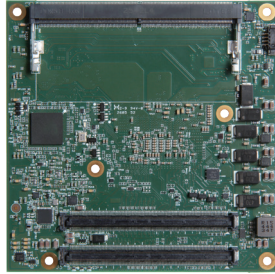
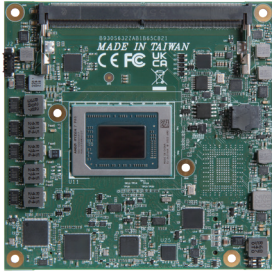


PCOM-B65C

COM Express Type6 Compact size module with AMD Ryzen Embedded 8000 Processor DDR5 SO-DIMM, DDI, PCIe Gen 4, USB 3.2 Gen2, discrete TPM 2.0, eDP, SATA, Out-of-Band(OOB)



FEATURES

- AMD Ryzen Embedded 8000 Series
- Up to 8 Zen4 Core, and RDNA3 up to 6 workgroups.
- 2x DDR5-5600 ECC/non-ECC SO-DIMMs up to 96GB, 1x Gen4 x8, 1x Gen4 x2, and 6x Gen4 x1
- 4x USB3.2 Gen2, 2x SATA, 3x DDI, VGA, eDP/LVDS
- Supports optional Out-of-Band (OOB) management and onboard PCIe NVMe SSD

General

| Model | PCOM-B65C | | | |
|--------------------|---|-------------------------------------|-------------------------------------|-------------------------------------|
| Form Factor | COM Express Type 6 Compact Size (95 mm x 95 mm) | | | |
| CPU | 8845HS | 8840U | 8645HS | 8640U |
| Core/Thread | 8C/16T | 8C/16T | 6C/12T | 6C/12T |
| Based Frequency | 3.8 | 3.3 | 4.3 | 3.5 |
| Turbo Frequency | 5.1 | 5.1 | 5.0 | 4.9 |
| Cache | 8 | 8 | 6 | 6 |
| TDP | 45 | 28 | 45 | 28 |
| Graphics EU | 6 WGP | 6 WGP | 4 WGP | 4 WGP |
| Graphics Max Freq. | 2.7 | 2.7 | 2.6 | 2.6 |
| Memory Type/Speed | 2x DDR5 SO-DIMM up to 96GB 5600MT/s | 2x DDR5 SO-DIMM up to 96GB 5600MT/s | 2x DDR5 SO-DIMM up to 96GB 5600MT/s | 2x DDR5 SO-DIMM up to 96GB 5600MT/s |
| ECC Memory Support | Support | Support | Support | Support |
| Temperature Range | 0 ~ 60 °C (32.0 ~ 140.0 °F) | 0 ~ 60 °C (32.0 ~ 140.0 °F) | 0 ~ 60 °C (32.0 ~ 140.0 °F) | 0 ~ 60 °C (32.0 ~ 140.0 °F) |
| BIOS | AMI uEFI BIOS | | | |
| Memory | 2x SO-DIMM DDR5 up to 96GB 5600 MT/s | | | |

I/O Interface

| | | | |
|------------|---|----------------------------|-------------------|
| SATA | 2x SATA III | | |
| USB | 8x USB 2.0 (Default) 4x USB3.2 Gen2 (Default) | | |
| Ethernet | 1x 1Gbe LAN (Default) | | |
| PCIe | 1x PCIe Gen4 x8 (Default) 1x PCIe Gen4 x2 (Default) 6x PCIe Gen4 x1 (Default) | | |
| Storage | 1x support NVMe (Share w/ SATA) | | |
| Legacy I/O | 8x GPIO (Default) 1x I ² C (Default) 1x SMBus (Default) 2x UART (Default) | | |
| Security | TPM 2.0 | | |
| Display | Module display interface | Carrier output options | Resolution |
| | eDP / LVDS (default eDP) | eDP up to HBR3 | 3840 x 2160@120Hz |
| | | LVDS (24bit, dual channel) | 1920 x 1200@60Hz |
| | DDI 1/2/3 | DP up to HBR3 | 3840 x 2160@120Hz |
| HDMI 2.1 | | 3840 x 2160@120Hz | |
| VGA | VGA | 1920 x 1200@60Hz | |

MECHANICAL & ENVIRONMENT

| | |
|--------------------------|--------------------------------|
| Dimension | 95 x 95mm (3.74" x 3.74") |
| Operating Temperature | 0 ~ 60 °C (32.0 ~ 140.0 °F) |
| Storage Temperature | -40 ~ 85 °C (-40.0 ~ 185.0 °F) |
| Certification | CE/FCC Class A |
| OS | Windows 11, Ubuntu 24.04 |
| Portwell Special Feature | PET, RPET |

| Accessory | Ordering P/N | Status |
|----------------------------------|--------------|------------|
| Cooler (copper elastic pad) | TBD | Contact US |
| Heat Sink (copper elastic pad) | TBD | Contact US |
| Heat Spreader (aluminum) | TBD | Contact US |
| PCOM-C605R Mini-ITX Carrier | TBD | Contact US |
| PCOM-C60B ATX Evaluation Carrier | TBD | Contact US |

ORDERING GUIDE

| Product | Ordering P/N | Status |
|------------------|--------------|------------|
| PCOM-B65C-8845HS | TBD | Contact US |
| PCOM-B65C-8840U | TBD | Contact US |
| PCOM-B65C-8645HS | TBD | Contact US |
| PCOM-B65C-8640U | TBD | Contact US |

BLOCK DIAGRAM

PCOM-B65C

