

SOM-DK5992 Evaluation Kit

Intel Xeon D-1548 COM Express R3.0 Basic Module Type 7 Pin Definition



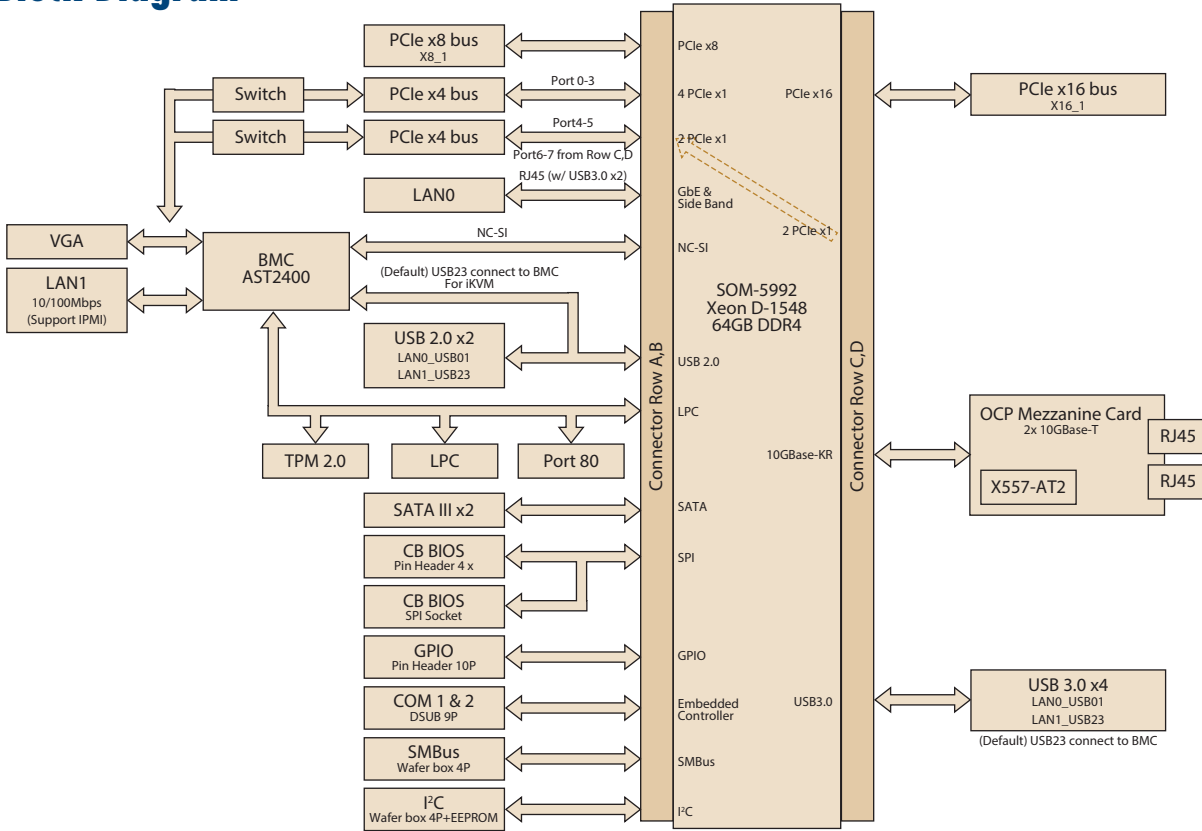
Features

- Intel Xeon D-1548, 8 Cores, TDP 45W
- COM Express R3.0 Basic Module Type 7 features
- Dual-CH DDR4 64GB, 2400GHz ECC memory
- High speed Ethernet (dual 10GBASE-KR interfaces, one GbE)
- Super speed expansion bus and I/Os. (Gen3 PCIe, USB3.0 & SATAIII)
- Support VGA display from BMC
- Operating temperature 0 ~ 60 °C

Specifications

Platform	COMe Module	SOM-5992, COM Express R3.0 Type 7 Basic Module
	Processor	Intel Xeon D-1548, 8 Cores, 45W
	Memory	DDR4 SO-DIMM 64GB
Expansion Bus	PCI Express x16	1 slot. PCIe x16 Gen.3, and bifurcatable to 2 x8, 1 x8 & 2 x4, or 4 x4
	PCI Express x8	1 slot. PCIe x8 Gen.3, and bifurcatable to 2 x4
	PCI Express x4	2 slots. 7 PCIe x1 Gen.2, and bifurcatable to x2 or x4 (max. 8 Ports if remove GbE LAN)
	LPC	Yes. 33MHz, support DMA read/write
Ethernet	10 Gigabit Ethernet	2 Ports RJ45 support 10GBase-T by OCP mezzanine card
	Gigabit Ethernet	1 port 1000Base-T (RJ-45) supports 10/100/1000 Mbps from SOM-5992
	Fast Ethernet	1 port 100Base-T (RJ-45) supports 10/100 Mbps from AST2400, supports IPMI
Serial Bus	SMBus	1
	I2C Bus	Support 100Kb/s & 400Kb/s devices. Default master mode, optional slave mode
I/O	SATA	2 (Type B Connector)
	USB	4 x USB3.0, 4 x USB2.0 (shared by 4 x USB3.0 Connectors)
	SPI Bus	Yes. For BIOS ROM
	COM Port	2 x 2-wire COM Ports
	GPIO	8-bit GPIO
	Watchdog	65536 level, 0 ~ 65535 sec
	Fan	2 (1 Smart Fan from module side or carrier CPU_FAN1, 1 fixed-voltage from carrier SYS_Fan1)
	TPM	TPM2.0 (SLB9665), default from SOM-5992
	Port 80	1
Graphic	Controller	AST2400 Integrated 2D Graphics Controller
Display	VGA	1920 x 1200 (from AST2400)
Power	Type	ATX: Vin, VSB ; AT: Vin
	Supply Voltage	Vin: 8.5 (9-5%) ~ 20V (19+5%), VSB: 5V±5%, RTC Battery: 2.0-3.3V
Environment	Temperature	Operating Standard: 0 ~ 60 °C (32 ~ 140 °F) Storage -40 ~ 85 °C (-40 ~ 185 °F)
	Humidity	Operating: 40 °C @ 95% relative humidity, non-condensing Storage: 60 °C @ 95%relative humidity, non-condensing
Mechanical	Dimensions	304.8 x 244 mm (12" x 9.6")

Block Diagram



Packing List

Part No.	Description	Quantity
9696592000E	Development board, COM R3.0 Type 7 Pin Out	1
9696599200E	Intel Xeon D-1548, SOM-5992 COM Express Basic Module	1
SQR-SD4N16G2K4SEBB	SODIMM ECC DDR4 2133 16GB memory	4
1960075879N001	Cooler 66 x 60 x 23 mm with 12V Fan	1
SOM-EA60	Dual Ports Copper 10GB LAN Mezzanine Card, with X557-AT2	1
1700008941	Serial ATA Cable 7P/7P 32cm	1
1931000590	Screw M2.5* L:5mm (for EA60)	4
1930006864-01	Screw M3* L:8mm	9
1910000035-01	Copper M3* L:15mm	9