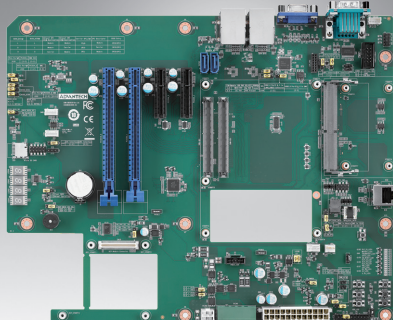


SOM-DB5930

Development Board for COM Express® Type 7 Pin-out Modules

Preliminary



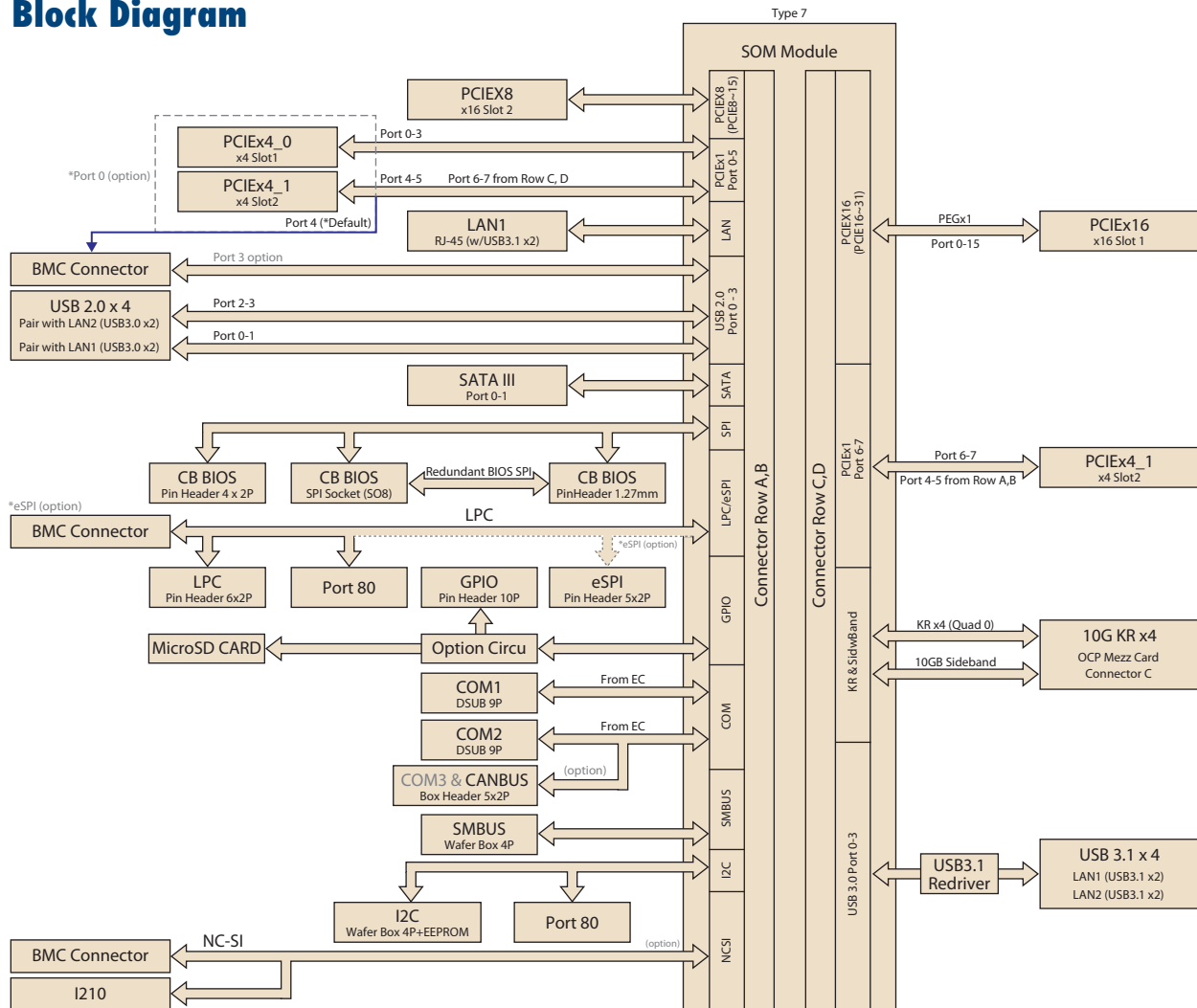
Specifications

Compatible Models	Advantech COM Express Basic Module (125 x 95mm) and COM Express Compact Module (95 x 95 mm)	
Graphic	Controller	AST2600 Integrated 2D Graphics Controller (on SOM-RM10), 800x600 @60Hz
	Frequency	800x600 @60Hz
	Graphics Memory	128MB @ DDR4 3200MT/s
Display	VGA	800x600 @60Hz (from AST2600 on SOM-RM10), VBIOS on SOM-RM10
Expansion	PCI Express x16	1
	PCI Express x8	1
	PCI Express x4	2
	LPC	1
	eSPI (option)	1
Ethernet	Fast Ethernet	1 port 1000Base-T (RJ-45) supports 10/100/1000 Mbps from AST2600 (on SOM-RM10), supports IPMI
	Gigabit Ethernet	1 port 2.5GBase-T (RJ-45) supports up to 2.5Gbps from Module side
	10 Gigabit Ethernet	Up to 4 Ports, support 10GBase-T or SFP+ physical layer transferred by OCP mezzanine card
Serial Bus	SMBus	1
	I2C Bus	1
	CAN Bus (option)	1 (Mux with SER2)
	PMBus	1 from AST2600 (on SOM-RM10)
I/O	SATA 3.0	2 (Type B Connector)
	USB	4 x USB3.2 (shared by 4 x USB3.1 Connectors)
	SPI Bus	1
	COM Port	2 x 2wire COM Ports (from EC) & 1 x Box Header 5x2p (from AST2600 on SOM-RM10)
	GPIO	8
	SDIO (option)	1 (Pin Mux with GPIO)
	FAN	2 (1 Smart Fan from Module side, 1 fixed-voltage Fan)
	Port 80	1 header
	IPMB	1 from AST2600 (on SOM-RM10)
Power	Type	ATX: Vin, VSB; AT: Vin or Vdc
	Supply Voltage	Vin: 12V $\pm$ 5%, VSB: 5 $\pm$ 5% Vdc: 8.5V (9-5%) ~ 20V (19+5%)
Environment	Temperature	Operating Standard: 0 ~ 60 °C (32 ~ 140 °F)
	Storage Temperature	-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	304.8 x 244 mm (12" x 9.6")

Features

- PICMG COM.0 R 3.1 Type 7 Pin out
- COM Express® Basic/Compact module
- 10 Gigabit Ethernet support by OCP mezzanine card
- Extension: PCIe x16, PCIe x8, 2 PCIe x4
- External BMC card supports VGA, Dedicated NIC for IPMI, iKVM
- Visible Debug Utility: BIOS Port-80 header and Power State

Block Diagram



Ordering Information

Part No.	Description
TBD	

Packing List

Part No.	Description	Quantity
SOM-DB5930	COM Express Development Board	1
TBD		