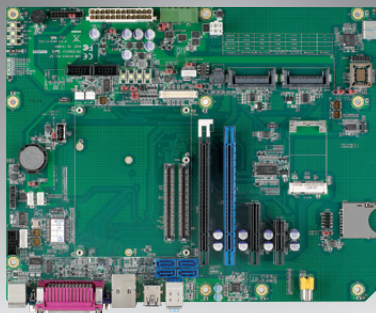


# SOM-DB5800

Development Board for COM Express®  
Type 6/10 Pin-out Modules



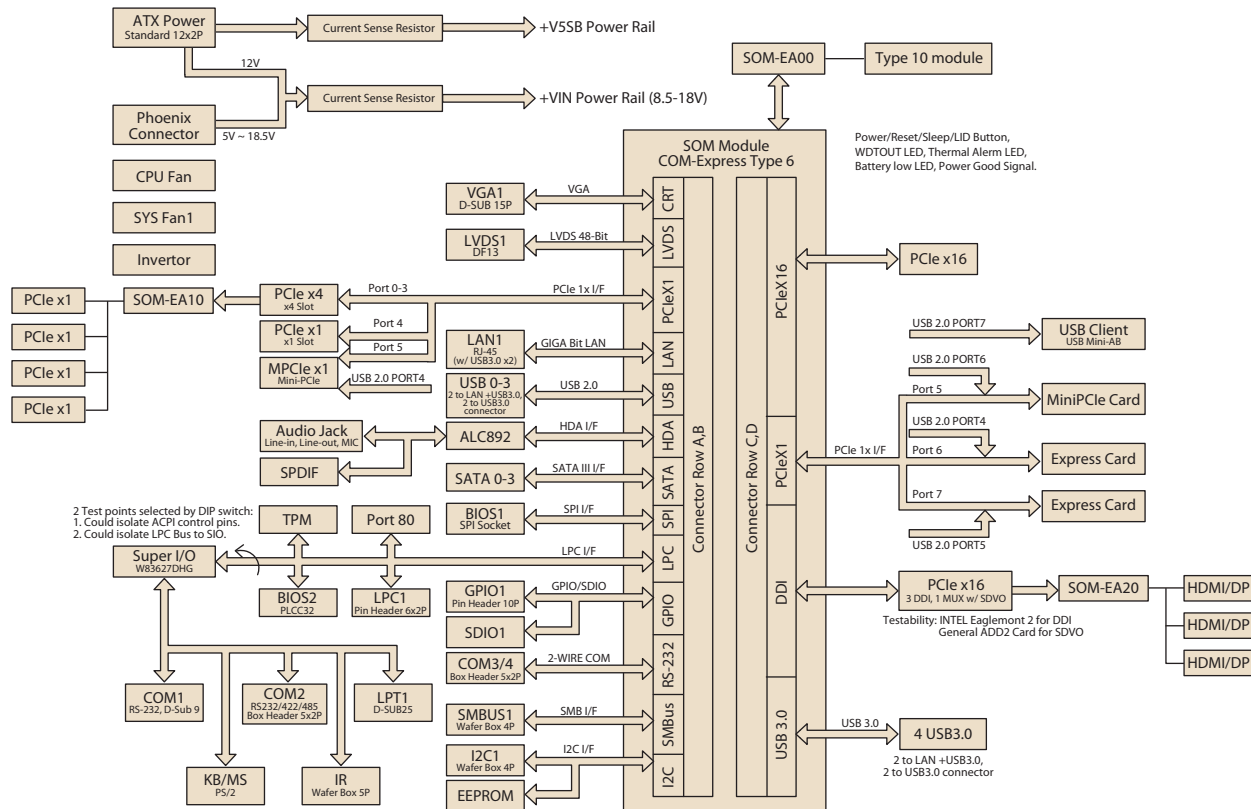
## Features

- PICMG COM.0R 2.1 Type 6/10 Pin out
- COM Express® Basic/ Compact/ Mini module
- VGA, LVDS, HDMI/Display port
- Extension: PCIe Raiser Card and HDMI/ DisplayPort Riser Card
- Visible Debug Utility: BIOS 80 Port and Power State

## Specifications

|                   |                       |                                                                                                                               |
|-------------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Compatible Models |                       | Advantech COM Express Basic Modules (125 x 95 mm), COM Express Compact Modules (95 x 95 mm) and COM Express Mini (84 x 55 mm) |
| Display           | LVDS                  | 18/24-bit single or dual channel                                                                                              |
|                   | VGA                   | 1 (D-SUB 15P Female)                                                                                                          |
|                   | HDMI / DP             | Up to 3 ports (Expand by SOM-EA20)                                                                                            |
| Ethernet          |                       | 1 Giga LAN                                                                                                                    |
| Audio             | Chipset               | Realtek ALC892 HD Audio (Line-in, Line-out, MIC, SPDIF)                                                                       |
| Expansion         | PCIe slot             | 1 PCIe x16 slot/1 PCIe x4 slot/1 PCIe x1 slot                                                                                 |
|                   | Mini-PCIe socket      | 1                                                                                                                             |
|                   | Express Card slot     | 2                                                                                                                             |
|                   | LPC connector         | 1                                                                                                                             |
| I/O               | SATA                  | 4 (Type B)                                                                                                                    |
|                   | USB                   | 4 USB2.0 host, include 1 USB Client<br>4 USB3.0                                                                               |
|                   | Serial                | 4 COM ports<br>1 RS-232 (D-SUB 9P), 1 RS-232/422/485, 2 2-Wire RS-232                                                         |
|                   | KB/MS                 | 1                                                                                                                             |
|                   | LPT                   | 1 (D-SUB 15P)                                                                                                                 |
|                   | GPIO                  | 8                                                                                                                             |
|                   | SDIO                  | 1 (Mux with GPIO)                                                                                                             |
|                   | SMBus                 | 1                                                                                                                             |
|                   | I2C                   | 1                                                                                                                             |
|                   | SPI                   | 1                                                                                                                             |
|                   | Fan                   | 2 (1 from Module support iManager Smart Fan)                                                                                  |
|                   | Port 80               | 1                                                                                                                             |
|                   | TPM                   | 1                                                                                                                             |
| Power             | Power Type            | ATX/ AT modes                                                                                                                 |
| Environment       | Operating Temperature | 0 ~ 60° C (32 ~ 140° F)                                                                                                       |
|                   | Humidity              | Operating: 40° C @ 95% relative humidity, non-condensing<br>Storage: 60° C @ 95%relative humidity, non-condensing             |
| Mechanical        | Dimensions            | 304.8mm x 244mm (12" x 9.6")                                                                                                  |

## Block Diagram



## Ordering Information

| Part No.         | Description                                      |
|------------------|--------------------------------------------------|
| SOM-DB5800-00A2E | COM Express Development Board for Type 6 Pin-out |
| SOM-DB5800-U0A2E | COM Express Development Board A2 Type 10Pin-out  |

## Packing List

| Part No.       | Description                                                 | Q'ty |
|----------------|-------------------------------------------------------------|------|
|                | COM Express Development Board                               | 1    |
| SOM-EA20       | HDMI/DisplayPort Riser Card                                 | 1    |
| SOM-EA10       | PCIe x4 - to- 4 PCIe x1 Riser Card                          | 1    |
| SOM-EA00       | Type10 to Type6 Middle board<br>(For SOM-DB5800-U0A2E only) | 1    |
| 1700008894     | Serial ATA Cable 7P/7P 30cm                                 | 2    |
| 1701100300     | Flat COM Port Cable                                         | 2    |
| 1960012531T000 | I/O Bracket for SOM-DB5800                                  | 1    |
| 1960052347N000 | DDI card Bracket for SOM-EA20                               | 1    |
| 1910001675     | POST M2.5*4L 2.5*5L 2.5 2.1 5 5 Cu Ni                       | 5    |
| 1920001128     | NUT M D=5 5 2.1 3 Cu Ni                                     | 5    |
| 1931000590     | Screw M2.5*5L                                               | 3    |
| 1935030500     | Screw M3*5L                                                 | 2    |

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