Fanless Linux embedded system makes a compact IoT gateway
ICP Germany has recently introduced the MiTAC ME1-8MD series family of compact, fanless Linux embedded systems powered by NXP i.MX 8M processor and designed to be used as IoT gateways, data acquisition and processing systems, and mini servers.

Three models have been launched with a choice of dual or quad-core processors, up to 4GB LPDDR4 RAM, and 32GB eMMC flash storage. The embedded computers also come with up to two Ethernet ports, support up to two displays, and include an internal Raspberry Pi compatible 40 pin GPIO header.

• **Official Raspberry Pi 4 case fan adds cooling to Raspberry Pi 4 case** [3]

When the Raspberry Pi Foundation first introduced the Raspberry Pi 4, they claimed the board would work just fine under most cases without a heatsink, and the latter was only really needed under load. That may have been true when using the board in a temperate climate like in the United Kingdom, but then Raspberry Pi 4 met Thailand with some benchmarks results lower than on a Raspberry Pi 3. People using plastic enclosures had even more troubles.

It’s only when I installed a heatsink on Raspberry Pi 4 that the board could really shine. The company also provided some firmware optimizations later on to further cool-down the board. But you can only do much with software, and many third-party cooling solutions such as fansinks or metal cases have been introduced for the popular SBC.

• **Pi-oT 2 IoT module adds 24V digital inputs, RS-485, and UPS to Raspberry Pi (Crowdfunding)**[4]

Pi-oT was launched last year as a Raspberry Pi add-ons designed for commercial and industrial IoT automation. It features 5V I/Os, relays, and ADC inputs suitable for light-duty projects and prototyping.

The company, called Edge Devices, has now launched an update with Pi-oT 2 adding optional support for 24V digital inputs, RS-485, and an uninterruptible power supply (UPS).

• **M5Paper ESP32 IoT development kit features a 4.7-inch e-Ink touchscreen display**[5]

M5Stack has just launched its unique and latest core device with a touchscreen e-Ink display. M5Paper ESP32 IoT Development Kit is a fully programmable microcontroller-based platform that can be an ideal choice for your IoT applications. This low-power device could suit such purposes as an industrial controller or smart weather display.