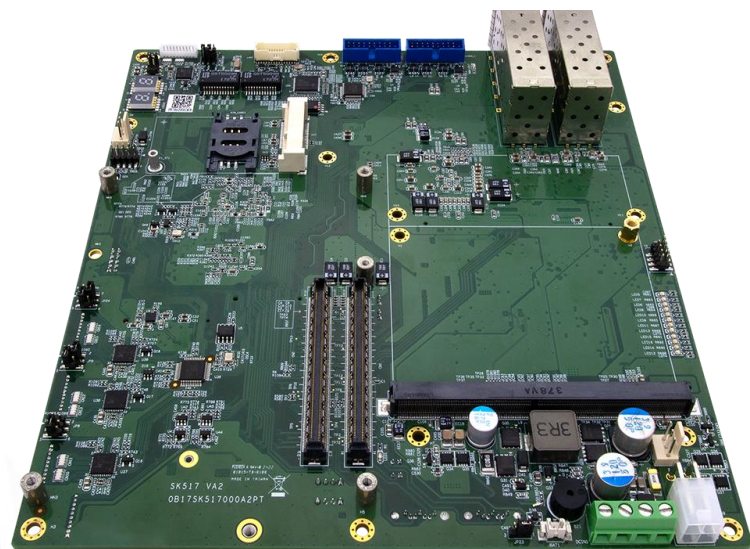




SK517

COM EXPRESS TYPE 7 CARRIER BOARD



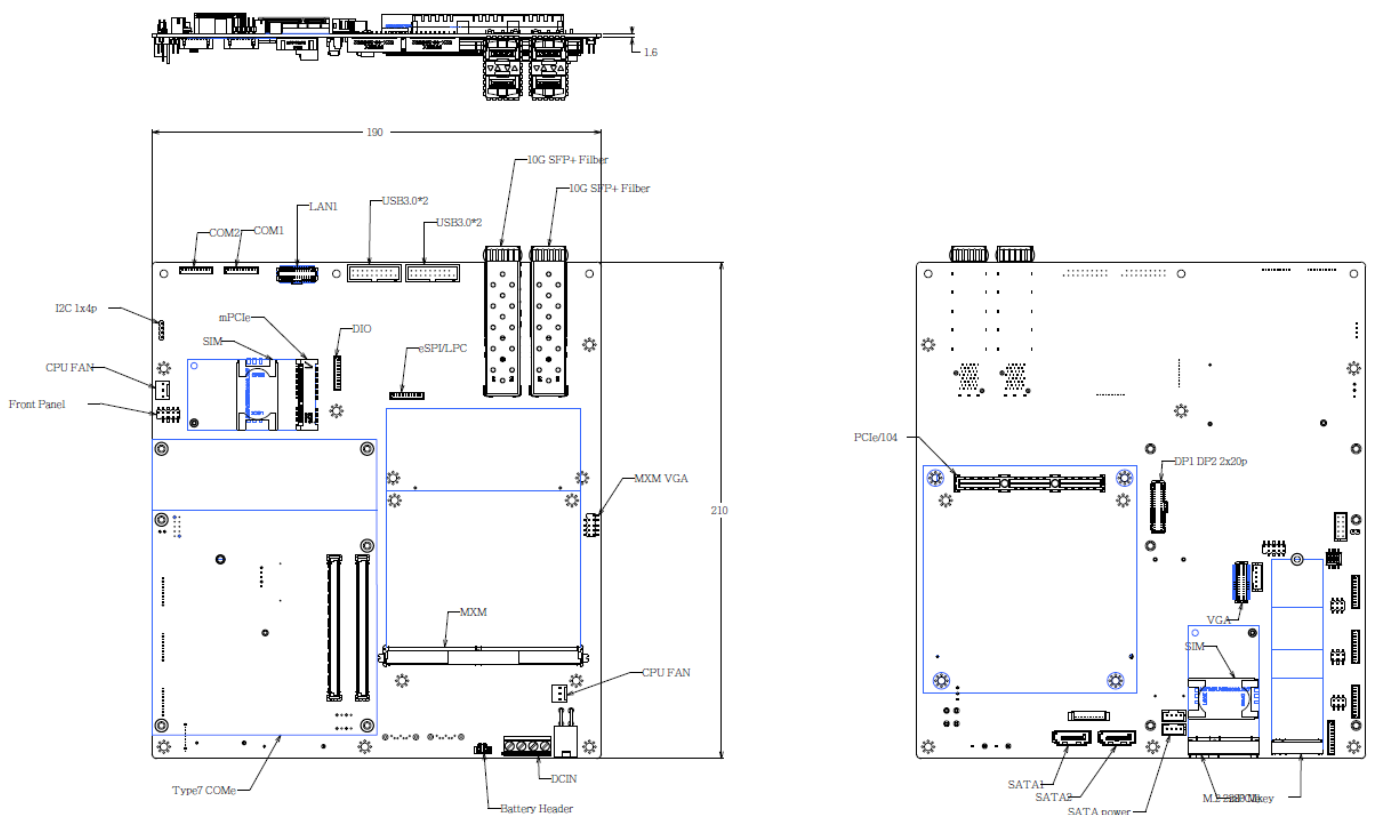
- **COM Express Type7 R3.1 support Ice Lake-D LCC family processor**
- **MXM Type 3.1 Type B (PCIe Gen3 x8)**
- **PCIe/104 Type 2 Expansion slot (2x PCIe Gen3 x4 + 2 x PCIe Gen3 x1)**
- **1 x M.2 2280 M-Key slot (PCIe Gen3 x4, NVMe)**
- **4 x 10GbE SFP+ + 2 x GbE RJ45**
- **4 x USB3.0, 4x RS232**
- **2 x DP (outputs from GPU, Port A/B)**
- **2 x SATA 3.0**
- **8 Bits DIO, I2C**
- **2 x Full-size mini PCIe (PCIe)**
- **9V~36V DC-IN (AT/ATX mode support)**

Introduction

COM Express, a computer-on-module (COM) form factor, is a highly integrated and compact architecture that can be used in system designs much like an integrated circuit component. The COM Express module integrates core CPU and memory functionality along with standard PC I/O interfaces, including PC/AT, USB, audio, graphics (PEG), and Ethernet.

The SK517 supports a broad range of Intel® processors, including the latest Intel® Xeon® D-1700 series, as well as the NVIDIA Blackwell GPU series. Engineered for harsh operating environments, it delivers reliable performance across an extended temperature range of -40°C to $+85^{\circ}\text{C}$. Combining low power efficiency with high-performance processing, the SK517 is well suited for diverse computing applications, including signal processing, unmanned systems, and other mission-critical edge deployments.

Dimensions



Specifications

PROCESSOR & SYSTEM

COM Express CPU (Type 7)	Intel® Xeon® D-1700 processor (Ice Lake-D LCC)
COM Express CPU Options (Type 7)	Xeon® D-1848TER 2.0/3.1GHz 15MB, 57W, 10C, with NVMe 1TB 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 NVIDIA® RTX PRO 2000 Blackwell, 60/100W, 8GB GDDR7, 3328 CUDA Cores NVIDIA® RTX™ MXM ADA 5000, 80/115W, 16GB GDDR6, 9728 CUDA Cores NVIDIA® RTX PRO 5000 Blackwell,95/115W, 24GB GDDR7, 10496 CUDA Cores
Memory type	Base On CPU module
Chipset	Base On CPU module
Watchdog	Base On CPU module

DISPLAY

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

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

EXPANSION

MXM	1 x (MXM3.1 Type B), PCIe3.0 support
PCIe/104	1 x Type 2: 2 x PCIe Gen3 x4 + 2 x PCIe Gen3 x1
mPCIe	2 x Full-size mini PCIe Expansion Slot
M.2	1 x M.2 2280 M-Key Slot (PCIe x4 GEN3, NVMe)
SIM Slot	2 x

REAR I/O

10GbE SFP+	4 x
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FRONT I/O

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

INTERNAL I/O

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

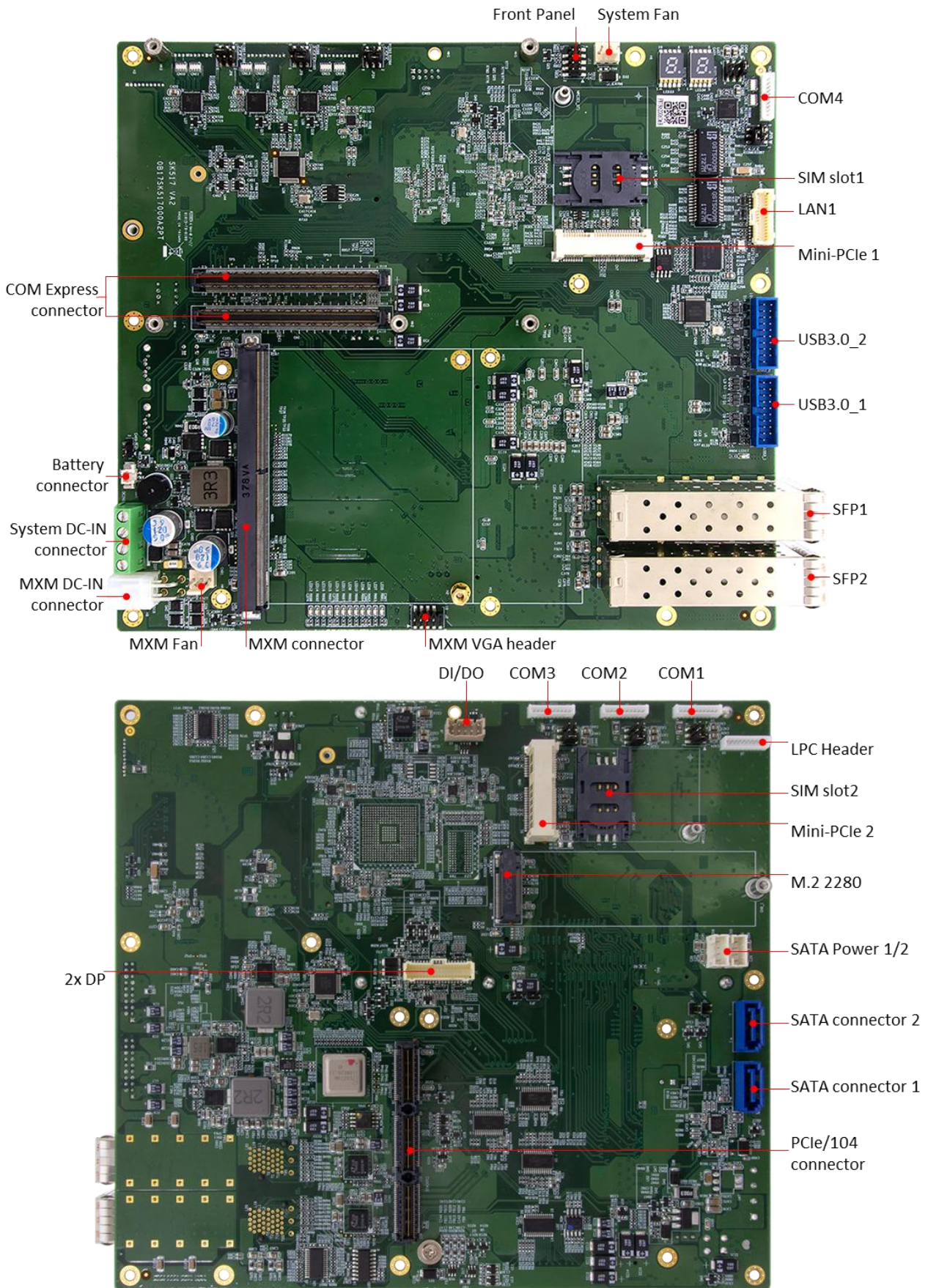
POWER MANAGEMENT

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

MECHANICAL AND ENVIRONMENTAL

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

Placement



Ordering Information

COMe	Model Name	Configurations
Type 7	SK517-D1848-BW50	CPU Board: D-1848TER /10C/ MXM GPU: Blackwell 5000
	SK517-D1848-Ad50	CPU Board: D-1848TER /10C/ MXM GPU: Lovelace Ada5000
	SK517-D1848-BW20	CPU Board: D-1848TER /10C/ MXM GPU: Blackwell 2000
	SK517-D1746-A45	CPU Board: D-1746TER/10C / MXM GPU: Quadro A4500
	SK517-D1746-A20	CPU Board: D-1746TER/10C / MXM GPU: Quadro A2000
	SK517-D1735-A45	CPU Board: D-1735TR /8C/ MXM GPU: Quadro A4500
	SK517-D1735-A20	CPU Board: D-1735TR /8C/ MXM GPU: Quadro A2000
	SK517-D1732-A45	CPU Board: D-1732TE/8C / MXM GPU: Quadro A4500
	SK517-D1732-A20	CPU Board: D-1732TE /8C/ MXM GPU: Quadro A2000

This datasheet is for marketing purposes only and does not constitute a warranty. All specifications, dimensions, and data are subject to change without notice. For the latest specifications and updates, please contact your 7STARLAKE representatives.