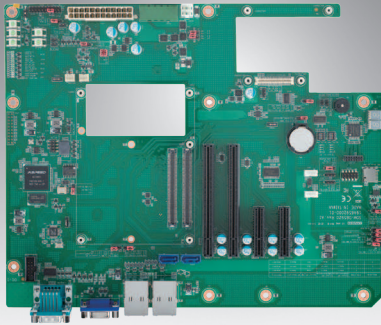


SOM-DB5920

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

Preliminary



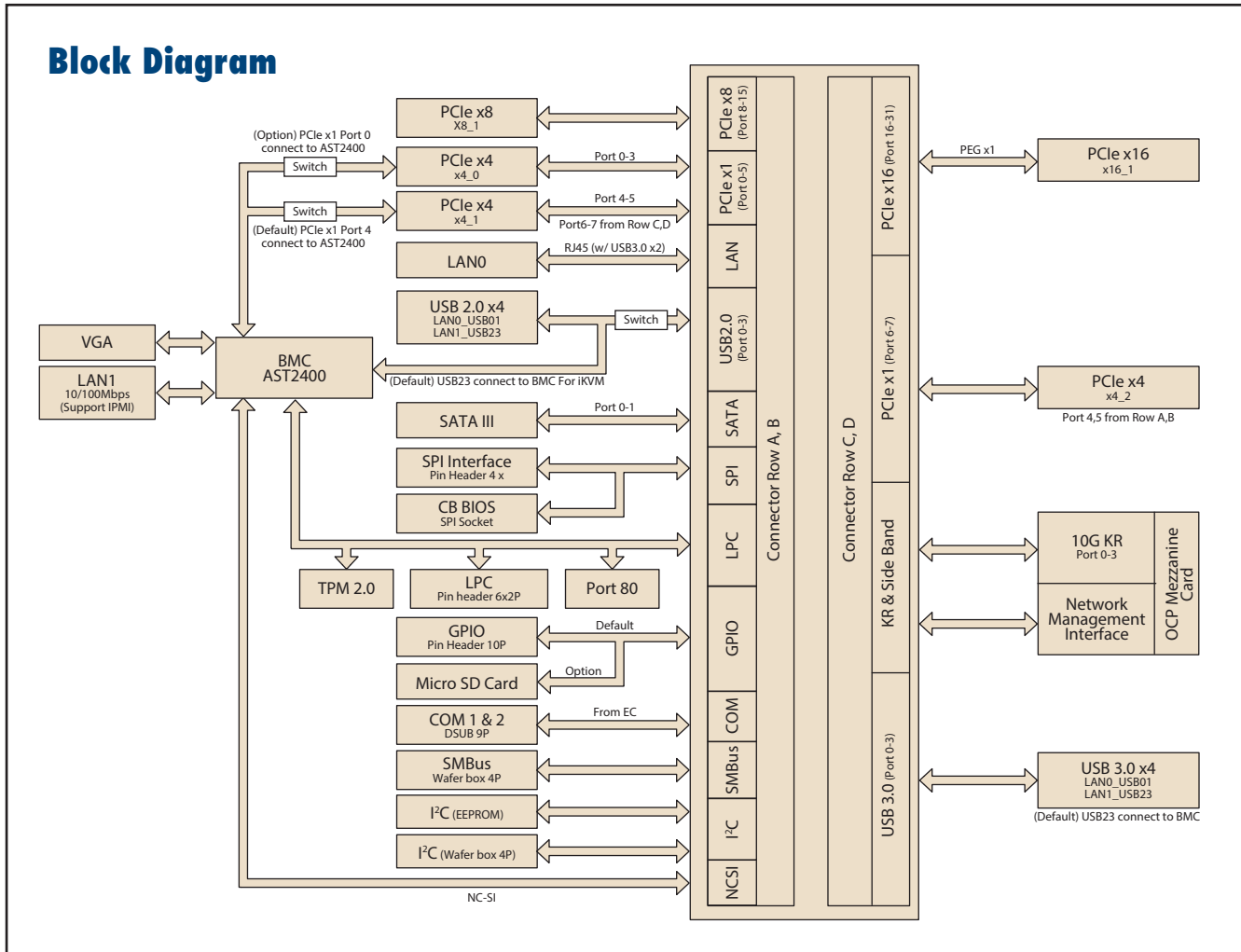
Features

- 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 |