

# 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

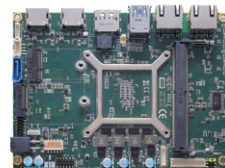
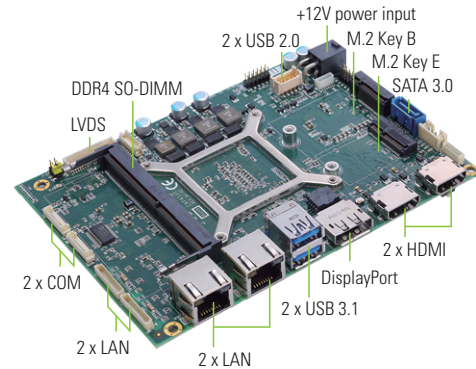
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|-----------------------|-------------------------------------------------------------------------------|
| CPU                   | AMD® RYZEN™ Embedded V1807B/V1605B APU onboard                                |
| System Memory         | 1 x 260-pin 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 (PCIe x1, 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 |
| 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

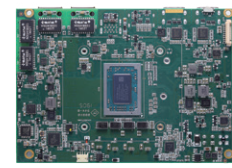
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|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SATA                | 1 x SATA-600                                                                                                                                                                                |
| Hardware Monitoring | Detect CPU/system temperature, voltage and fan speed                                                                                                                                        |
| Ethernet            | 2 x 10/100/1000 Mbps Ethernet with Realtek RTL8111G; support Wake-on-LAN, PXE Boot ROM<br>2 x 10/100/1000 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                                                                                                                                                                                         |
| 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       | 3.5" Embedded SBC with AMD® RYZEN™ V1605B (2.0 - 3.6 GHz, 2MB Cache, 15W) DisplayPort, 2 HDMI, LVDS and 2 GbE LAN       |
| CAPA13RPHGG-V1605B w/fan | 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       | 3.5" Embedded SBC with AMD® RYZEN™ V1807B (3.35 - 3.8 GHz, 2MB Cache, 45W) DisplayPort, 2 HDMI, LVDS and 2 GbE LAN      |
| CAPA13RPHGG-V1807B w/fan | 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             | 3.5" Embedded SBC with AMD® RYZENTM Embedded V1605B (2.0-3.6 GHz, 2MB Cache, 15W), DisplayPort, 2 HDMI, LVDS, and 4 GbE LAN           |
| CAPA13RPH4G-V1605B w/ heatsink | 3.5" Embedded SBC with AMD® RYZENTM Embedded V1605B (2.0-3.6 GHz, 2MB Cache, 15W), DisplayPort, 2 HDMI, LVDS, 4 GbE LAN, and heatsink |
| CAPA13RPH4G-V1807B             | 3.5" Embedded SBC with AMD® RYZENTM Embedded V1807B (3.35-3.8 GHz, 2MB Cache, 45W), DisplayPort, 2 HDMI, LVDS, and 4 GbE LAN          |
| CAPA13RPH4G-V1807B w/fan       | 3.5" Embedded SBC with AMD® RYZENTM 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                                                                                                |