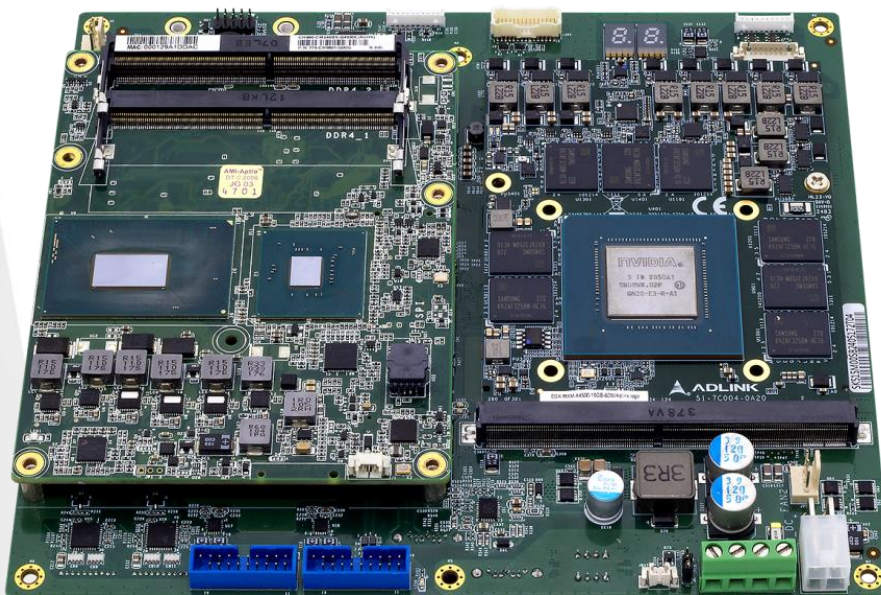




# SKY-TECH

COM Express® Type 6 Carrier Board Cores

+ MXM Graphics System +2x M.2 M-Key



## Key Feature

- COM Express Type 6 Support 9<sup>th</sup> Coffee Lake-H Processor
- MXM Type 3.1 Support NVIDIA® GTX® / RTX® GPU
- Support MXM RTX 5000 Ada (9728 CUDA, 16GB RAM)
- Multi-Expansion Slots include Dual Mini PCIe Express Slots, Dual M.2 2280 M-key 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



# Instructions

COM Express, a computer-on-module (COM) form factor, is a highly integrated and compact PC that can be used in a design application much like an integrated circuit component. The COM Express Module integrates core CPU and memory functionality, the common I/O of a PC/AT, USB, audio, graphics (PEG), and Ethernet.

SK515M feature a range of Intel processors, up to the latest Intel Core series. SK515M are built to operate in harsh environmental conditions, the operating temperatures as low as -40°C to as hot as 85°C. From low power consumption to high performance processing power, SK515M are built to suit a wide range of computing applications from signal processing to unmanned vehicles and more.

## Specifications

### System

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

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

### Expansion

mini PCIe	2x Full-size Mini PCIe (with SIM card slot)
M.2	2x 2280 M key (both PCIe x4 from PEG)
SATA	2x SATAIII

## Ethernet

Ethernet	2x 10/100/1000mb/2.5G Ethernet Ports(One from CPU module)
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## Interface

USB	4x USB 3.0 + 2x USB2.0
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Serial Port	2x RS232(COM1,2) + 2x RS232/422/485(Com3,4)
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Audio	1x MIC-in, 1x Line-out
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SATA Power	2x SATA Power
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DI/DO	1x DI/DO (4in / 4out)
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FAN Power	1x CPU FAN
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	1x MXM FAN
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Battery	1x Battery Header
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## Power System

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

Dimension	170mm x 190 mm
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Operating Temp	-40°C to 85°C
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Storage Temp	-40°C to 85°C
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Relative Humidity	10% to 90%, non-condensing
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## Standard Compliance

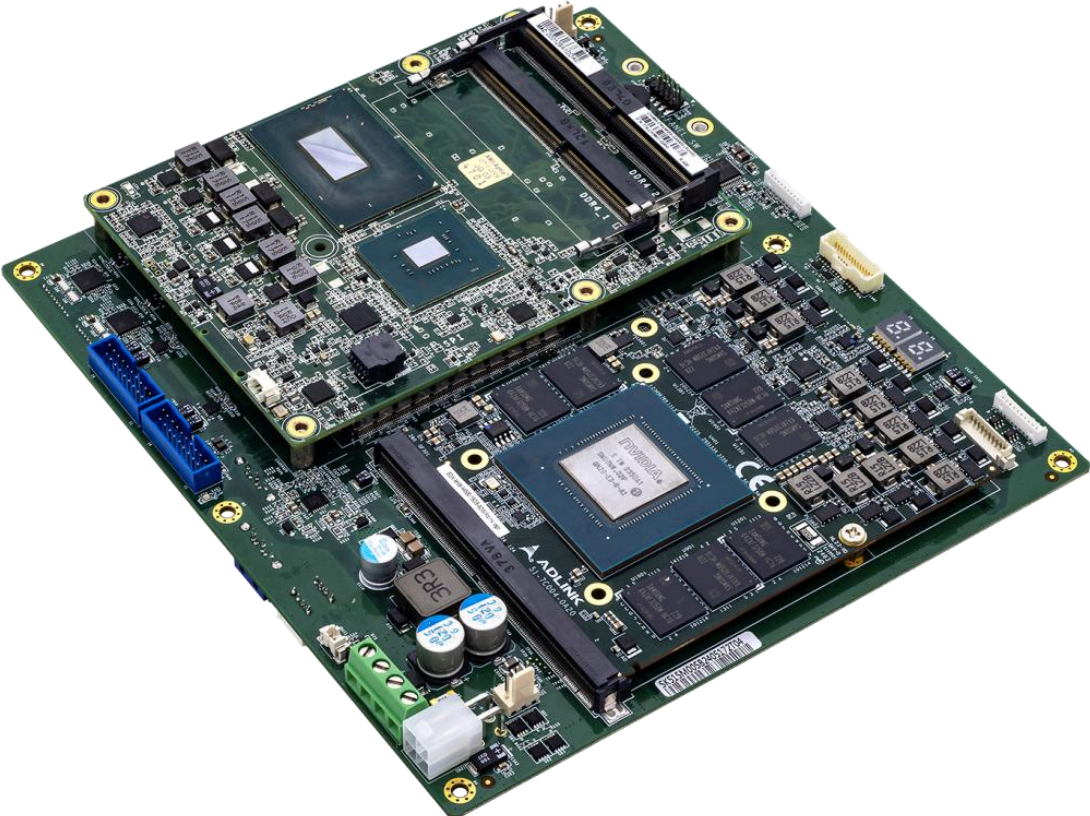
Standard Compliance	CE/FCC
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## OS

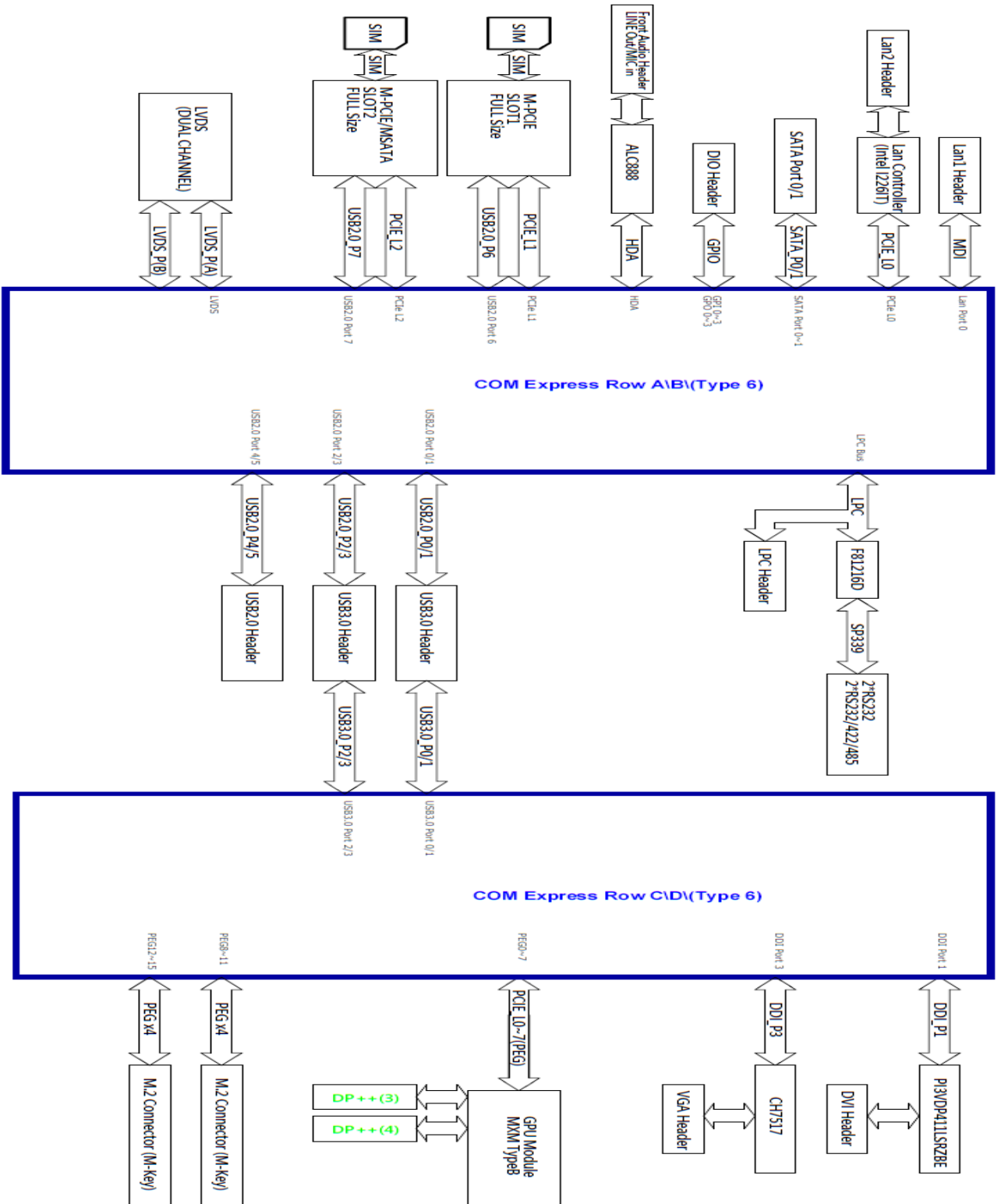
OS Support	Windows®10 64bit, Linux(Support by request)
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\*All specifications and photos are subject to change without notice.

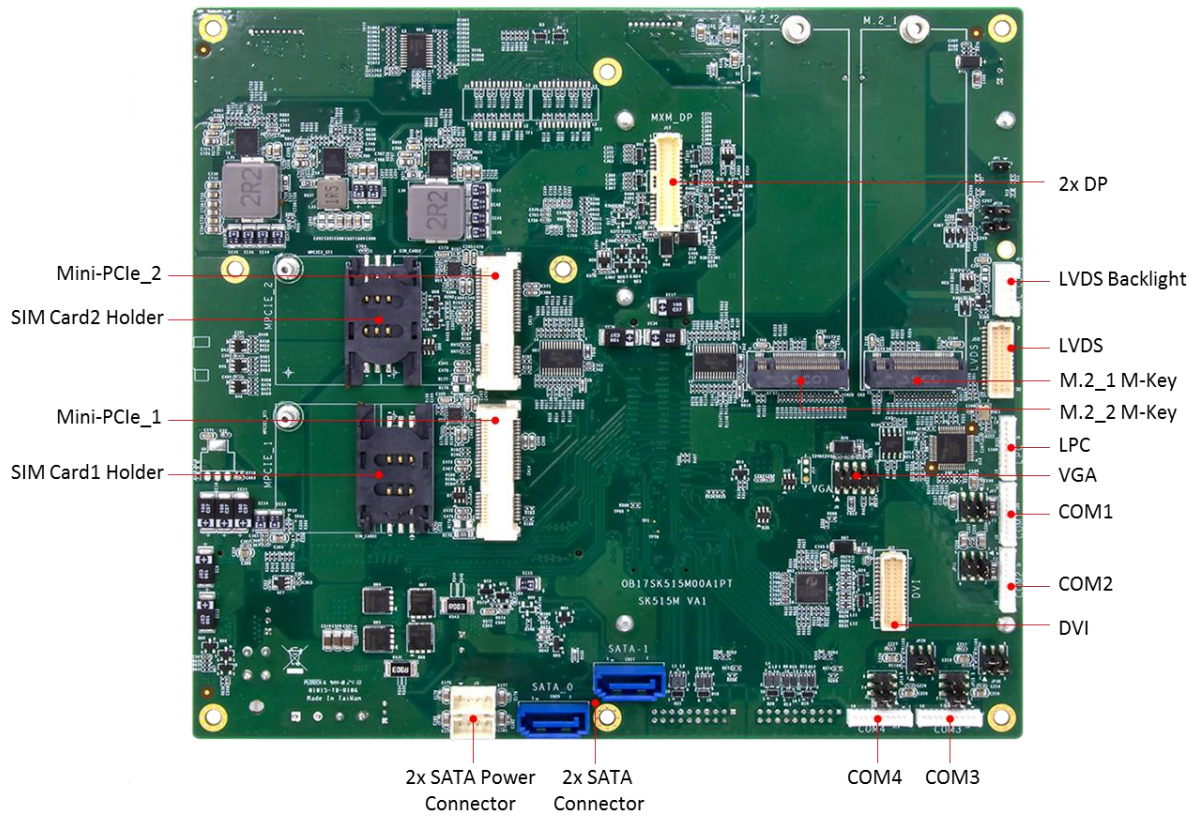
# Appearance



# 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 <sup>th</sup> CPU	Intel® Xeon®E-2276ME	45W	Coffee Lake 9th Gen, 6C, Freq. 2.8 / 4.5 GHz, 129MB cache
9 <sup>th</sup> CPU	Intel® Xeon®E-2276ML	25W	Coffee Lake 9th Gen, 6C, Freq. 2.0 / 4.2 GHz, 12MB cache
9 <sup>th</sup> CPU	Intel® Core™ i7-9850HE	45W	Coffee Lake 9th Gen, 6C, Freq. 2.7 / 4.4 GHz, 9MB cache
9 <sup>th</sup> 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

COMe Type	Model Name	Configuration
SK515M-T6CH	SK515M-2276E-A45	CPU Board: E-2276ME / MXM GPU: Quadro A4500
	SK515M-2276L-A20	CPU Board: E-2276ML / MXM GPU: Quadro A2000
	SK515M-9850E-A45	CPU Board: i7-9850HE / MXM GPU: Quadro A4500
	SK515M-9850L-A20	CPU Board: i7-9850HL / MXM GPU: Quadro A2000