



LAND



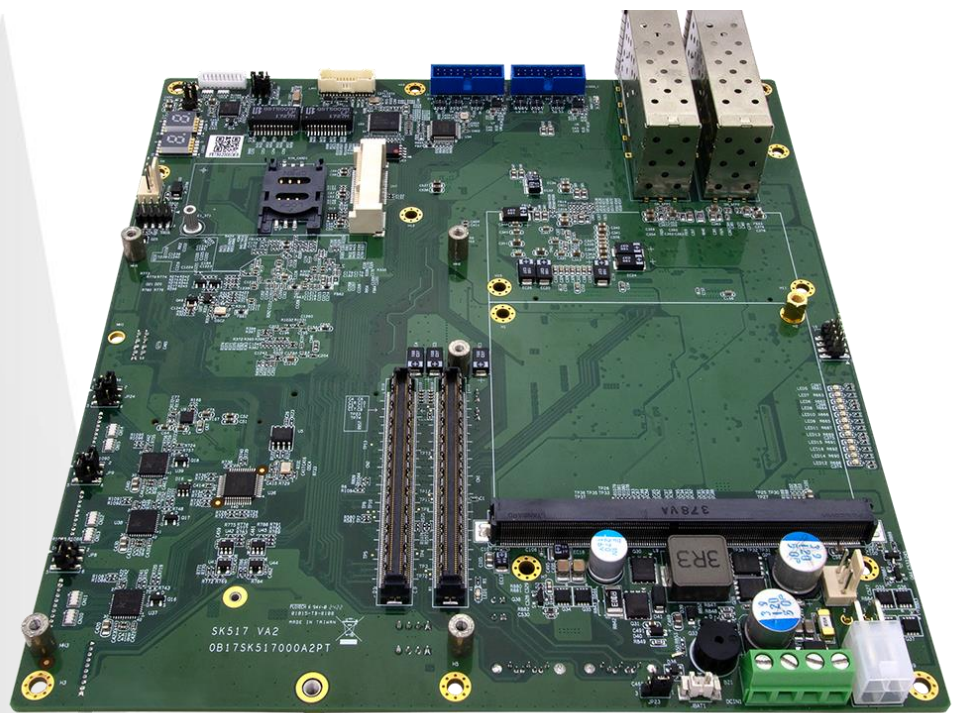
SEA



AIR

SK517

COM Express Type 7 Carrier



Key Features

- COM Express Type7 R3.1 support Ice Lake-D LCC family processor
- MXM Type 3.1 Type B(PCIe Gen3 x8)
- PCIe/104 Type 2 Expansion slot (2x PCIe Gen3 x4 + 2x PCIe Gen3 x1)
- 1x M.2 2280 M-Key slot (PCIe Gen3 x4, NVMe)
- 4x 10GbE SFP+ + 2x GbE RJ45
- 4x USB3.0, 4x RS232
- 2X DP (outputs from GPU, Port A/B)
- 2x SATA3.0
- 8 Bits DIO, I2C
- 2x Full-size mini PCIe (PCIe)
- 9V~36V DC-IN (AT/ATX mode support)



Specifications

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.

SK517 feature a range of Intel processors, up to the latest Intel Xeon-D 1700 series. SK517 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, SK517 are built to suit a wide range of computing applications from signal processing to unmanned vehicles and more.

Specifications

Processor & System

COM Express CPU (Type 7)	Intel® Xeon® D-1700 processor (Ice Lake-D LCC)
COM Express CPU Options (Type 7)	<ul style="list-style-type: none">• Xeon® D-1746TER 2.0/3.1GHz 15MB, 67W, 10C• Xeon® D-1735TR 2.2/3.4GHz 15MB, 59W, 8C• Xeon® D-1732TE 1.9/3.0GHz 15MB, 52W, 8C
GPU Module Options	NVIDIA® Quadro™ MXM A2000, 60W, 8GB GDDR6, 2560 CUDA Cores NVIDIA® Quadro™ MXM A4500, 80/115W, 16GB GDDR6, 5888 CUDA Cores
Memory type	Base On CPU module
Chipset	Base On CPU module
Watchdog	Base On CPU module

Display

Internal Display Port	2x Display Port outputs from MXM GPU
-----------------------	--------------------------------------

Ethernet

RJ45 GbE LAN	2x GbE (one from CPU module; One from I210IT)
10GbE SFP+	4x (Intel C827 10G Retimer)

Expansion

MXM	1x (MXM3.1 Type B), PCIe3.0 support
-----	-------------------------------------

PCIe/104	1x Type 2: 2x PCIe Gen3 x4 + 2x PCIe Gen3 x1
mPCIe	2x Full-size mini PCIe Expansion Slot
M.2	1x M.2 2280 M-Key Slot (PCIe x4 GEN3, NVMe)
SIM Slot	2x

Rear I/O

10GbE SFP+	4x
------------	----

Front I/O

Power In-System	1x 4P Terminal Block DIP (Vin: 2PIN; GND: 2PIN)
Power In -MXM	1x 2x2P Terminal

Internal I/O

Display Port	1x Header with 2x DP ports
MXM_VGA	1x Header (By MXM GPU support)
RJ45 LAN	1x Header with 2x LAN ports
SATA Port	2x SATA connector (Standard 7Pin)
SATA Power	2x SATA Power connector
COM (RS232)	4x RS232/422/485 Header
USB	2x USB3.0 Header, each with 2x USB3.0 ports
Front Panel	1x Header
CPU FAN	1x CPU FAN connector
MXM FAN	1x MXM FAN connector
I2C	1x Header
DIO (1x10pin)	1x DI/DO (4in/4out) Header
Battery	1x Battery connector
LPC	1x Header

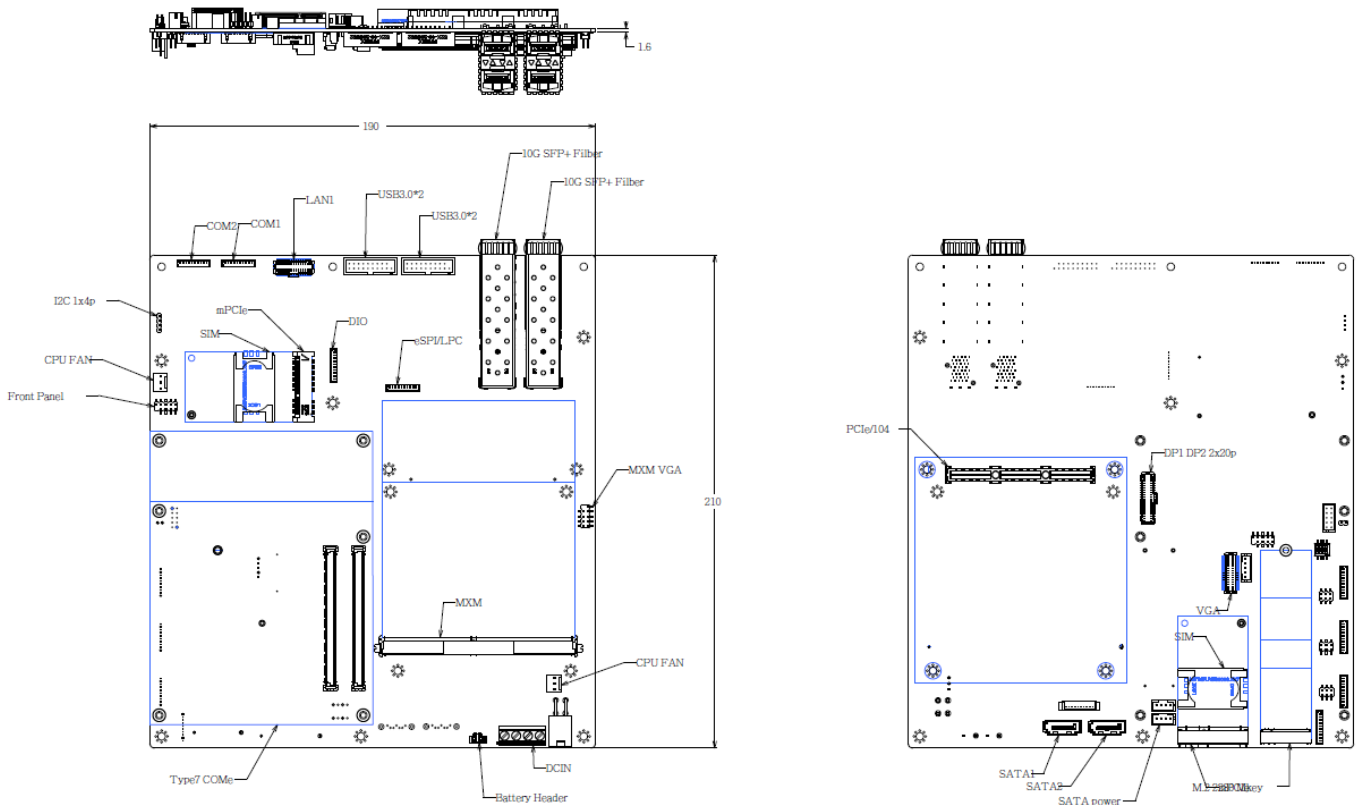
Power Management

ACPI	ACPI3.0 (By CPU module)
Power Type	Wide Voltage DC-IN 9V~36V (Support AT/ATX mode)

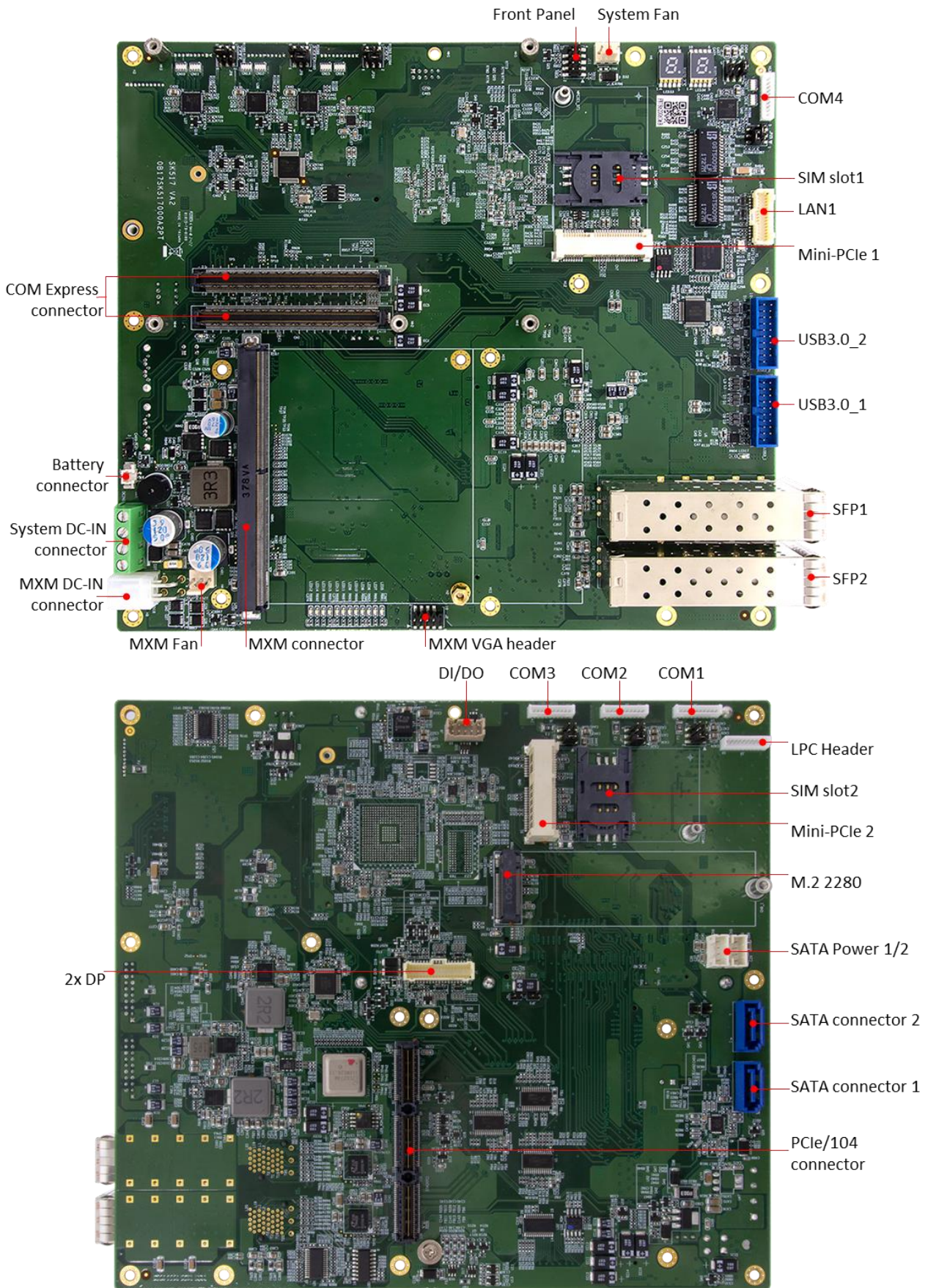
Mechanical and Environmental

Dimension	190 x 210 mm
Operating Temp.	- 40°C ~ 85°C
Storage Temp.	-40°C ~ 85°C
Relative Humidity	5% to 95%, non-condensing

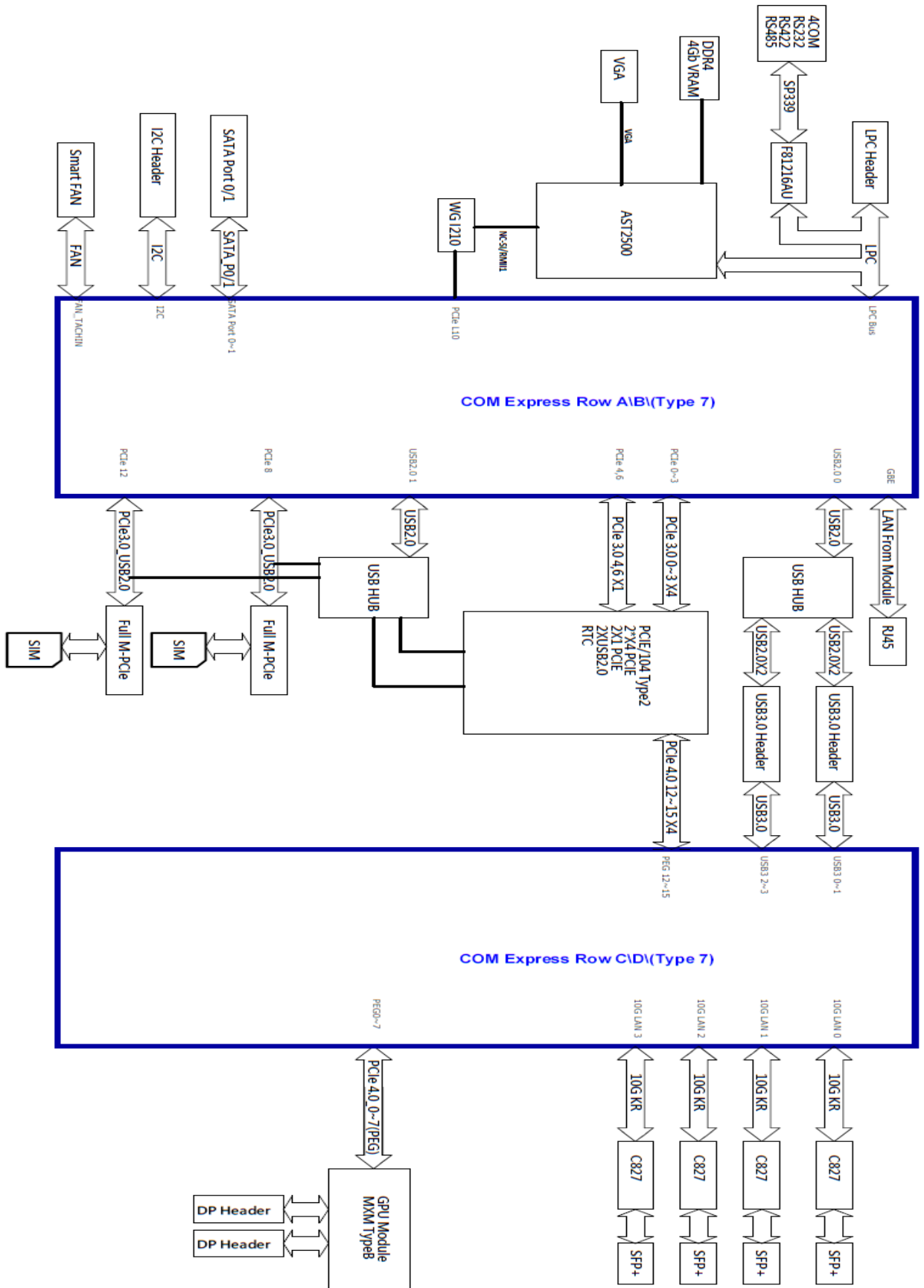
Dimension



Placement



Block Diagram



Ordering Information

COMe Type	Model Name	Configuration
Type7	SK517-D1746-A45	CPU Board : D-1746TER / MXM GPU : Quadro A4500
	SK517-D1746-A20	CPU Board : D-1746TER / MXM GPU : Quadro A2000
	SK517-D1735-A45	CPU Board : D-1735TR / MXM GPU : Quadro A4500
	SK517-D1735-A20	CPU Board : D-1735TR / MXM GPU : Quadro A2000
	SK517-D1732-A45	CPU Board : D-1732TE / MXM GPU : Quadro A4500
	SK517-D1732-A20	CPU Board : D-1732TE / MXM GPU : Quadro A2000