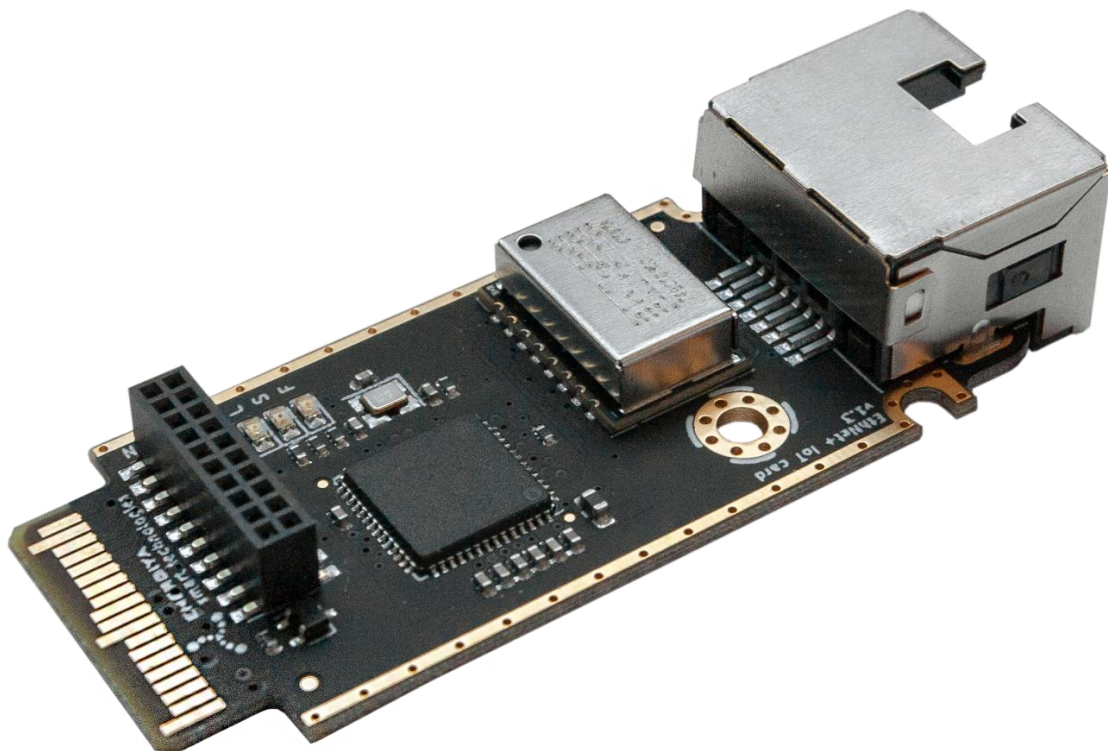


EthNet+

Ethernet + IoT card



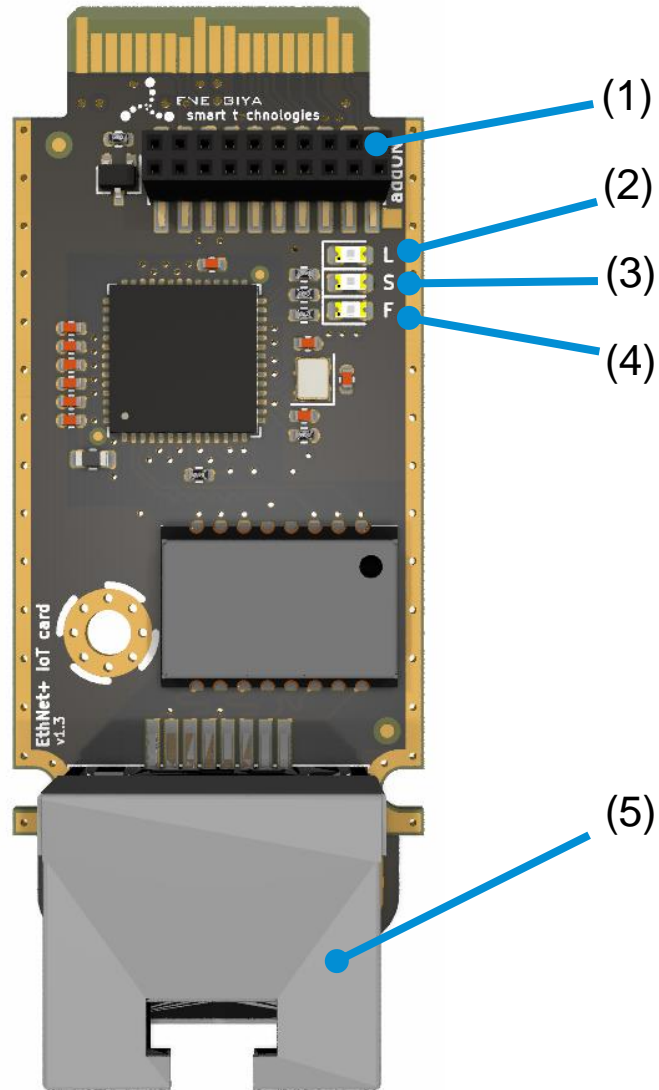


fig. 1

(1) addON socket

(2) LNK LED (**green** – valid link is detected)

(3) SPD LED (**yellow** – Ethernet operating speed is 100 Mbs)

(4) FDX LED (**blue** – Ethernet link is operating in full-duplex mode)

(5) RJ45 socket

Description

Ethernet card is a high performance Hi-Speed USB 2.0 to 10/100 Ethernet controller.


Thanks to a special connector, the device has the possibility to extend its functionality with addON expansion cards.


The IoT card is compatible with mangOH Green, Red, Yellow and FX30 / FX30S.

Mounting the card in the host

It is recommended to install the IoT card when the power is off to avoid accidental short circuits. If the card is installed with the power on, it is necessary to reboot the program.

Depending on the device used, the card is mounted using standoffs/spacers (mangOH) or rails (FX30). The IoT card also has dedicated cover for locking inside FX30.

 **Important!** Lock the card in the host before use (in mangOH lock in the spacers, in FX30(S) use dedicated cover).

 **Important!** Never mount or remove the addON card with power on!

IoT card operating

The IoT Ethernet + card is integrated into the Legato operating system and is automatically detected when installed inside the host.

LED description:

- **L (green)** - LNK LED is on when a valid link is detected. This LED is pulsed whenever transmit or receive activity is detected. Effectively, LNK LED is activated solid for a link. When transmit or receive activity is sensed, LNK LED will function as an activity indicator.
- **S (yellow)** - SPD LED is on when the Ethernet operating speed is 100 Mbs, or during autonegotiation. The LED is off during 10 Mbs operation, or during line isolation.
- **F (blue)** - FDX LED is on when the Ethernet link is operating in full-duplex mode.

Specifications

Dimensions (W x H x D)	22.3 x 55.5 x 11.0 mm
Operating temp	-40 to +85°C
Weight	6.6 g
Current consumption	72 mA (100 Mbps Full Duplex) 48 mA (10 Mbps Full Duplex)
# Ethernet Ports	Ethernet x1
Ethernet Bandwidth	10 / 100 Mbps
Interface connector type	RJ45
ESD protection	yes
addON socket	yes
Latching cover for FX30	yes

Troubleshooting

Connectivity Issues

Check the cable connection, make sure the L diode is blinking green.

If you are having issues connecting over IP on the Target device try connection over USB or Serial Cable and bring the interface up and down, or reboot the device.

```
# ifdown eth0
# ifup eth0
```

Developer Studio Connectivity

If the Target is not being recognized in Developer Studio:
Check to see if devMode is running

```
# app status devMode
```

Start developer mode (restart if needed)

```
# app stop devMode
# app start devMode
```

For further help with Developer Studio see the Developer Studio Guide within the Help section of Developer Studio. Also find information on configuring the Ethernet interface in the Legato documentation.

Send us your feedback and suggestion to help us improve our products! 😊 info@energiya.pl



Please consider the environment before printing this manual.