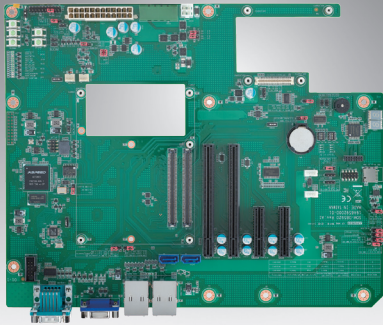


SOM-DB5920

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

Preliminary



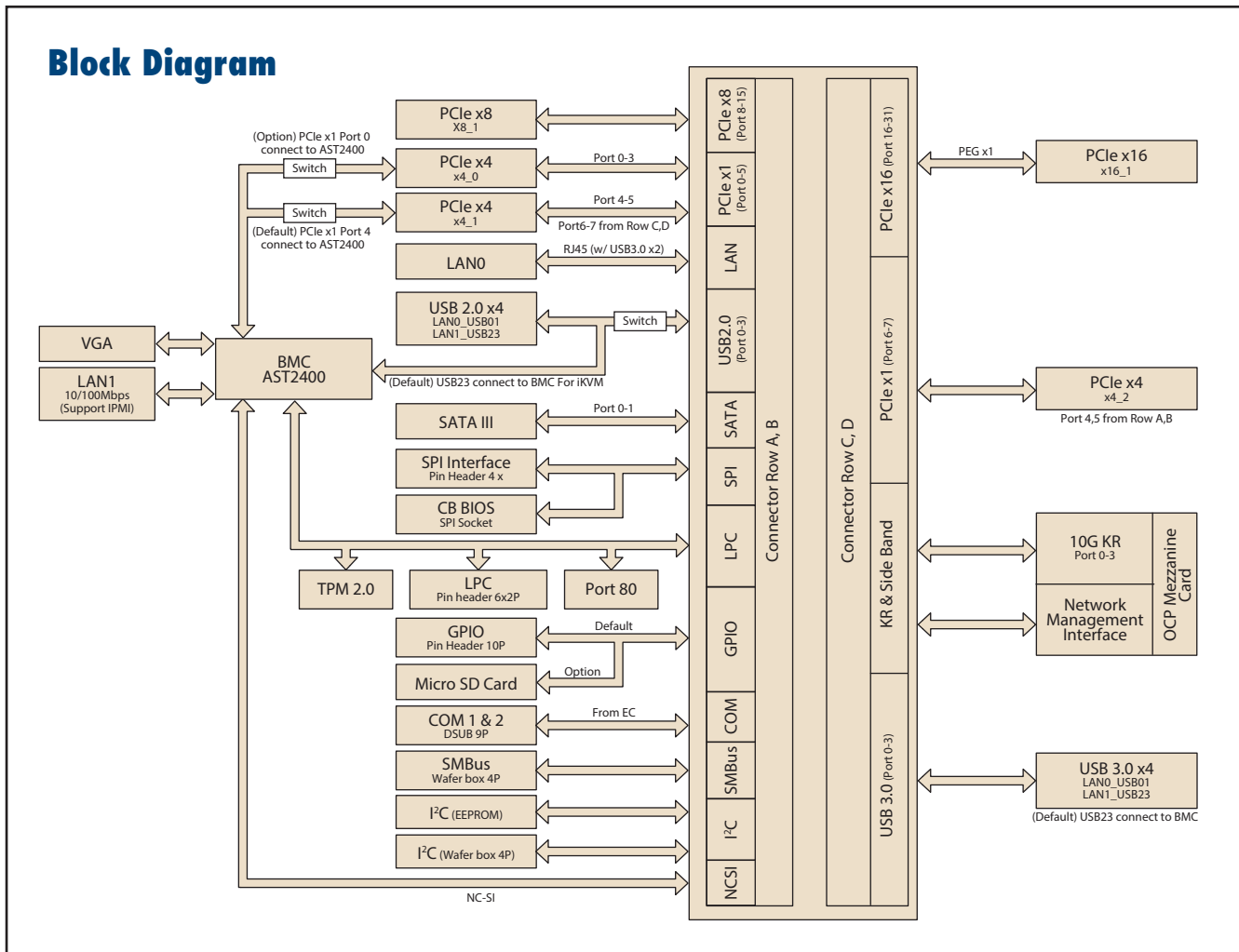
Features

- PICMG COM.0 R 3.0 Type 7 Pin out
- COM Express® Basic/Compact module
- Extension: PCIe x16, PCIe x8, 2 PCIe x4
- Integrated BMC supports VGA, Dedicated NIC for IPMI, iKVM
- 10 Gigabit Ethernet support by OCP mezzanine card
- Visible Debug Utility: BIOS 80 Port and Power State

Specifications

Compatible Models	Advantech COM Express Basic Module (125 x 9.5mm) and COM Express Compact Module (95 x 95 mm)	
Graphic	Controller	AST2400 Integrated 2D Graphics Controller
	Frequency	266MHz
	Graphics Memory	512MB @ DDR3-800
Display	VGA	1920 x 1200 (from AST2400)
Expansion	PCI Express x16	1
	PCI Express x8	1
	PCI Express x4	2
	LPC	1
Ethernet	Fast Ethernet	1 port 100Base-T (RJ-45) supports 10/100 Mbps from AST2400, supports IPMI
	Gigabit Ethernet	1 port 1000Base-T (RJ-45) supports 10/100/1000 Mbps 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
	I ² C Bus	1
I/O	SATA	2 (Type B Connector)
	USB	4 x USB3.0, 4 x USB2.0 (shared by 4 x USB3.0 Connectors)
	SPI Bus	1
	COM Port	2 x 2-wire COM Ports
	GPIO	8
	SDIO (option)	1 (Pin Mux with GPIO)
	Fan	2 (1 Smart Fan from Module side, 1 fixed-voltage Fan)
	Port 80	1
TPM	TPM2.0 (SLB9665)	
Power	Type	ATX: Vin, VSB; AT: Vin or Vdc
	Supply Voltage	Vin: 12V ±5%, VSB: 5 ±5% Vdc: 8.5V (9-5%) ~ 20V (19+10%)
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	304.8 x 244 mm (12" x 9.6")

Block Diagram



Ordering Information

Part No.	Description
SOM-DB5920-00A1E	COM Express Development Board for Type 7 Pin-out

Packing List

Part No.	Description	Quantity
SOM-DB5920	COM Express Development Board	1
SOM-EA60	Dual Ports Copper 10GB LAN Mezzanine Card, with X557-AT2	1