

ICD970

Server



3rd Gen Intel® Xeon® Processor D-1700 Family
COM Express® Basic

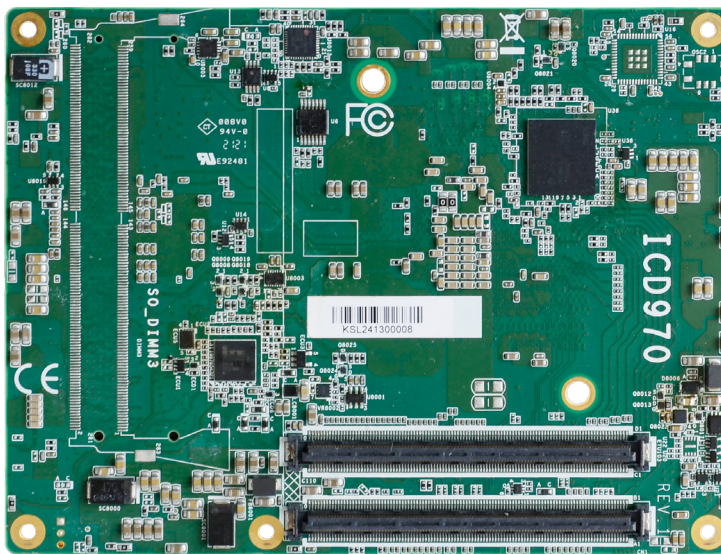


Intel® Xeon® Processor
D-1700 Family



DDR4 2933MHz SODIMM

Top View



Bottom View

KEY FEATURES



DDR4

Default 2 260-pin DDR4 2666 SO-DIMM, dual channel mode up to 64GB

3rd DIMM by request (SDPC mode by request to support DDR4 2933MHz)



Extended Temperature

Support extended operating temperature: -40 to 85°C



10GBASE-KR

Support up to 4 x 10GbE Mac ports



Multiple Expansion

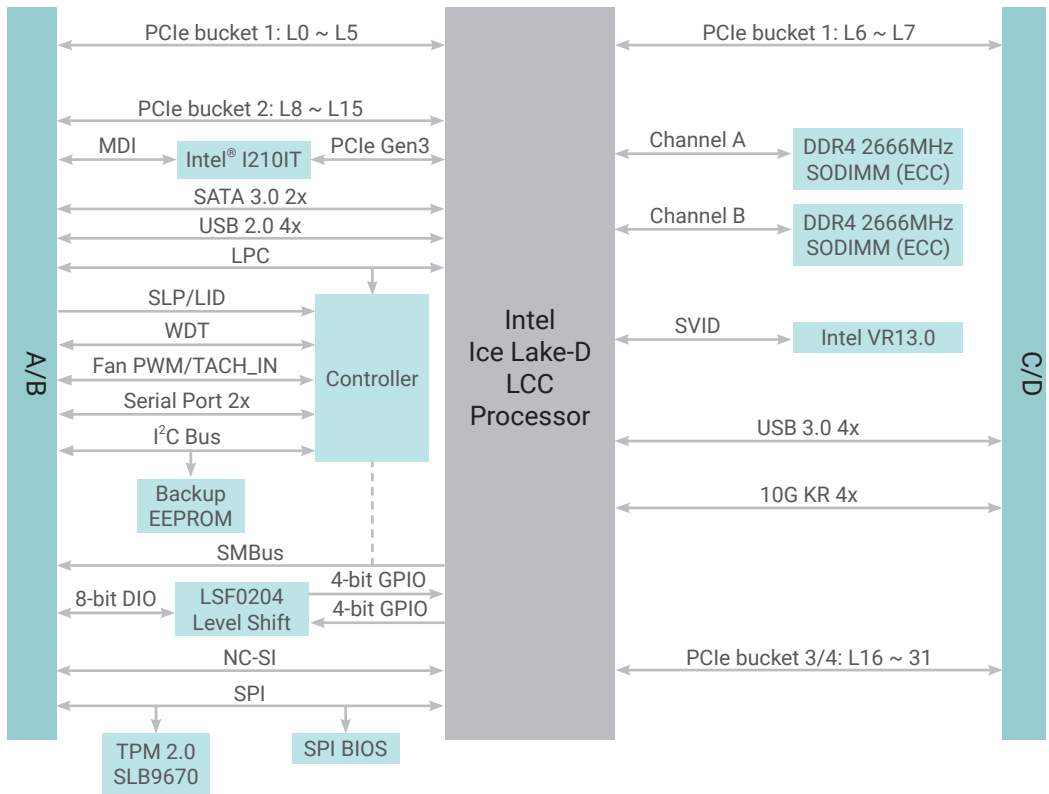
1 PCIe x16 (Gen4), 2 PCIe x8 (Gen3), 1 SMBus, 1 I²C, 1 LPC, 2 UART (TX/RX)



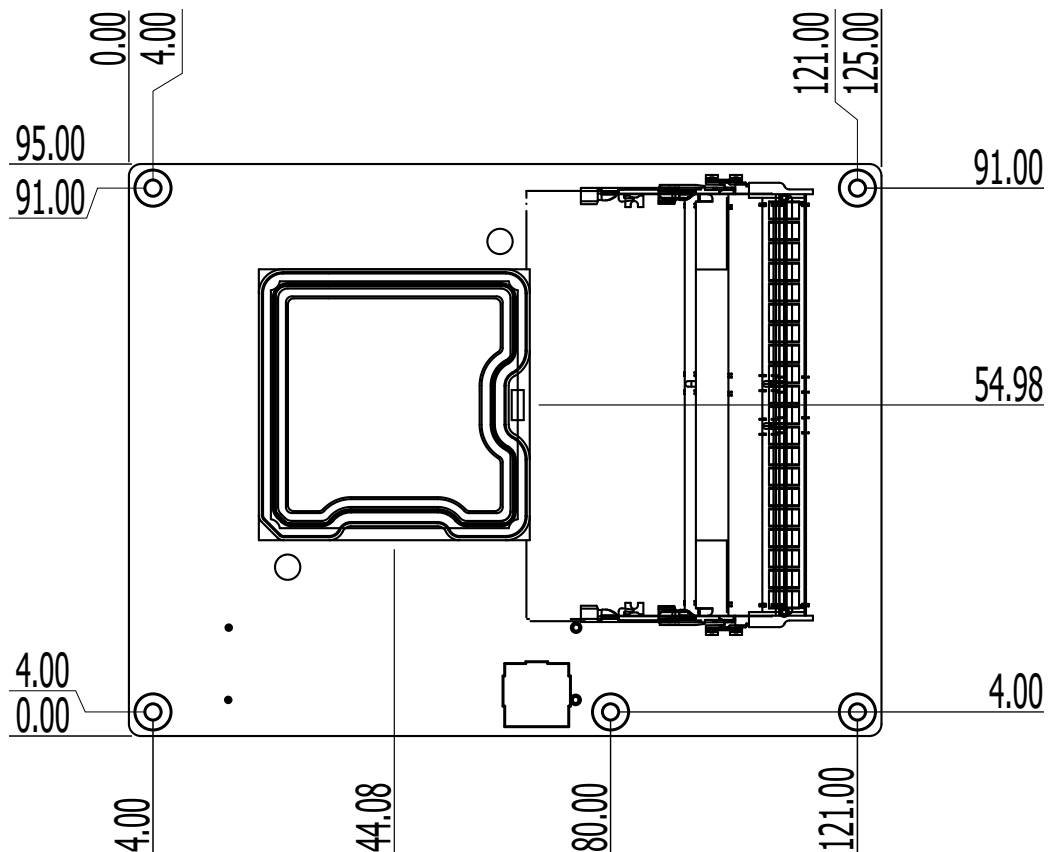
Rich I/O

2 Intel GbE, 4 USB 3.0, 4 USB 2.0, 2 SATA 3.0

BLOCK DIAGRAM



MECHANICAL DRAWING



SPECIFICATION

SYSTEM	Processor	3rd Gen Intel® Xeon® Scalable Processors D-1700 Family Intel® Xeon® D-1746TER Processor, 10 Cores, 15MB Cache, 2.0GHz, 67W Intel® Xeon® D-1735TR Processor, 8 Cores, 15MB Cache, 2.2GHz, 59W Intel® Xeon® D-1732TE Processor, 8 Cores, 15MB Cache, 1.9GHz, 52W Intel® Xeon® D-1715TER Processor, 4 Cores, 10MB Cache, 2.4GHz, 50W Intel® Xeon® D-1712TR Processor, 4 Cores, 10MB Cache, 2.0GHz, 40W	
	Memory	Default 2 260-pin DDR4 2666 SO-DIMM, dual channel mode up to 64GB 3rd DIMM by request (SDPC mode by request to support DDR4 2933MHz)	
	BIOS	Insyde SPI 512Mbit	
EXPANSION	Interface	Default: B1: 1 x PCIe x8 or 2 x PCIe x4 or 4x PCIe x2 (Gen 3) B2: 1 x PCIe x8 or 2 x PCIe x4 or 4x PCIe x2 (Gen 3) B3/B4: 1 x PCIe x16 or 2 x PCIe x8 or 4x PCIe x4 (Gen 4)	
		1 x LPC	
		1 x I ² C	
		1 x SMBus	
		2 x UART (TX/RX)	
ETHERNET	Controller	Supports up to 4 x 10GBASE-KR interfaces and max up to 4 x 10GbE MAC ports (maximum bandwidth 40Gb by activating the 4 x 10GbE at the same time) 1 x Intel® I210AT (10/100/1000Mbps) (0 to 60°C) or 1 x Intel® I210IT (10/100/1000Mbps) (-40 to 85°C)	
I/O	USB	4 x USB 3.0	
		4 x USB 2.0	
	SATA	2 x SATA 3.0 (up to 6Gb/s)	
	DIO	1 x 8-bit DIO (4 in, 4 out)	
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds	
SECURITY	TPM	Default TPM2.0, fTPM by request	
POWER	Type	12V, 5VSB, VCC_RTC (ATX mode)	
		12V, VCC_RTC (AT mode)	
	Consumption	Typical: 71.36W	
		Max: 72.36W	
OS SUPPORT	Windows	Windows Server 2019, 2022	
	Linux	Ubuntu 20.04, CentOS 7.5	
ENVIRONMENT	Temperature	Operating: 0 to 60°C, -40 to 85°C	
		Storage: -40 to 85°C	
	Humidity	Operating: 5 to 90% RH	
		Storage: 5 to 90% RH	
MTBF	277,731hrs @25°C; 144,676hrs @45°C; 81,589hrs @60°C; 55,811hrs @70°C; 37,526 @85°C Calculation model: Telcordia Issue 4 Environment: GB, GC – Ground Benign, Controlled		
MECHANISM	Dimensions	COM Express® Basic	95mm (3.74") x 125mm (4.9")
	Compliance	PICMG COM Express® R3.0, Type 7	
STANDARDS AND CERTIFICATIONS	Certifications	CE, FCC, RoHS	

ORDERING INFORMATION

Model Name	P/N	CPU	CPU TDP	eMMC	TPM 2.0	Thermal	Operating Temp.
ICD970-TS-1746	770-ICD9701-000G	D-1746TER	67W	16GB	Yes	Cooler	-40~85°C
ICD970-BS-1712	770-ICD9701-100G	D-1712TR	40W	16GB	Yes	Cooler	0~60°C
ICD970-TS-1715	770-ICD9701-200G	D-1715TER	50W	16GB	Yes	Cooler	-40~85°C

PACKING LIST

• 1 ICD970 board	TBD (0 to 60°C)
• 1 Cooler (Height: 47.80 mm)	TBD (-40 to 85°C)

OPTIONAL ITEMS

• COM336 carrier board kit	770-COM3361-000G
• Heat spreader	A71-808352-000G