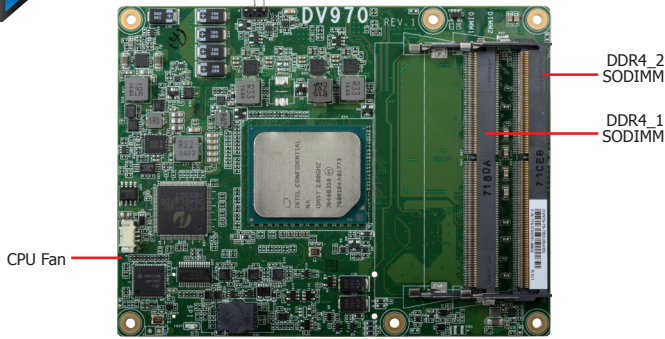


# DV970



## Features

- Dual channel DDR4 2400MHz 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

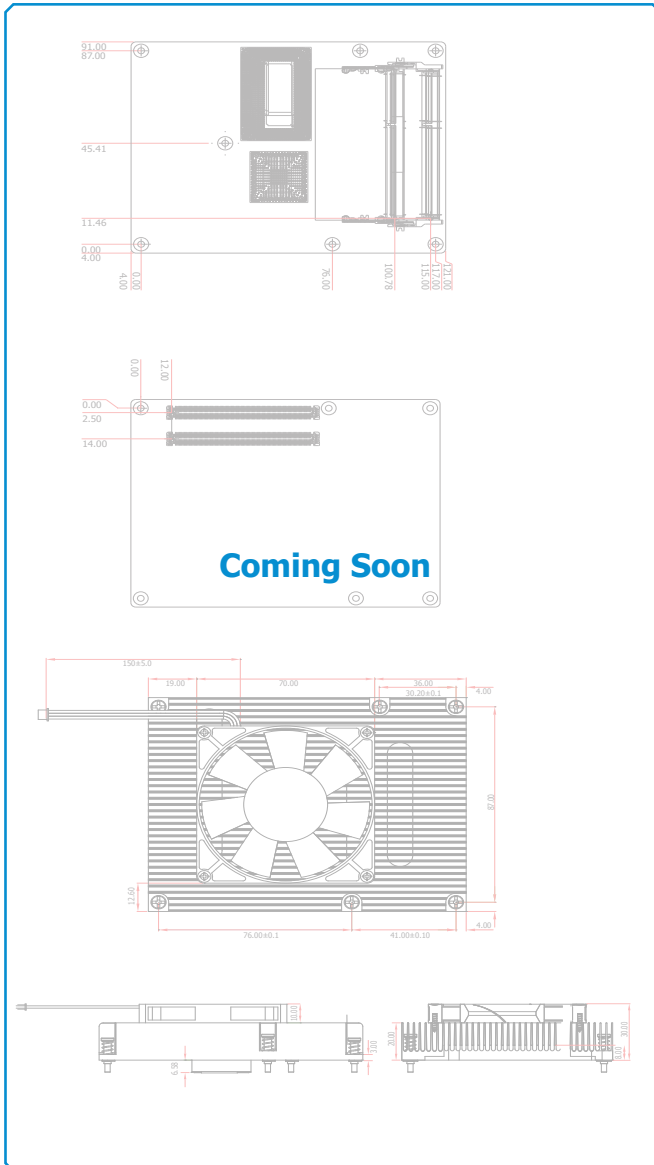
**SATA 3.0**

**DDR4**

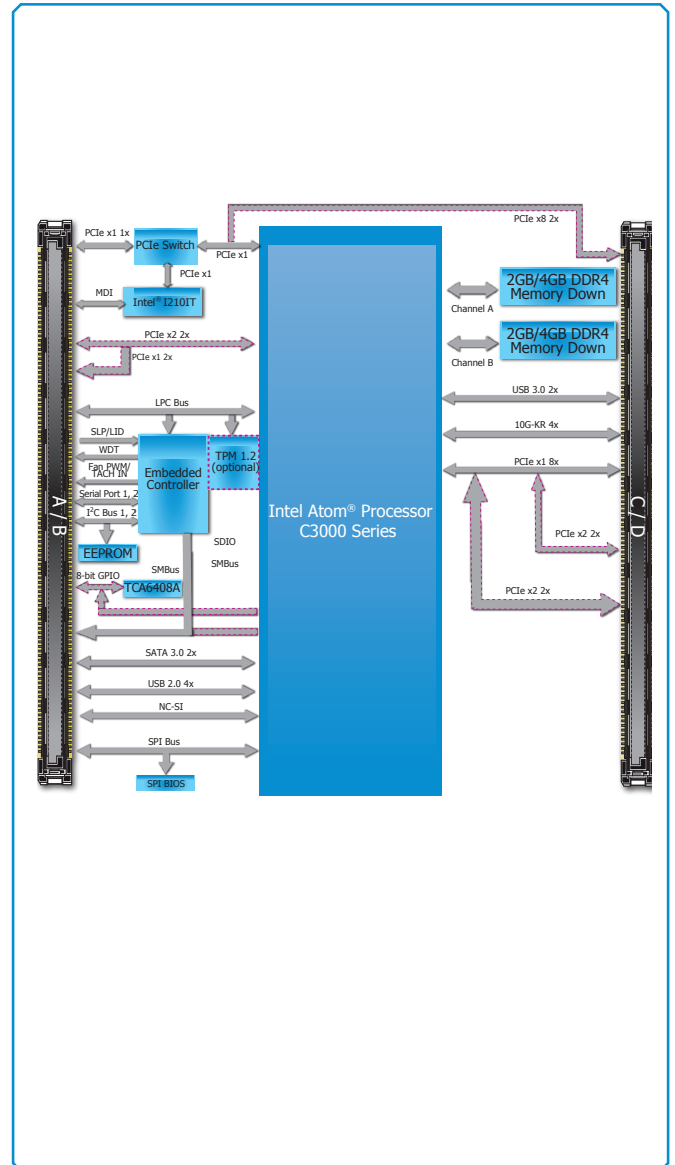
**Wide Temperature**

**USB 3.0**

## Mechanical Drawing



## Block Diagram



## ► Specifications

<b>SYSTEM</b>	<b>Processor</b>	Intel Atom® Processor C3000 Series, BGA	
	<b>Memory</b>	Two 260-pin SODIMM up to 32GB	Dual Channel DDR4 2400MHz
	<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 or 2 x PCIe x1 (Gen 3) 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) Option 2: B1: 2 x PCIe x2 or 2 x PCIe x1 (Gen 3) B2: 1 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) Option 3: B1: 1 x PCIe x8 or 2 x PCIe x4 or 2 x PCIe x2 or 2 x PCIe x1 (Gen 3) B3: 1 x PCIe x8 or 2 x PCIe x4 or 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>
<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 0/1/5/10
	<b>DIO</b>	1 x 8-bit DIO	
<b>WATCHDOG TIMER</b>	<b>Output &amp; Interval</b>	System Reset, Programmable via Software from 1 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	Storage: -40 to 85°C
		-40 to 85°C (with heat spreader)	
	<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: TBD mm)	TBD

## ► Optional Items

• COM333-I carrier board kit	TBD
• Heat spreader (Height: 11mm)	TBD



► PCIe Configurations

Bucket	Lane NO.	PCIe Configurations				DV970 Default	DV970 Option 1	DV970 Option 2	DV970 Option 3			
<b>B1</b>	Lane 0	x8	x4	x2	x1	Lane 0	Lane 0	Lane 0	Lane 0			
	Lane 1					Lane 1	Lane 1	Lane 1				
	Lane 2					Lane 2	Lane 2	Lane 2				
	Lane 3					Lane 3	Lane 3	Lane 3				
	Lane 4	x4	x2	x1	Lane 2	Lane 4	Lane 2	Lane 4				
	Lane 5				Lane 3	Lane 5	Lane 5					
	Lane 6				Lane 6	Lane 6	Lane 6					
	Lane 7				Lane 7	Lane 7	Lane 7					
<b>B2</b>	Lane 8	x8	x4	x2	x1	Lane 4		Lane 4				
	Lane 9					Lane 5		Lane 5				
	Lane 10					x4		x2		x1	Lane 6 (SW)	Lane 6 (SW)
	Lane 11											
	Lane 12											
	Lane 13											
	Lane 14											
	Lane 15											
<b>B3</b>	Lane 16	x8	x4	x2	x1	Lane 8	Lane 8	Lane 8	Lane 8			
	Lane 17					Lane 9	Lane 8	Lane 9				
	Lane 18					Lane 10	Lane 10	Lane 10				
	Lane 19					Lane 11	Lane 11	Lane 11				
	Lane 20	x4	x2	x1	Lane 12	Lane 10	Lane 10	Lane 12				
	Lane 21				Lane 13	Lane 11	Lane 11					
	Lane 22				Lane 14	Lane 14	Lane 14					
	Lane 23				Lane 15	Lane 15	Lane 15					
<b>B4</b>	Lane 24	x8	x4	x2	x1		Lane 12	Lane 12				
	Lane 25						Lane 13	Lane 13				
	Lane 26						x4	x2		x1	Lane 14	Lane 14
	Lane 27											
	Lane 28											
	Lane 29											
	Lane 30											
	Lane 31											