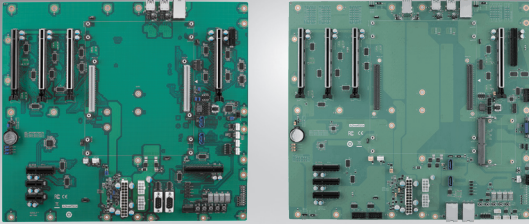


SOM-DH7000

Development Board for COM-HPC® Extension Modules



SOM-DH7000 A1

SOM-DH7000 A2



Features

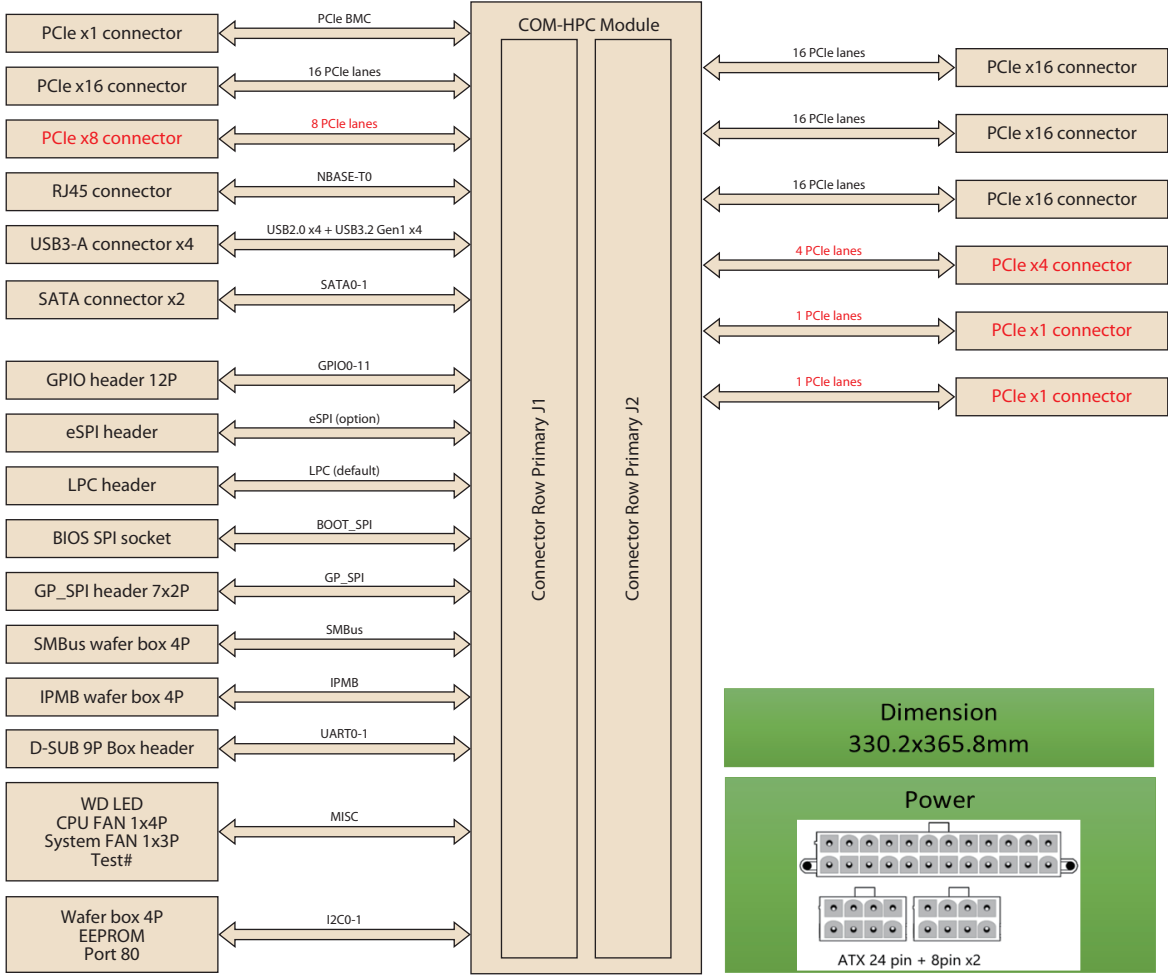
- COM-HPC® Extension Size E
- RunBMCv1.5 260pin socket interface (A2)
- 1 PCIe x1 reserved for BMC add-in card (A1)
- Rich extension: 4 x PCIe x16, 1 PCIe x8, 1 PCIe x4, 2 PCIe1 (Gen 5)
- Max. power 225W supplying for server grade processor
- Visible Debug Utility: BIOS 80 Port and Power State

Specifications

Compatible Models	Advantech COM-HPC Size E module (200x160mm)	
Expansion	PCI Express x16	4
	PCI Express x1	1 (for BMC, A1 only)
	PCI Express x8 (Proprietary)	1
	PCI Express x4 (Proprietary)	1
	PCI Express x1 (Proprietary)	2
	LPC	1
	eSPI (Option)	1
Serial Bus	SMBus	1
	I2C Bus	2 (1x 1.8v, 1x 3.3v)
	Management (IPMB)	1 (1x 4P Pin header)
Ethernet	NBASE-T (RJ45) 1 Port 2.5GBase-T (RJ-45) supports up to 2.5Gbps from Module side	
I/O	SATA 3.0	2 Ports
	USB 3.2 Gen1	4 Ports (Type-A)
	USB 2.0	4 Ports (Type-A)
	Boot_SPI	1 (SPI Socket)
	GP_SPI	1 (7x 2P Pin Header)
	COM Port	2 (D-SUB 9P)
	GPIO	12 (12P Pin Header)
	FAN	2 (1x 4P Smart Fan Header from Module side, 1x 3P System Fan Header)
	Port 80	1
BMC (A2 only)	LAN - MDI	1 (RJ45)
	LAN - NCSI (Share NIC)	1 (RJ45)
	Display	1 (15P D-SUB)
	GPIO	4 (4P Pin Header)
	I2C for temperature sensor	1 (Temp sensor)
	UART	1 (D-SUB 9P)
	PWM/FAN Tach	1 (1x 4P Header)
	I2C for PMBUS	1 (5P wafer box)
LED	3 (3P Pin Header)	
Power	Type	ATX: Vin, VSB; AT: Vin
	Supply Voltage	Vin: 12V (± 5%); VSB: 5V (± 5%)
Environment	Operating Temperature	Operating Standard: 0 ~ 60 °C (32 ~ 140 °F) Storage: -40 ~ 85 °C (-40 ~ 185 °F)
	Humidity	Operating: 40°C@95% relative humidity, non-condensing Storage: 60°C@95% relative humidity, non-condensing
Mechanical	Dimensions	366 x 330 mm

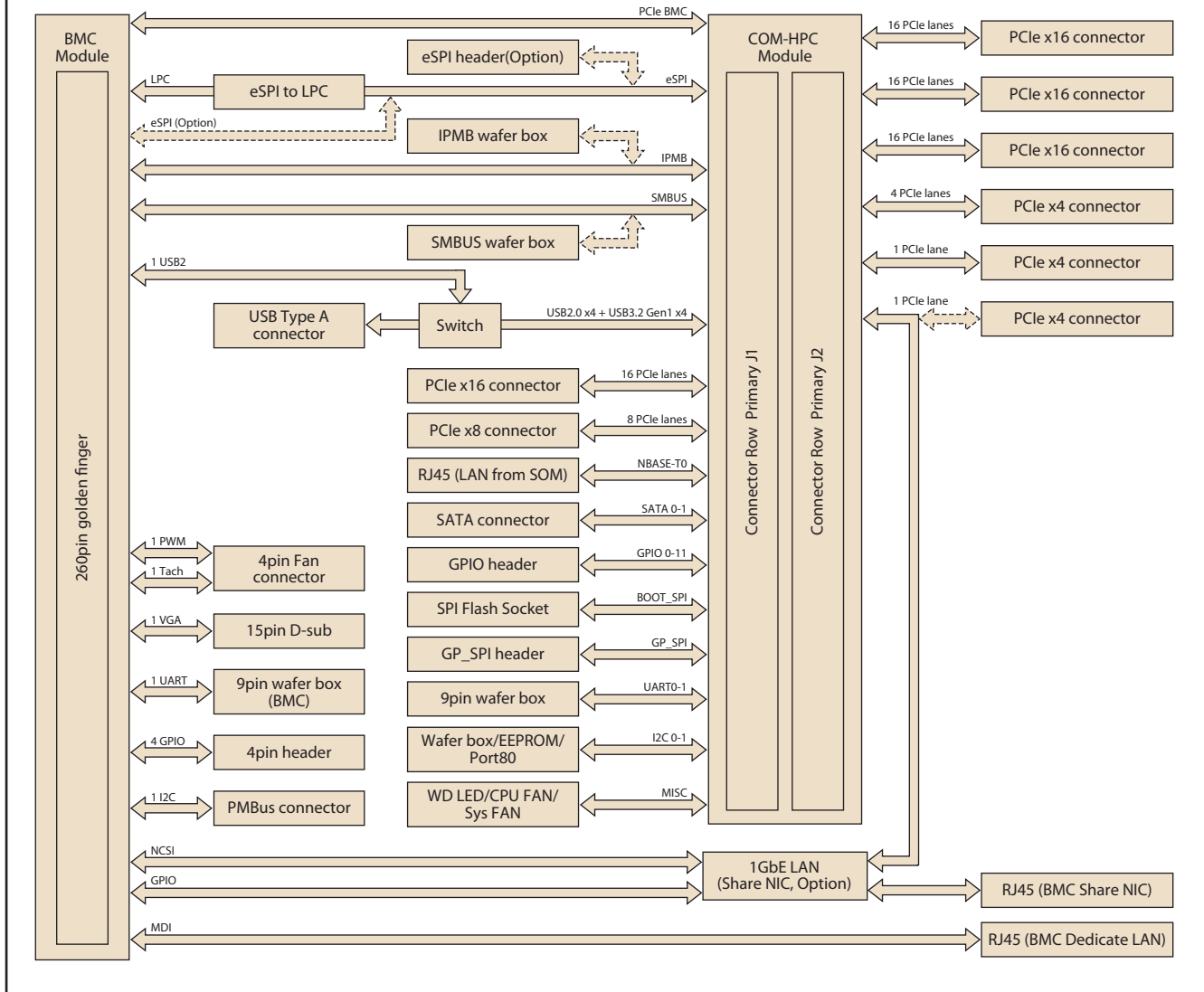
Block Diagram

For A1



Block Diagram

For A2



Ordering Information

Part No.	Description
SOM-DH7000-00A1	COM-HPC Size E proprietary Dev. Board A1
SOM-DH7000-00A2	COM-HPC Size E Extension Dev. Board A2 (W/ RunBMC)
SOM-DH7000A-00A2	COM-HPC Size E Extension Dev. Board A2 (W/ RunBMC + Share NIC)

Packing List

Part No.	Description	Quantity
1700008941	Serial ATA Cable 7P/7P 32cm	2