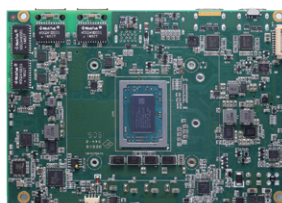
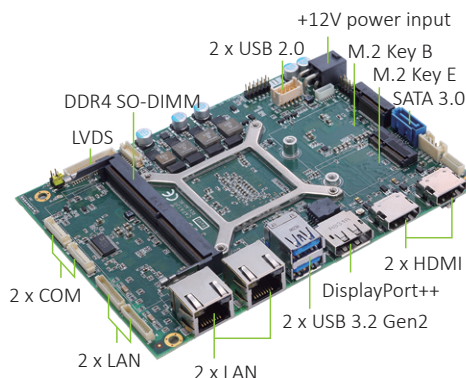


# CAPA13R

3.5" Embedded SBC with AMD Ryzen™ Embedded V1807B/V1605B APU, DisplayPort++, 2 HDMI, 2.5GbE LAN, and heatsink 4 GbE LAN



▲ Rear view

## Features

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



▲ Assembly View



▲ APC200

## Specifications

### Core System

|                     |                                                                                                           |
|---------------------|-----------------------------------------------------------------------------------------------------------|
| 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 22 x 42 or 30 x 42                                 |
| Watchdog Timer      | 255 levels, 1 to 255 sec.                                                                                 |
| Expansion Interface | 1 x M.2 Key E (PCIe x1, USB 2.0) in 22 x 30                                                               |
| 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 V1605B @2.0 GHz 16GB DDR4, min. RMS. +12V@2.5A<br>AMD V1807B @3.35 GHz 16GB DDR4, min. RMS. +12V@4.2A |

### 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 |

### I/O

|                     |                                                                                                                                                                                             |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 3.2 Gen2                                                                                                                                                             |
| Serial              | 1 x RS-232/422/485<br>1 x RS-232                                                                                                                                                            |

## I/O

|             |                                            |
|-------------|--------------------------------------------|
| TPM         | ST ST33HTPH2E32AHB4 with TPM 2.0 compliant |
| SMBus       | N/A                                        |
| Digital I/O | 8-channel in/out programmed                |

## Mechanical and Environmental

|                       |                                            |
|-----------------------|--------------------------------------------|
| 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 |

## APC200, Industrial Chassis

|                                       |                                                                                            |
|---------------------------------------|--------------------------------------------------------------------------------------------|
| SBC Option                            | CAPA13RPHGG-V1605B w/fan (P/N: E38E13R108)                                                 |
| I/O                                   | 2 x GbE LAN<br>2 x USB 3.2 Gen2<br>1 x DisplayPort++<br>2 x HDMI<br>1 x 12V DC Jack        |
| Dimensions<br>(with wall mount ear)   | 197.4 mm (7.77") (W) x 139.6 mm (5.5") (D) x 49.6 mm (1.95") (H)                           |
| Operating Temperature                 | -10°C to +50°C (+14°F to +122°F)                                                           |
| APC200-2G-V1605B<br>(P/N: E27P200100) | Embedded chassis with CAPA13RPHGG-V1605B, 8GB RAM, 64GB M.2 Key B card and 12V/60W adapter |

## Ordering Information

### Standard

|                                                  |                                                                                                                                  |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| CAPA13RPHGG-V1605B<br>(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<br>w/fan<br>(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<br>(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<br>w/fan<br>(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<br>(P/N: E38E13R101)          | 3.5" Embedded SBC with AMD Ryzen™ V1605B (2.0-3.6 GHz, 2MB Cache, 15W), DisplayPort++, 2 HDMI, LVDS, and 4 GbE LAN; without fan  |
| CAPA13RPH4G-V1605B<br>w/fan<br>(P/N: E38E13R106) | 3.5" Embedded SBC with AMD Ryzen™ V1605B (2.0-3.6 GHz, 2MB Cache, 15W), DisplayPort++, 2 HDMI, LVDS, 4 GbE LAN, and fan          |
| CAPA13RPH4G-V1807B<br>(P/N: E38E13R100)          | 3.5" Embedded SBC with AMD Ryzen™ V1807B (3.35-3.8 GHz, 2MB Cache, 45W), DisplayPort++, 2 HDMI, LVDS, and 4 GbE LAN; without fan |
| CAPA13RPH4G-V1807B<br>w/fan<br>(P/N: E38E13R105) | 3.5" Embedded SBC with AMD Ryzen™ V1807B (3.35-3.8 GHz, 2MB Cache, 45W), DisplayPort++, 2 HDMI, LVDS, 4 GbE LAN, and fan         |
| AX93A22<br>(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                                                                                           |
| 7128E13R000E                                     | Heatspreader                                                                                                                     |