

# CAPA13R NEW

3.5" Embedded SBC with AMD® RYZEN™ Embedded V1807B/V1605B APU, DisplayPort, 2 HDMI, LVDS and 4 GbE LAN

## Features

- AMD® RYZEN™ Embedded V1807B and V1605B APU
- 1 DDR4 SO-DIMM for up to 16GB of memory
- 4 GbE LAN
- Supports quad-view
- M.2 Key E
- M.2 Key B



### Core System

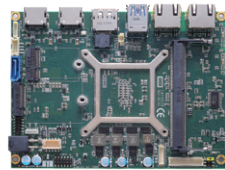
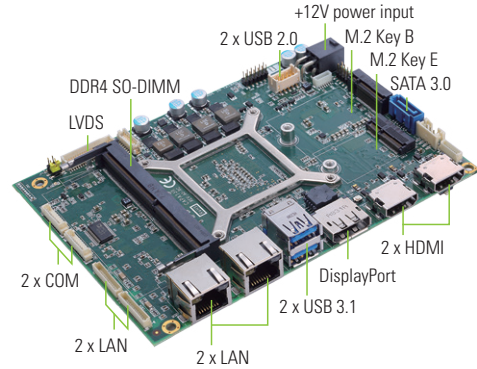
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|-----------------------|--|
| CPU                   | AMD® RYZEN™ Embedded V1807B/V1605B APU onboard   |
| System Memory         | 1 x 260-pin DDR4-2400 (V1605B), DDR4-3200 (V1807) SO-DIMM, up to 16GB  |
| Chipset               | SoC integrated   |
| BIOS                  | AMI  |
| SSD                   | 1 x M.2 Key B (SATA, USB 2.0, PCIe x2 for optional) in 22x42 or 30x42  |
| Watchdog Timer        | 255 levels, 1 to 255 sec.  |
| Expansion Interface   | 1 x M.2 Key E (PCIex1, USB2.0) in 22x30  |
| Battery Lithium       | Lithium 3V/220 mAh   |
| Power Input           | 2 x 2 pin connector<br>+12V DC-in only<br>AT Auto Power On function supported                                    |
| Power Requirement     | AMD (R) V1605B @2.0 GHz 16GB DDR4, max. RMS. +12V@2.5A<br>AMD (R) V1807B @3.8 GHz 16GB DDR4, max. RMS. +12V@4.2A |
| Dimensions            | 146 x 104 mm   |
| Board Thickness       | 1.6 mm   |
| Operating Temperature | -20°C to +60°C (-4°F to 140°F)   |
| Humidity              | 10% - 95% relative humidity, non-condensing  |

### I/O

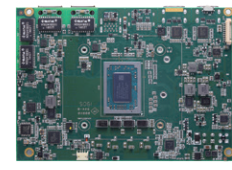
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|---------------------|---|
| SATA                | 1 x SATA-600  |
| Hardware Monitoring | Detect CPU/system temperature, voltage and fan speed  |
| Ethernet            | 2 x10/100/1000 Mbps Ethernet with Realtek RTL8111G; support Wake-on-LAN, PXE Boot ROM<br>2 x10/100/1000 Mbps Ethernet with Realtek RTL8111G; support Wake-on-LAN, PXE Boot ROM (optional) |
| Audio               | HD audio link   |
| USB                 | 2 x USB 2.0<br>2 x USB 3.1 Gen2   |
| Serial              | 1 x RS-232/422/485<br>1 x RS-232  |
| TPM                 | ST ST33HTPH2E32AHB4 with TPM 2.0 compliant  |
| SMBus               | Yes; compatible with i²C  |
| Digital I/O         | 8-channel in/out programmed   |

### Display

|                   |  |
|-------------------|--|
| Chipset           | AMD® Radeon™ RX Vega Graphics  |
| Memory Size       | Share System memory  |
| Display Interface | 1 x DisplayPort<br>2 x HDMI<br>1 x LVDS; 18/24-bit single/dual channel |



▲ Top view



▲ Rear view



▲ Assembly View

### Ordering Information

| Standard                                   |   |
|--|---|
| CAPA13RPHGG-V1605B (P/N: E38E13R104)       | 3.5" Embedded SBC with AMD® RYZEN™ V1605B (2.0 - 3.6 GHz, 2MB Cache, 15W) DisplayPort, 2 HDMI, LVDS and 2 GbE LAN, without fan  |
| CAPA13RPHGG-V1605B w/fan (P/N: E38E13R108) | 3.5" Embedded SBC with AMD® RYZEN™ V1605B (2.0 - 3.6 GHz, 2MB Cache, 15W) DisplayPort, 2 HDMI, LVDS, 2 GbE LAN and fan          |
| CAPA13RPHGG-V1807B (P/N: E38E13R103)       | 3.5" Embedded SBC with AMD® RYZEN™ V1807B (3.35 - 3.8 GHz, 2MB Cache, 45W) DisplayPort, 2 HDMI, LVDS and 2 GbE LAN, without fan |
| CAPA13RPHGG-V1807B w/fan (P/N: E38E13R107) | 3.5" Embedded SBC with AMD® RYZEN™ V1807B (3.35 - 3.8 GHz, 2MB Cache, 45W) DisplayPort, 2 HDMI, LVDS, 2 GbE LAN and fan         |

| Optional                                   |  |
|--|--|
| CAPA13RPH4G-V1605B (P/N: E38E13R101)       | 3.5" Embedded SBC with AMD® RYZEN™ Embedded V1605B (2.0-3.6 GHz, 2MB Cache, 15W), DisplayPort, 2 HDMI, LVDS, and 4 GbE LAN, without fan  |
| CAPA13RPH4G-V1605B w/fan (P/N: E38E13R106) | 3.5" Embedded SBC with AMD® RYZEN™ Embedded V1605B (2.0-3.6 GHz, 2MB Cache, 15W), DisplayPort, 2 HDMI, LVDS, 4 GbE LAN, and fan          |
| CAPA13RPH4G-V1807B (P/N: E38E13R100)       | 3.5" Embedded SBC with AMD® RYZEN™ Embedded V1807B (3.35-3.8 GHz, 2MB Cache, 45W), DisplayPort, 2 HDMI, LVDS, and 4 GbE LAN, without fan |
| CAPA13RPH4G-V1807B w/fan (P/N: E38E13R105) | 3.5" Embedded SBC with AMD® RYZEN™ Embedded V1807B (3.35-3.8 GHz, 2MB Cache, 45W), DisplayPort, 2 HDMI, LVDS, 4 GbE LAN, and fan         |
| AX93A22 (P/N: E393A22100)                  | HD codec audio board for Mic-in/Line-in/Line-out   |
| 594H3186800E                               | Buzzer cable 9 x 55 mm 2-pin, L=400 mm   |
| 59380880250E                               | COM port cable DB9-9 x 1P, P=1.25, L=250 mm  |
| 594E8422800E                               | 2 x USB 2.0 cable with bracket, 180 mm   |