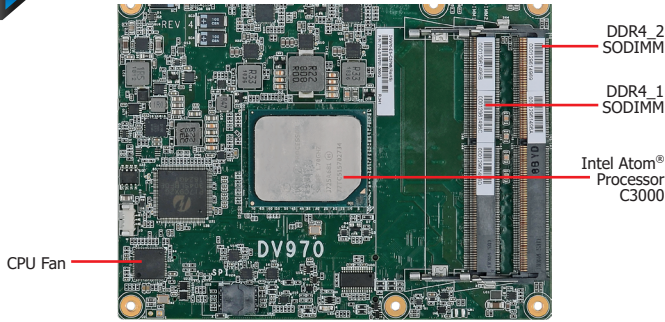


# DV970



## 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

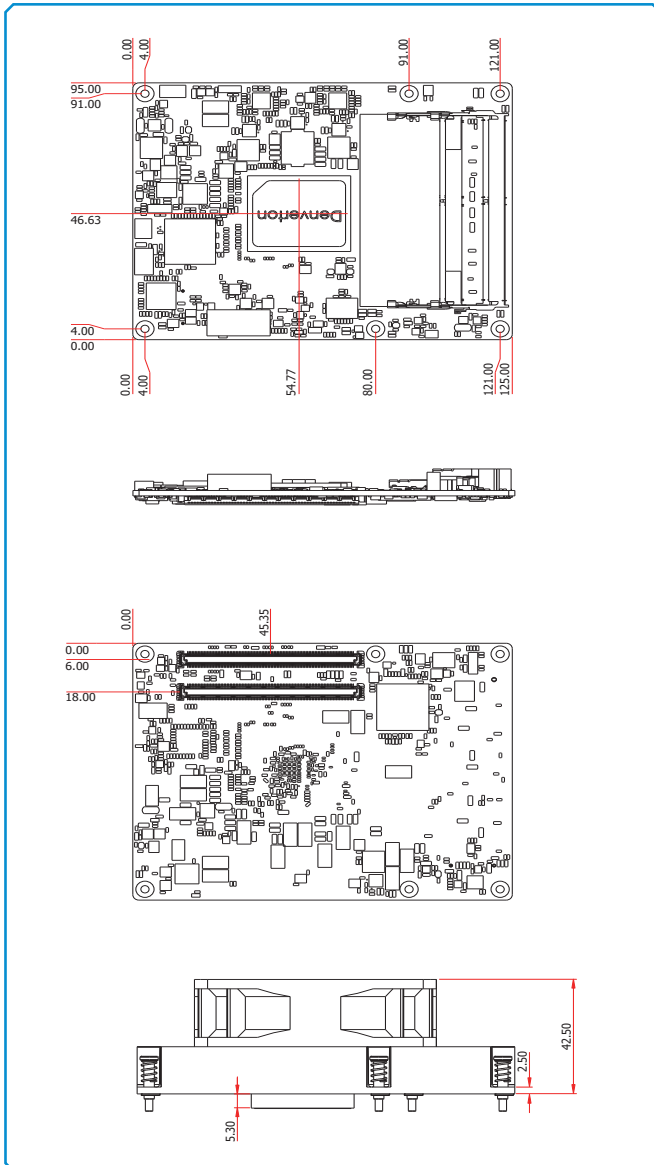
SATA 3.0

DDR4

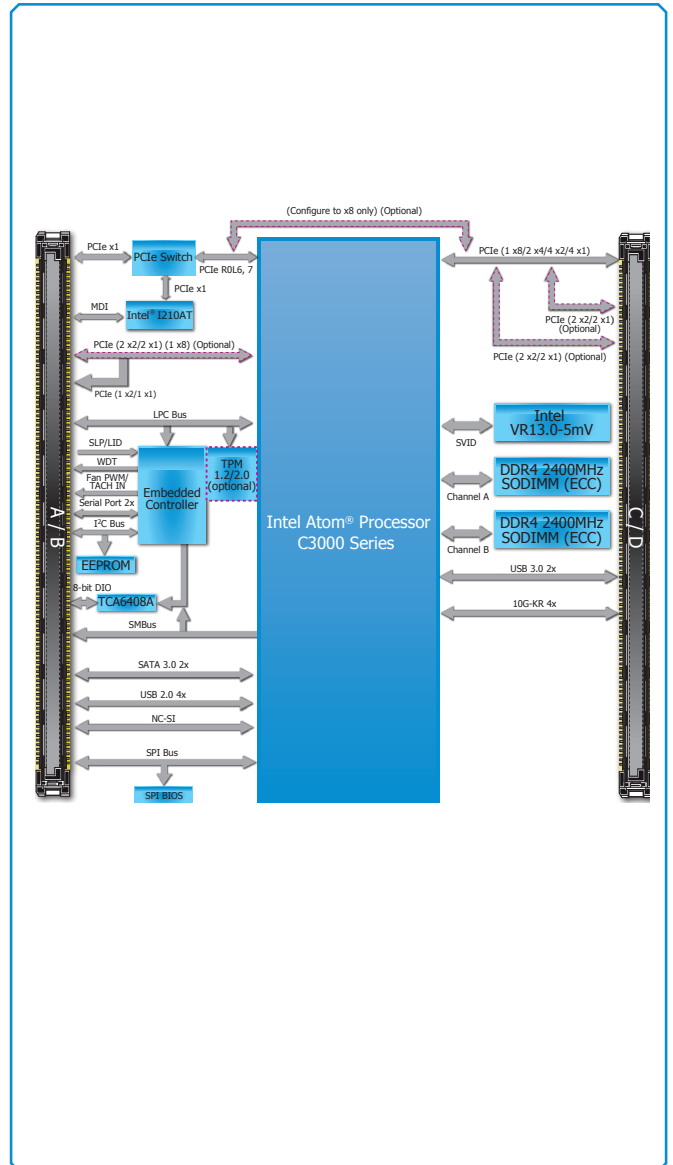
Wide Temperature

USB 3.0

## Mechanical Drawing



## Block Diagram



## Specifications

<b>SYSTEM</b>	<b>Processor</b>	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	
	<b>Memory</b>	Two 260-pin ECC SODIMM up to 32GB Dual Channel DDR4 2400MHz (Memory max speed depends on CPU SKU)	
	<b>BIOS</b>	Insyde SPI 128Mbit	
<b>EXPANSION</b>	<b>Interface</b>	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 <sup>2</sup> C 1 x SMBus 2 x UART (TX/RX)	
	<b>ETHERNET</b>	<b>Controller</b>	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.)
<b>I/O</b>	<b>USB</b>	2 x USB 3.0 4 x USB 2.0	
	<b>SATA</b>	2 x SATA 3.0 (up to 6Gb/s)	RAID 0/1/10
	<b>DIO</b>	1 x 8-bit DIO (4 in, 4 out)	
<b>WATCHDOG TIMER</b>	<b>Output &amp; Interval</b>	System Reset, Programmable via Software from 15 to 255 Seconds	
<b>SECURITY</b>	<b>TPM</b>	Available Upon Request	
<b>POWER</b>	<b>Type</b>	12V, 5VSB, VCC_RTC (ATX mode)	12V, VCC_RTC (AT mode)
	<b>Consumption</b>	TBD	
<b>OS SUPPORT</b>		Windows Server 2012 Windows Server 2016	Yocto Project v1.8/v2.0
<b>ENVIRONMENT</b>	<b>Temperature</b>	Operating: 0 to 60°C -40 to 85°C	Storage: -40 to 85°C
	<b>Humidity</b>	Operating: 5 to 90% RH	Storage: 5 to 90% RH
	<b>MTBF</b>	TBD	
<b>MECHANICAL</b>	<b>Dimensions</b>	COM Express® Basic	95mm (3.74") x 125mm (4.9")
	<b>Compliance</b>	PICMG COM Express® R3.0, Type 7	

## Packing List

• 1 DV970 board	
• 1 DVD	
• 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