

COM Express Type 6/7 Carrier Board

Support Intel Processor



MEZZANINE CARRIER BOARD

- COM Express Type 6 / 7 Support to Intel x86 Processor
- Standard MXM Type 3.1 Support Up to NVIDIA® Quadro®, Tesla®, and GeForce® GPUs
- PCI/104 Express Expansion Slot for Modular Open Structure
- Multi-Expansion Slots include Dual Mini PCIe Express Slots, 1 x M.2 Slot
- Extreme Temperature Support -40°C to 85°C
- 2 x VGA, 1 x LVDS, 4 x COM, 6 x USB, 2 x miniPCIe, 1 x M.2, 2 x SATA
- 9V-36V DC Input

Specifications

SYSTEM

COM Express CPU Options(Type6)	<p>9th CPU Intel® Xeon® E-2276ME 45W Coffee Lake 9th Gen, 6 x 2.8 / 4.5 GHz, 12MB cache</p> <p>9th CPU Intel® Xeon® E-2276ML 25W Coffee Lake 9th Gen, 6 x 2.0 / 4.2 GHz, 12MB cache</p> <p>9th CPU Intel® Core™ i7-9850HE 45W Coffee Lake 9th Gen, 6 x 2.7 / 4.4 GHz, 9MB cache</p> <p>9th CPU Intel® Core™ i7-9850HL 25W Coffee Lake 9th Gen, 6 x 1.9 / 4.1 GHz, 9MB cache</p>
COM Express CPU Options(Type7)	<p>Express-BD7-D1559 Basic COM Express Type7 module with Intel Broadwell-DE D1559, 12C (eTEMP)</p> <p>Express-BD7-D1539 Basic COM Express Type7 module with Intel Broadwell-DE D1539, 8C (eTEMP)</p> <p>Express-BD7-D1519 Basic COM Express Type7 module with Intel Broadwell-DE D1519, 4C (eTEMP)</p> <p>Express-BD7-D1577 Basic COM Express Type7 module with Intel Broadwell-DE D1577, 16C</p> <p>Express-BD7-D1548 Basic COM Express Type7 module with Intel Broadwell-DE D1548, 8C</p> <p>Express-BD7-D1527 Basic COM Express Type7 module with Intel Broadwell-DE D1527, 4C</p> <p>Express-BD7-D1508 Basic COM Express Type7 module with Intel Broadwell-DE D1508, 2C</p>
GPU Module Options	<p>NVIDIA® GeForce™ GTX 1050Ti – (Pascal, 768 CUDA Cores, 60W)</p> <p>NVIDIA® GeForce™ GTX 1060 – (Pascal, 1280 CUDA Cores, 78W)</p> <p>NVIDIA® GeForce™ GTX 1070 – (Pascal, 2048 CUDA Cores, 115W)</p> <p>NVIDIA® GeForce™ GTX 1080 – (Pascal, 2560 CUDA Cores, 150W)</p> <p>NVIDIA® GeForce™ GTX 1660S – (Pascal, 1408 CUDA Cores, 125W)</p>
COMe Compatibility	COM Express® Type 6/7

EXPANSION

MiniPCIe Expansion	2 x Full-size mini PCIe (1 with mSATA supported)
M.2 Expansion	1 x 2280 M key (SATA only)
PCIe/104 Expansion	<p>4 x PCIe x 1</p> <p>1 x PCIe x 4</p> <p>5 x USB 2.0</p> <p>1 x LPC</p> <p>1 x SPI</p>

DISPLAY

DisplayPort	2 x DisplayPort outputs from COM Express®, 4 x outputs from GPU, 6 total
VGA	1 x output from COM Express®, 1 x output from GPU
LVDS	1 x dual channel 18/24-bit LVDS

ETHERNET

Gigabit Ethernet	2 x 10/100/1000 Ethernet Ports
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I/O

USB	4 x USB 3.0, 2 x USB 2.0
COM Port	4 x RS232/422/485
Audio	1 x Line-out, 1 x MIC-In

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 ENVIRONMENT

Dimensions	190 x 185 mm
Operating Temperature	-40 to 85°C
Storage Temperature	-40 to 85°C
Relative Humidity	10% to 90%, non-condensing

Ordering Information

Model	No.	Description
SK513	S51301	SK506 LAN port Module
SK513	S51302	SK401 PCIe Module
SK513	S51303	SK303 COM port Module
SK513	S51304	SK1050-NVIDIA GTX1050Ti MXM 3.1 Graphics Module
SK513	S51305	SK1660S-NVIDIA GTX1600SUPER MXM 3.1 Graphics Module

Block Diagram

