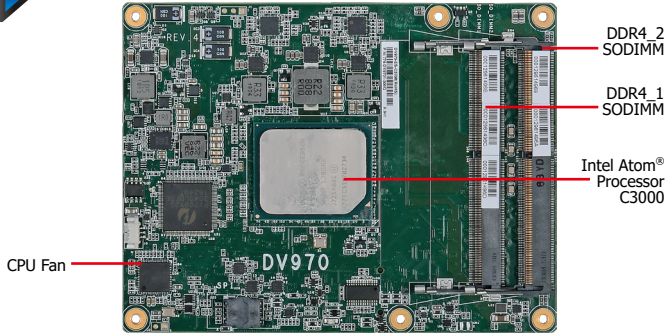


DV970



Features

- Dual channel DDR4 2400MHz ECC SODIMM up to 32GB
- High Performance CPU support up to 16 cores
- Support BMC features
- Multiple expansion: 2 PCIe x 8*, 2 SATA 3.0
- Rich I/O: 1 Intel GbE, 4 10Gbase-KR, 2 USB 3.0, 4 USB 2.0

* Populated by default

R3.0
Type7

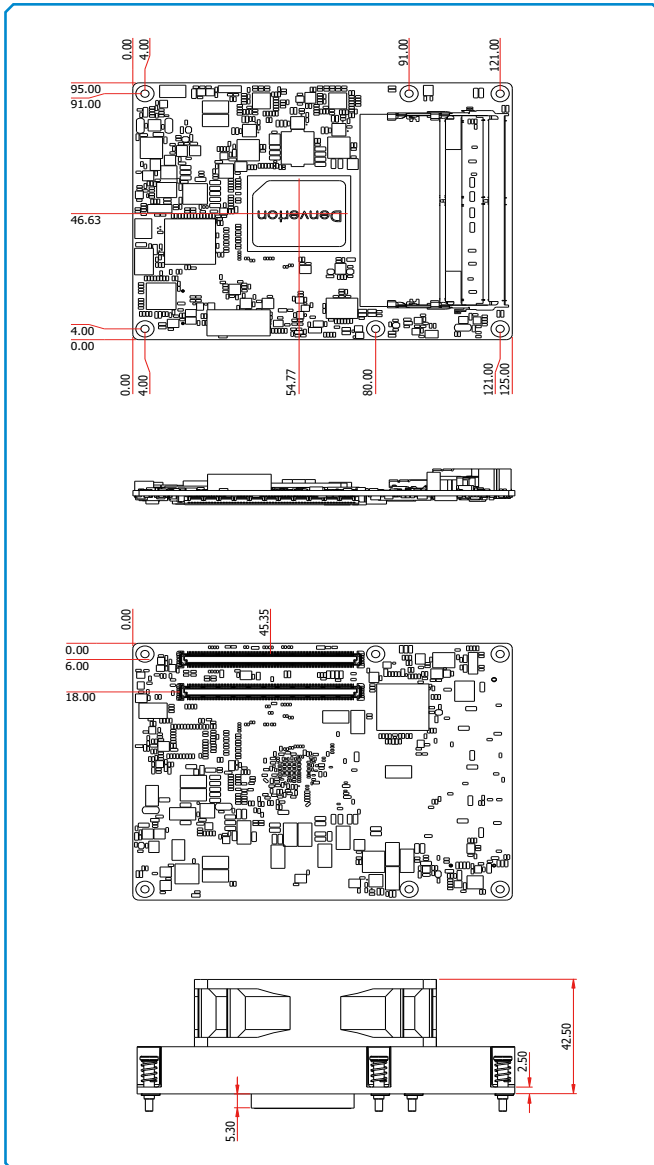
SATA 3.0

DDR4

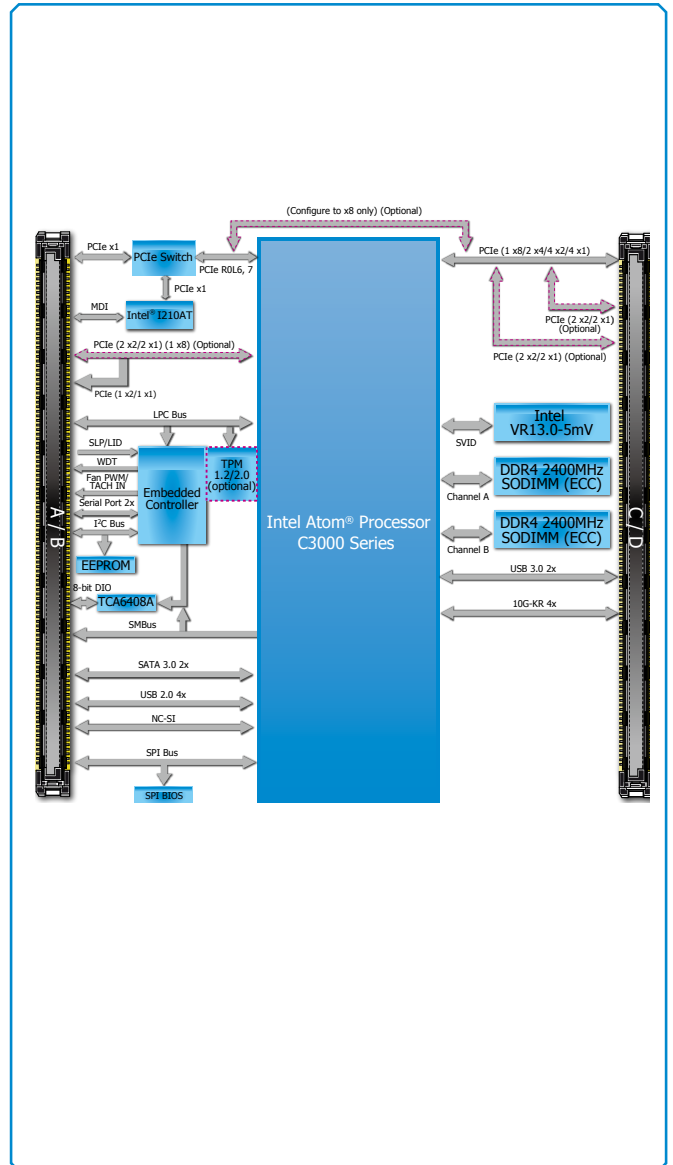
Wide Temperature

USB 3.0

Mechanical Drawing



Block Diagram



Specifications

SYSTEM	Processor	Intel Atom® Processor C3000 Series, BGA1310 Intel Atom® C3958 Processor, 16 Cores, 16M Cache, 2.0GHz, 31W Intel Atom® C3808 Processor, 12 Cores, 12M Cache, 2.0GHz, 25W Intel Atom® C3708 Processor, 8 Cores, 16M Cache, 1.7GHz, 17W	
	Memory	Two 260-pin ECC SODIMM up to 32GB	Dual Channel DDR4 2400MHz (Memory max speed depends on CPU SKU)
	BIOS	Insyde SPI 128Mbit	
EXPANSION	Interface	Default: B1: 2 x PCIe x2 or 2 x PCIe x1 (Gen 3) B2: 1 x PCIe x2 (Gen 3) + 1 x PCIe x1 (Gen 2) or 2 x PCIe x1 (Lane 8 Gen 3, Lane 12 Gen 2) B3: 1 x PCIe x8 or 2 x PCIe x4 or 2 x PCIe x2 or 2 x PCIe x1 (Gen 3) Option 1: B1: 1 x PCIe x8 or 2 x PCIe x4 or 2 x PCIe x2 or 2 x PCIe x1 (Gen 3) B3: 2 x PCIe x2 or 2 x PCIe x1 (Gen 3) B4: 2 x PCIe x2 or 2 x PCIe x1 (Gen 3) 1 x LPC 1 x I ² C 1 x SMBus 2 x UART (TX/RX)	
	ETHERNET	Controller	PHY for X557 or CS4227/CS4223 and Controller for Intel® I210AT/Intel® I210IT 2 x Independent 10GbE Media Access Controller (Sku dependent) Supports up to Two 10GBASE-KR Interfaces and Max up to Four 10GbE MAC Ports Supports Intel® X557-AT/AT2/AT4 10GbE PHY Supports Inphi CS4227 (2 port)/CS4223 (4 port) (maximum bandwidth is 20Gb when 4 ports of 10G interface active at the same time) 1 x Intel® I210AT (10/100/1000Mbps) (normal temp.) or 1 x Intel® I210IT (10/100/1000Mbps) (wide temp.)
I/O	USB	2 x USB 3.0 4 x USB 2.0	
	SATA	2 x SATA 3.0 (up to 6Gb/s)	RAID 0/1/10
	DIO	1 x 8-bit DIO (4 in, 4 out)	
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 15 to 255 Seconds	
SECURITY	TPM	Available Upon Request	
POWER	Type	12V, 5VSB, VCC_RTC (ATX mode)	12V, VCC_RTC (AT mode)
	Consumption	TBD	
OS SUPPORT		Windows Server 2012 Windows Server 2016	Yocto Project v1.8/v2.0
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	TBD	
MECHANICAL	Dimensions	COM Express® Basic	95mm (3.74") x 125mm (4.9")
	Compliance	PICMG COM Express® R3.0, Type 7	

Ordering Information

Model Name	P/N	Processor	SODIMM	GbE	10GbE	USB 3.0	USB 2.0	SATA 3.0	Power	Thermal	Temp.
DV970-TS-C3808	770-DV9702-000G	C3808	2	1	2	2	4	2	ATX/AT	Cooler	-40 to 85°C
DV970-BS-C3958	770-DV9702-100G	C3958	2	0	2	2	4	2	ATX/AT	Cooler	0 to 60°C
DV970-BS-C3958	770-DV9702-200G	C3958	2	1	2	2	4	2	ATX/AT	Cooler	0 to 60°C
DV970-TS-C3708	770-DV9702-300G	C3780	2	1	2	2	4	2	ATX/AT	Cooler	-40 to 85°C

Packing List

• 1 DV970 board	
• 1 Cooler (Height: 47.80 mm)	Standard: A71-108101-000G Wide Temp: A71-108101-010G

Optional Items

• COM333-I carrier board kit	770-CM3331-000G
• Heat spreader (Height: 11mm)	A71-808317-000G