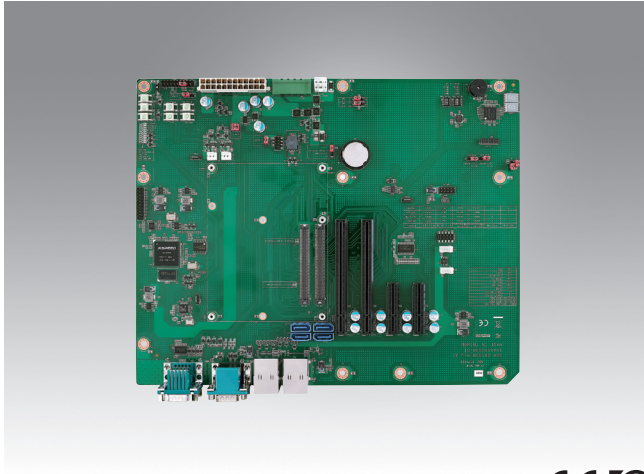


# SOM-DB5900

## Development Board for COM Express® Type 6 Pin-out Modules



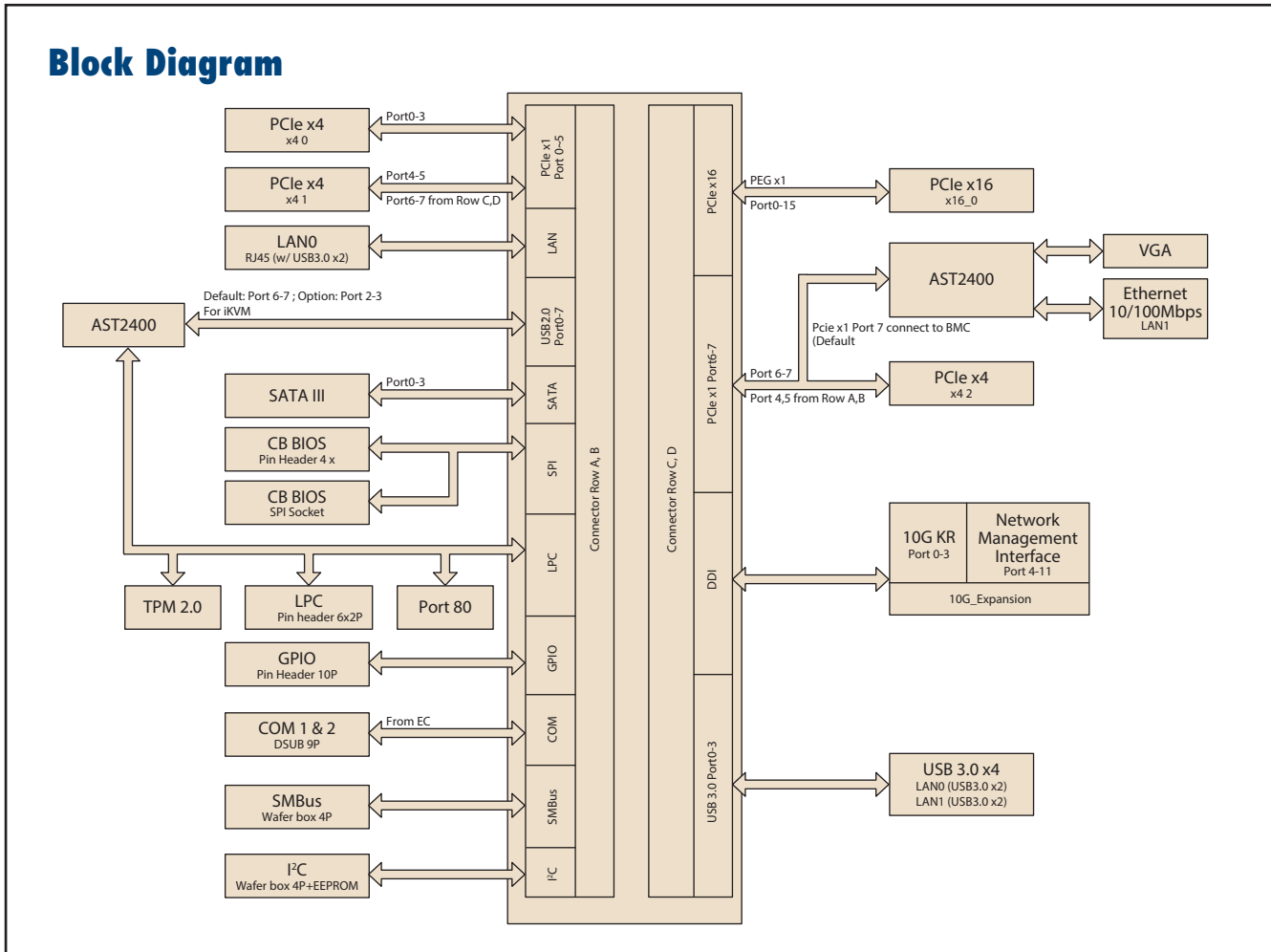
### Features

- PICMG COM.0R 2.1 Type 6 Pin out compatible
- COM Express® Basic/Compact module
- Extension: PCIe x16 and 2 PCIe x4, optional 2 Ports 10GBase-KR
- Integrated BMC supports VGA, Dedicated NIC for IPMI, iKVM
- Riser Card for 10GBASE-T function extension
- Visible Debug Utility: BIOS 80 Port and Power State

### Specifications

Compatible Models	Advantech COM Express Basic Module(125 x 95mm) and COM Express Compact Module (95 x 95mm)	
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 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	2 ports 10GBase-KR support 10Gbps from Module side, riser card SOM-EA21 provides physical layer transferring 2 ports 10GBase-T
Serial Bus	SMBus	1
	I <sup>2</sup> C Bus	1
I/O	SATA	4 (Type B Connector)
	USB	4 x USB3.0, 6 x USB2.0 (4 x USB3.0 Connectors w/ USB2.0, 2 x USB2.0 from Pin Header)
	SPI Bus	1
	COM Port	2 x 2-wire COM Ports
	GPIO	8
	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 @ 95% relative humidity, non-condensing Storage: 60 @ 95%relative humidity, non-condensing
Mechanical	Dimensions	304.8 x 244 mm (12" x 9.6")

## Block Diagram



## Ordering Information

Part No.	Description
SOM-DB5900-00A1E	COM Express Development Board for Type 6 Pin-out compatible

## Packing List

Part No.	Description	Quantity
SOM-DB5900	COM Express Development Board	1
SOM-EA21	10GBase-T Riser Card	1
SOM-EA10	PCIex4 to 4 PCIe1 Riser Card	1
1700008941	Serial ATA Cable 7P/7P 32cm	2
1960046435T100	I/O Bracket for SOM-DB5900	1
1960077399N000	10GB RJ45 I/O Bracket for SOM-EA21	1
1931000590	Screw M2.5*5L	3
1935030500	Screw M3*5L	2