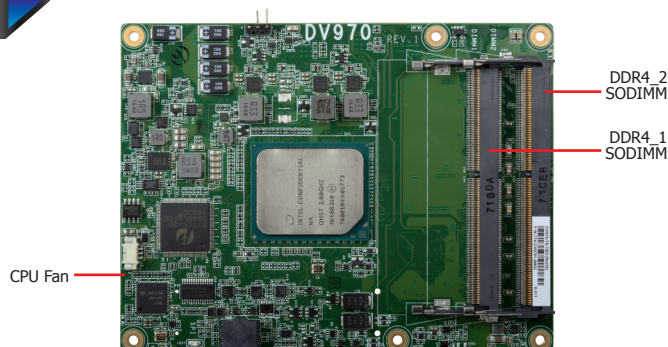


DV970

Atom



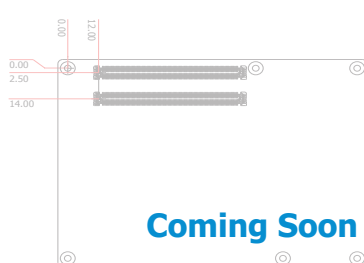
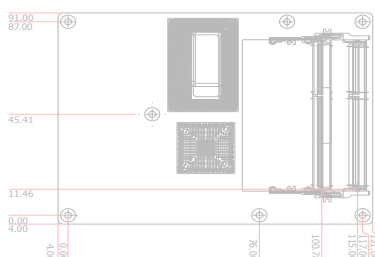
Features

- 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

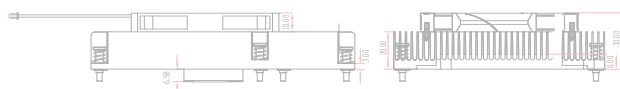
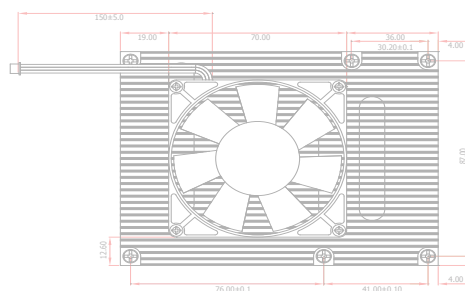
* Populated by default



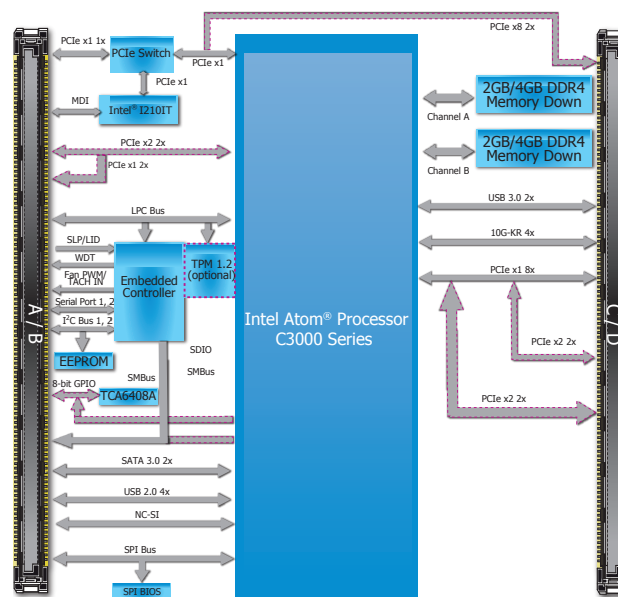
Mechanical Drawing



Coming Soon



Block Diagram



Specifications

SYSTEM	Processor	Intel Atom® Processor C3000 Series, BGA	
	Memory	Two 260-pin SODIMM up to 32GB	Dual Channel DDR4 2400MHz
	BIOS	Insyde SPI 128Mbit	
EXPANSION	Interface	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 ² C 1 x SMBus 2 x UART (TX/RX)	
ETHERNET	Controller	4 x 10Gbase-KR Support 10GBASE-KR FEC Support Intel® X557-AT/AT2/AT4 10 GbE PHY Support Inphi CS4227 (2 port)/CS4223 (4 port) (Bandwidth maximum of 4 ports is 20GB)	1 x Intel® I210AT (10/100/1000Mbps) (0°C to 60°C) 1 x Intel® I210IT (10/100/1000Mbps) (-40°C to 85°C)
I/O	USB	2 x USB 3.0 4 x USB 2.0	
	SATA	2 x SATA 3.0 (up to 6Gb/s)	RAID 0/1/5/10
	DIO	1 x 8-bit DIO	
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 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 (with heat spreader)	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	

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
B1	Lane 0	x8	x4	x2	x1	Lane 0	Lane 0	Lane 0	Lane 0
	Lane 1					Lane 1	Lane 1	Lane 1	Lane 1
	Lane 2						Lane 2		Lane 2
	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 3	Lane 5
	Lane 6						Lane 6		Lane 6
	Lane 7						Lane 7		Lane 7
B2	Lane 8	x8	x4	x2	x1	Lane 4		Lane 4	
	Lane 9					Lane 5		Lane 5	
	Lane 10								
	Lane 11								
	Lane 12		x4	x2	x1	Lane 6 (SW)		Lane 6 (SW)	
	Lane 13								
	Lane 14								
	Lane 15								
B3	Lane 16	x8	x4	x2	x1	Lane 8	Lane 8	Lane 8	Lane 8
	Lane 17					Lane 9	Lane 8	Lane 8	Lane 9
	Lane 18					Lane 10			Lane 10
	Lane 19					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 13
	Lane 22					Lane 14			Lane 14
	Lane 23					Lane 15			Lane 15
B4	Lane 24	x8	x4	x2	x1		Lane 12	Lane 12	
	Lane 25						Lane 13	Lane 13	
	Lane 26								
	Lane 27								
	Lane 28		x4	x2	x1		Lane 14	Lane 14	
	Lane 29						Lane 15	Lane 15	
	Lane 30								
	Lane 31								