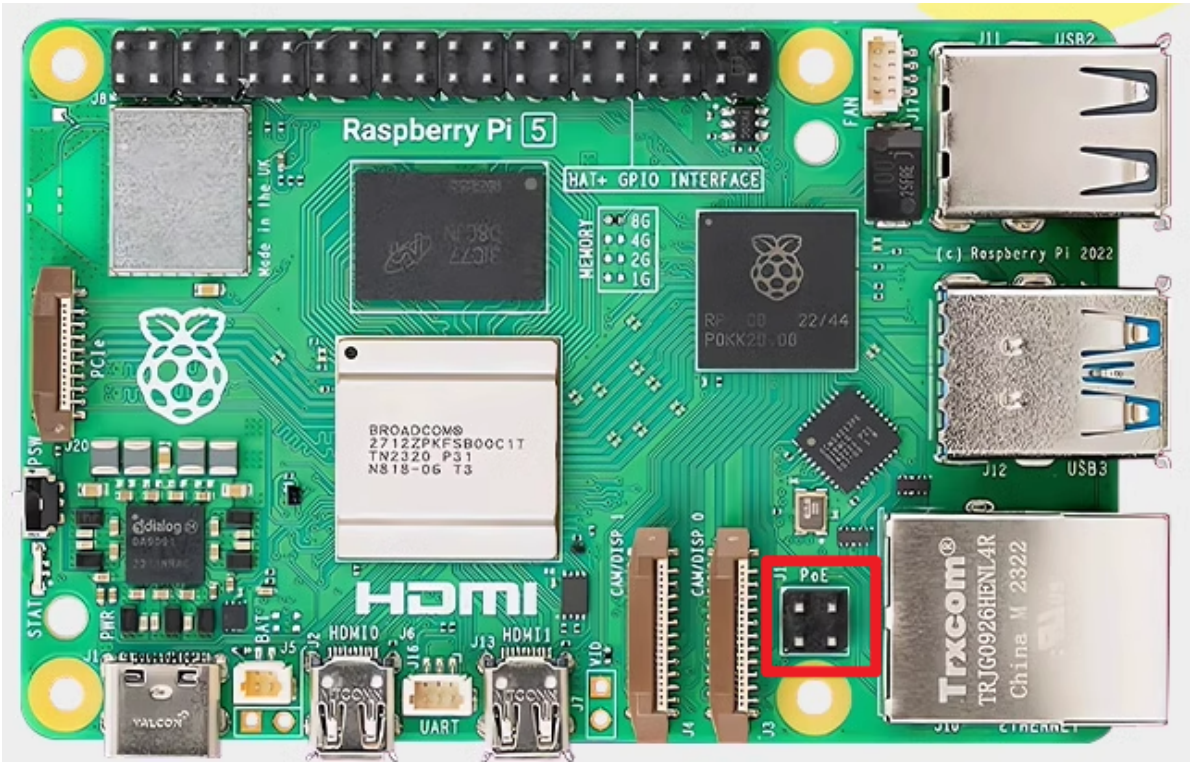
12. Power over Ethernet (PoE) connector

PoE

PoE refers to "POE" Power over Ethernet) technology, also called Power over Ethernet technology. It is a technology that combines power transmission and data transmission. It transmits power through Ethernet cables and realizes a method of powering devices without additional power lines.

The core idea of Poe's principle is to use Ethernet cables to transmit power and data signals simultaneously. Traditionally, network equipment such as IP cameras, wireless access points, etc. require independent power supply and require additional power cord connections. Poe technology achieves unified power supply for devices by integrating power and data signals into an Ethernet cable.

The Ethernet jack on the Raspberry Pi 5 is PoE+ capable and supports the IEEE 802.3at-2009 PoE standard. The Raspberry Pi 5 has a 4-pin Power over Ethernet (PoE) header block located between the Ethernet jack and the two MIPI connectors.



Raspberry Pi 5 PoE header

The Raspberry Pi PoE+ HAT for Raspberry Pi 5 is an add-on board for Raspberry Pi 5 computers which connects to the PoE header. It is used to power your Raspberry Pi via an Ethernet cable, provided that power-sourcing equipment is installed on the Ethernet network.

NOTE

```
The PoE+ HAT for Raspberry Pi 5 is still in prototype, and has not yet been
released.
```