888 CUDA Cores NVIDIA® Ada Lovelace RTX 3500 Ada, 115W, 12GB GDDR6, 5,120 CUDA Cores NVIDIA® Ada Lovelace RTX 5000 Ada, 115W, 16GB GDDR6, 9,728 CUDA Cores
Compatibility	COM Express® TYPE 6

Display

DP	2x Display Port outputs from GPU
VGA	1x output from COM Express
LVDS	1x dual channel 18/24-bit LVDS
DVI	1x

Expansion

M.2	1x 2280 M key (SATA only)
mini PCIe	2x Full-size Mini PCIe (1 with mSATA supported)
PCIe/104	4x PCIe x 1, 1x PCIe x 4, 5x USB 2.0, 1x LPC. 1x SPI
SATA	2x SATA III

Ethernet

Ethernet	2 x 10/100/1000/2.5G Ethernet Ports(One from CPU module)
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I/O

USB	4x USB 3.0 + 2x USB2.0
Serial Pot	4x RS232/422/485
Audio	1x MIC-in, 1x Line-out
SATA Power	2x SATA Power

DI/DO	4x DI/ 4x DO
FAN Power	1x CPU FAN + 1x MXM FAN
Battery	1x Battery Header

Power System

Input Power: SYS	9~36V (4P Terminal Block)
Input Power: MXM	12V (ATX 4P)
Power Consumption	Varies per COM Express /MXM with different CPU and GPU models
RTC Battery	3V CR2032

Mechanical and Environmental

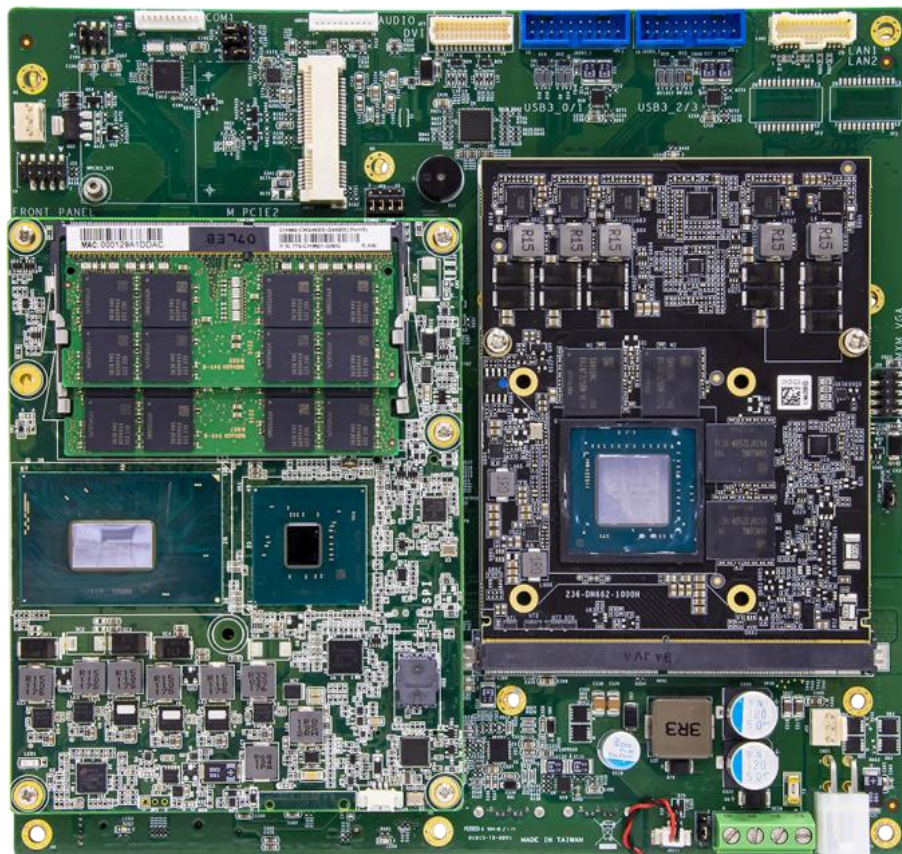
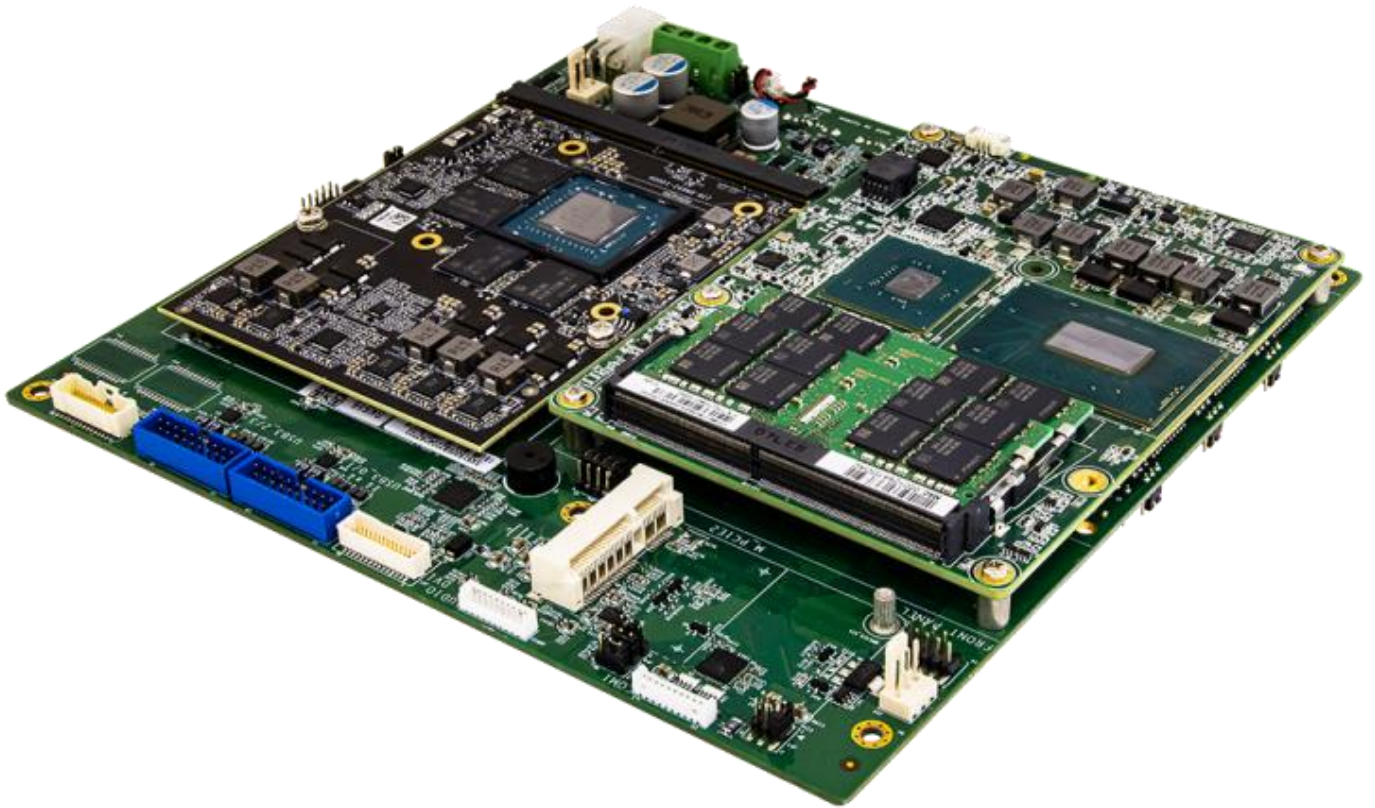
Dimension	190 x 180 mm
Operating Temp	-40°C to 85°C
Storage Temp	-40°C to 85°C
Relative Humidity	10% to 90%, non-condensing

Standard Compliance

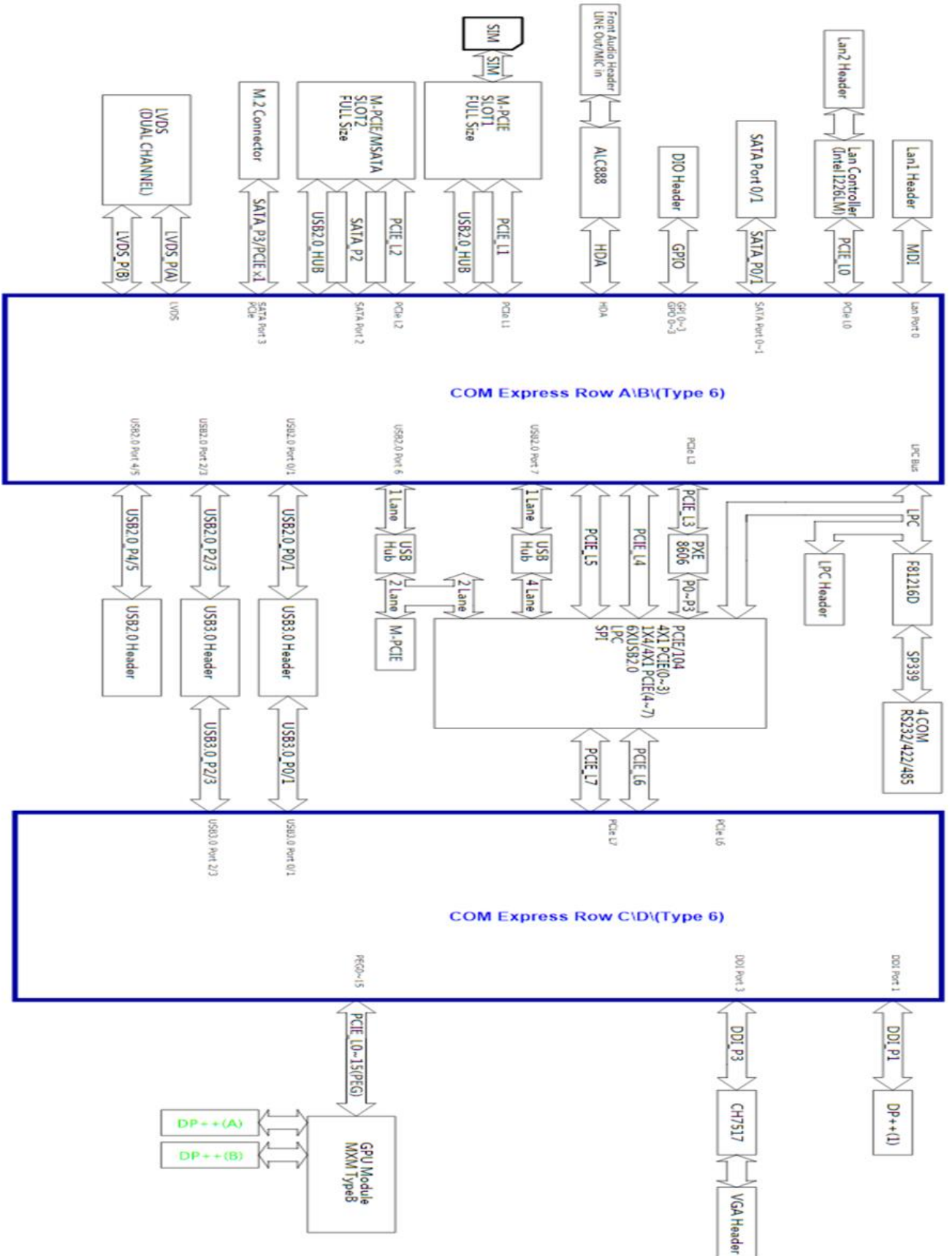
Standard Compliance	CE/FCC
OS Support	Windows®10 64bit, Linux(Support by request)

*All specifications and photos are subject to change without notice.

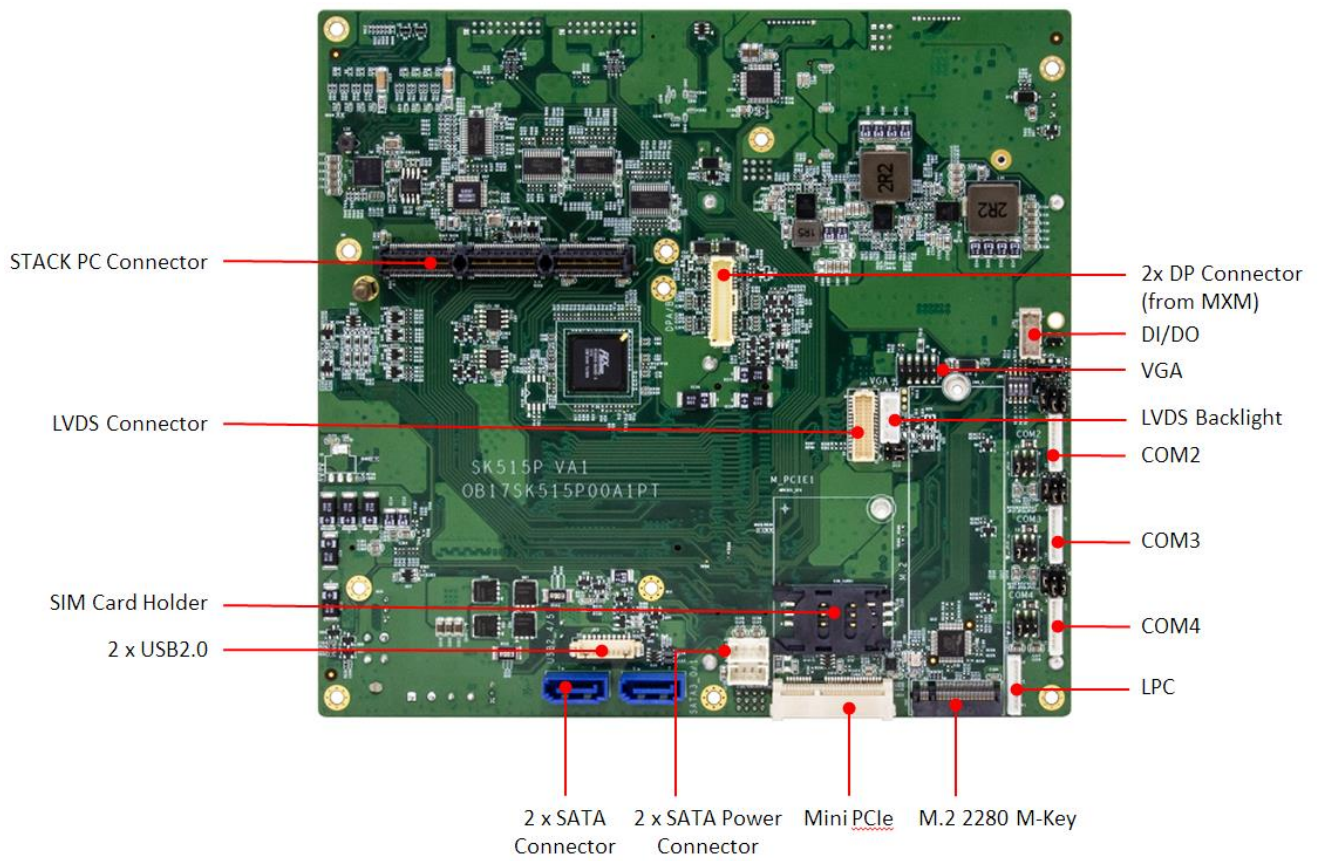
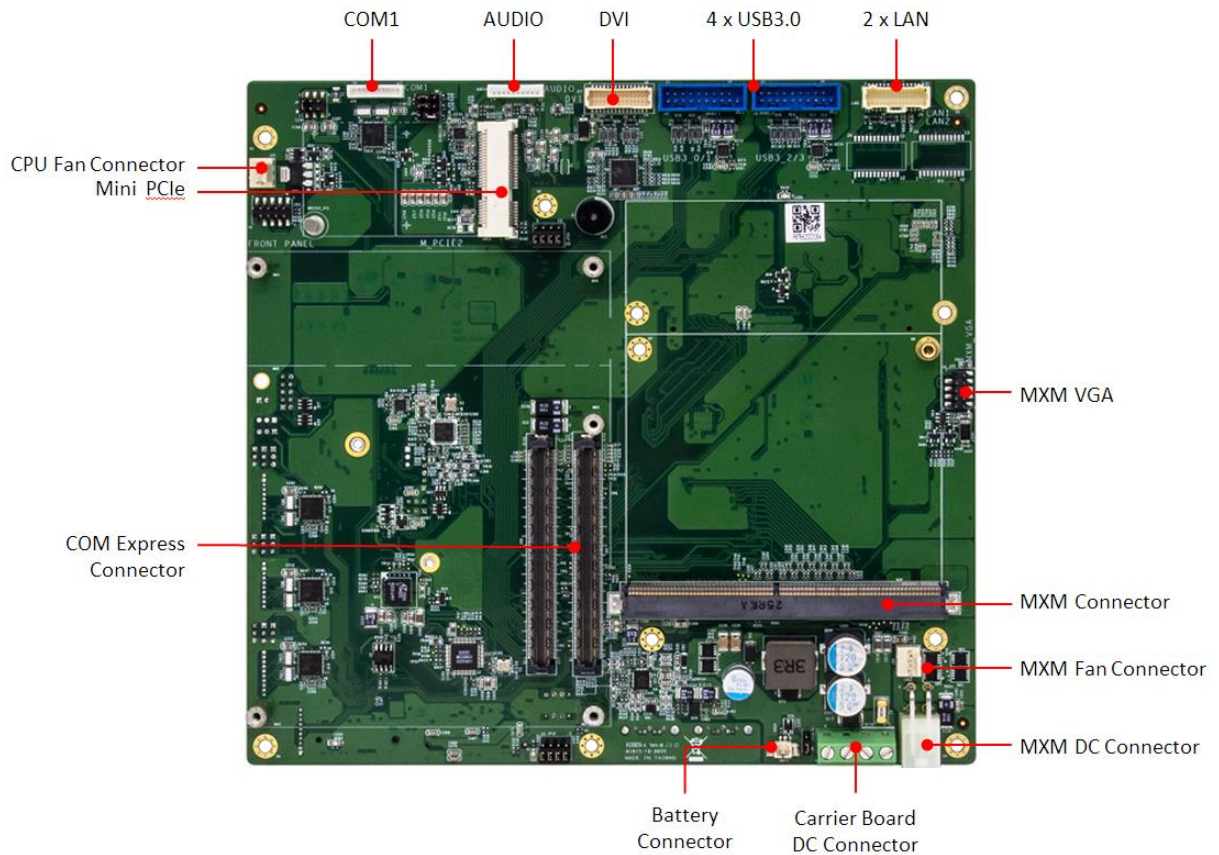
Appearance



Block Diagram



Connector & Pin Header



Ordering Information

CPU/GPU Table

All Operating Temperature meet from 0°C to +55°C.

Could Customize the Operating Temperature from -40°C to +70°C.

CPU Products List

Type	CPU	Power	SPEC
9 th CPU	Intel® Xeon®E-2276ME	45W	Coffee Lake 9th Gen, 6C, Freq. 2.8 / 4.5 GHz, 129MB cache
9 th CPU	Intel® Xeon®E-2276ML	25W	Coffee Lake 9th Gen, 6C, Freq. 2.0 / 4.2 GHz, 12MB cache
9 th CPU	Intel® Core™ i7-9850HE	45W	Coffee Lake 9th Gen, 6C, Freq. 2.7 / 4.4 GHz, 9MB cache
9 th CPU	Intel® Core™ i7-9850HL	25W	Coffee Lake 9th Gen, 6C, Freq. 1.9 / 4.1 GHz, 9MB cache

GPU Products List

GPU	CUDA Cores	Max power	UL Benchmarks
NVIDIA® Ampere RTX A2000	2,560 CUDA Cores	80W	5952
NVIDIA® Ampere RTX A4500	5,888 CUDA Cores	130W	12835
NVIDIA® Ada Lovelace RTX 3500 Ada,	5,120 CUDA Cores	115W	TBC
NVIDIA® Ada Lovelace RTX 5000 Ada	9,728 CUDA Cores	115W	TBC

Model No. List

Gen.	Model Name	Configuration
SK515P-T6CH	SK515P-2276E-A45	CPU Board: E-2276ME / MXM GPU: Quadro A4500
	SK515P-2276L-A20	CPU Board: E-2276ML / MXM GPU: Quadro A2000
	SK515P-9850E-A45	CPU Board: i7-9850HE / MXM GPU: Quadro A4500
	SK515P-9850L-A20	CPU Board: i7-9850HL / MXM GPU: Quadro A2000