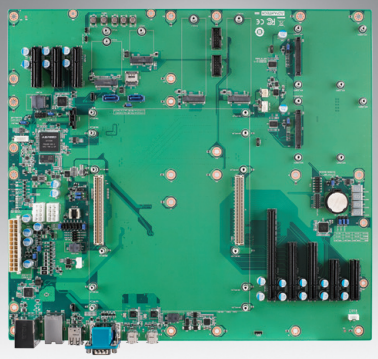
SOM-DH5000

Development Board for COM-HPC Server Pinout Modules

Preliminary



Features

- PICMG COM-HPC Server pinout
- COM-HPC Size D and E compatible
- Rich extension: 1 PCIe x16, 2 PCIe x8, 5 PCIe x4
- Integrated BMC supports VGA, Dedicated NIC for IPMI, iKVM
- 10/25 Gigabit Ethernet support by OCP mezzanine card
- Visible Debug Utility: BIOS 80 Port and Power State

Specifications

Compatible Models		Advantech COM-HPC Server Size D Module (160x160mm) and COM-HPC Server Size E Module (200 x 160mm)
Graphics	Controller	AST2500 Integrated 2D Graphics Controller
	Frequency	266MHz
	Graphic Memory	1GB @ DDR4-1600
Display	VGA	1920 x 1200 (from AST2500)
Expansion	PCI Express x16	1
	PCI Express x8	2
	PCI Express x4	5
	M.2 B Key	1
	M.2 E Key	1
	M.2 M Key	2
	eSPI	1
Serial Bus	SMBus	1
	I2C Bus	2 (1x 1.8v, 1x 3.3v)
Ethernet	Gigabit Ethernet	1 port 1000Base-T (RJ-45) supports 10/100/1000 Mbps from AST2500, supports IPMI 1 port 1000Base-T (RJ-45) supports 10/100/1000 Mbps from Module side
	Super Speed Ethernet	Up to 8 Ports, support 10G/25G by OCP mezzanine card
I/O	SATA3.0	2 (Type B Connector)
	USB4	2 (Type C Connector)
	USB 3.2 Gen2	2 (Type A Connector)
	USB2.0	2 (Type A Connector)
	Boot_SPI	1 (SPI Socket)
	GP_SPI	1 (6x2P Pin Header)
	COM Port	2 (1x D-SUB 9P, 1x Box Header)
	GPIO	12 (12P Pin Header)
	Fan	2 (1x 4P Smart Fan Header from Module side, 1x 3P System Fan Header)
	Port 80	1
Power	Type	ATX: Vin, VSB; AT: Vin
	Supply Voltage	Vin: 12V ±5%, VSB: 5 ±5%
Environment	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	Proprietary: 366 x 330 mm

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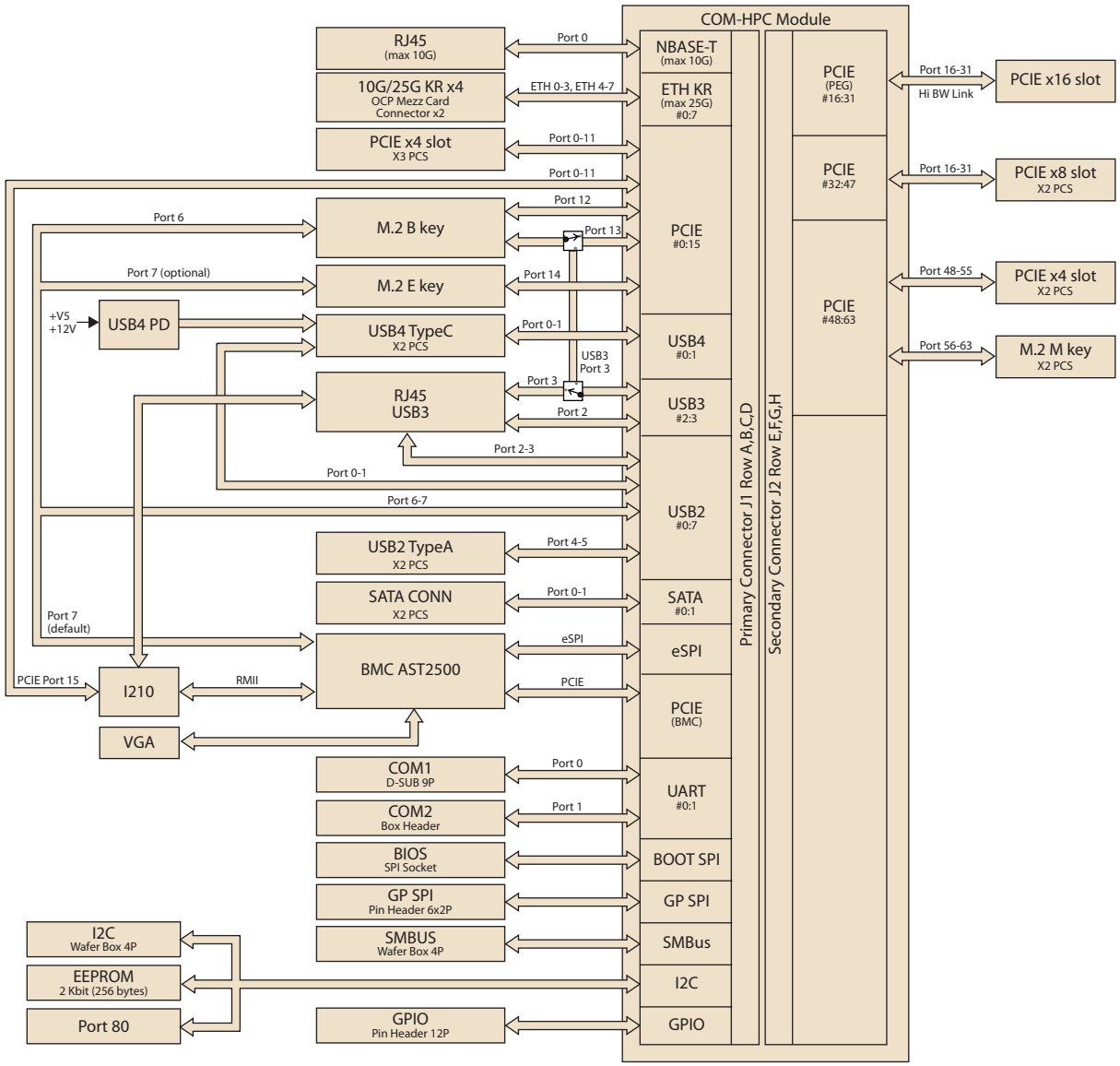
All product specifications are subject to change without notice.

Block Diagram



Ordering Information

Part No.	Description
SOM-DH5000-00A1	COM-HPC Development Board for Server Pinout with 5mm High Board to Board Connector
SOM-DH5000-H0A1	COM-HPC Development Board for Server Pinout with 10mm High Board to Board Connector

Any other SKUs or combination is project based support. Please contact sales for details.

Packing List

Part No.	Description	Quantity
-	COM-HPC Development Board	1
	Others TBD	