

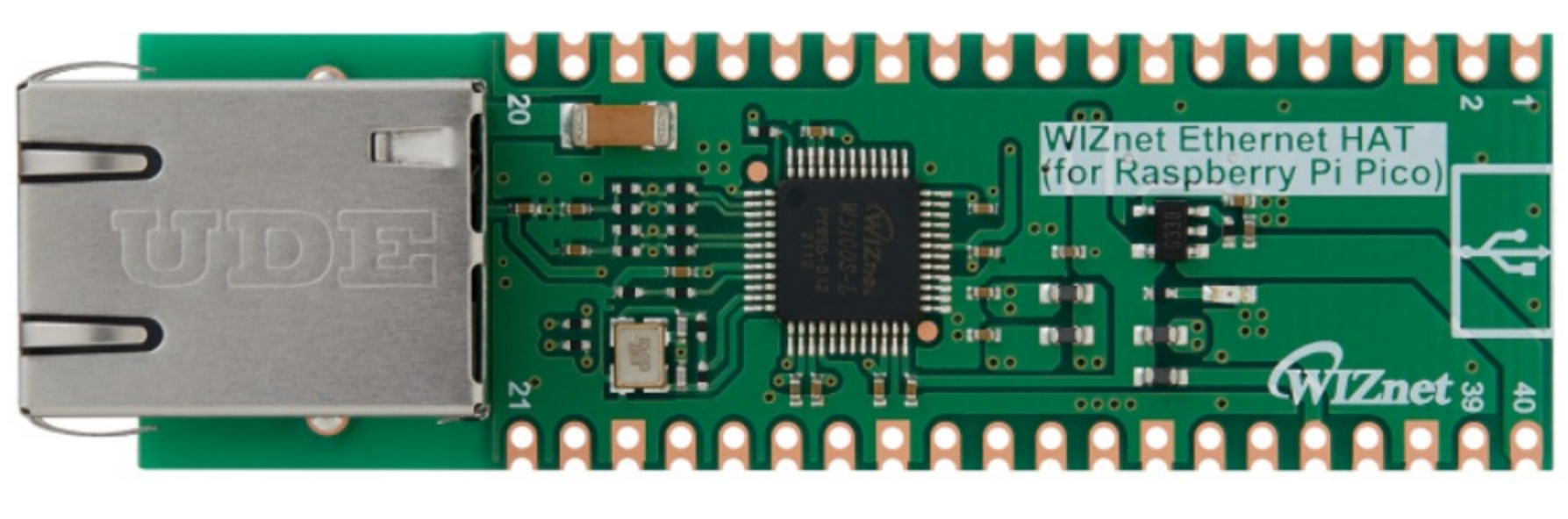
# WIZnet Ethernet HAT

## Overview #

WIZnet Ethernet HAT (Hardware Attached on Top) is a Raspberry Pi Pico pin-compatible board that utilizes W5100S and supports both 3.3V & 5V.

Please refer to this link to find more information about [W5100S](#).

- Raspberry Pi Pico Pin-Compatible
- Ethernet (W5100S Hardwired TCP/IP CHIP)

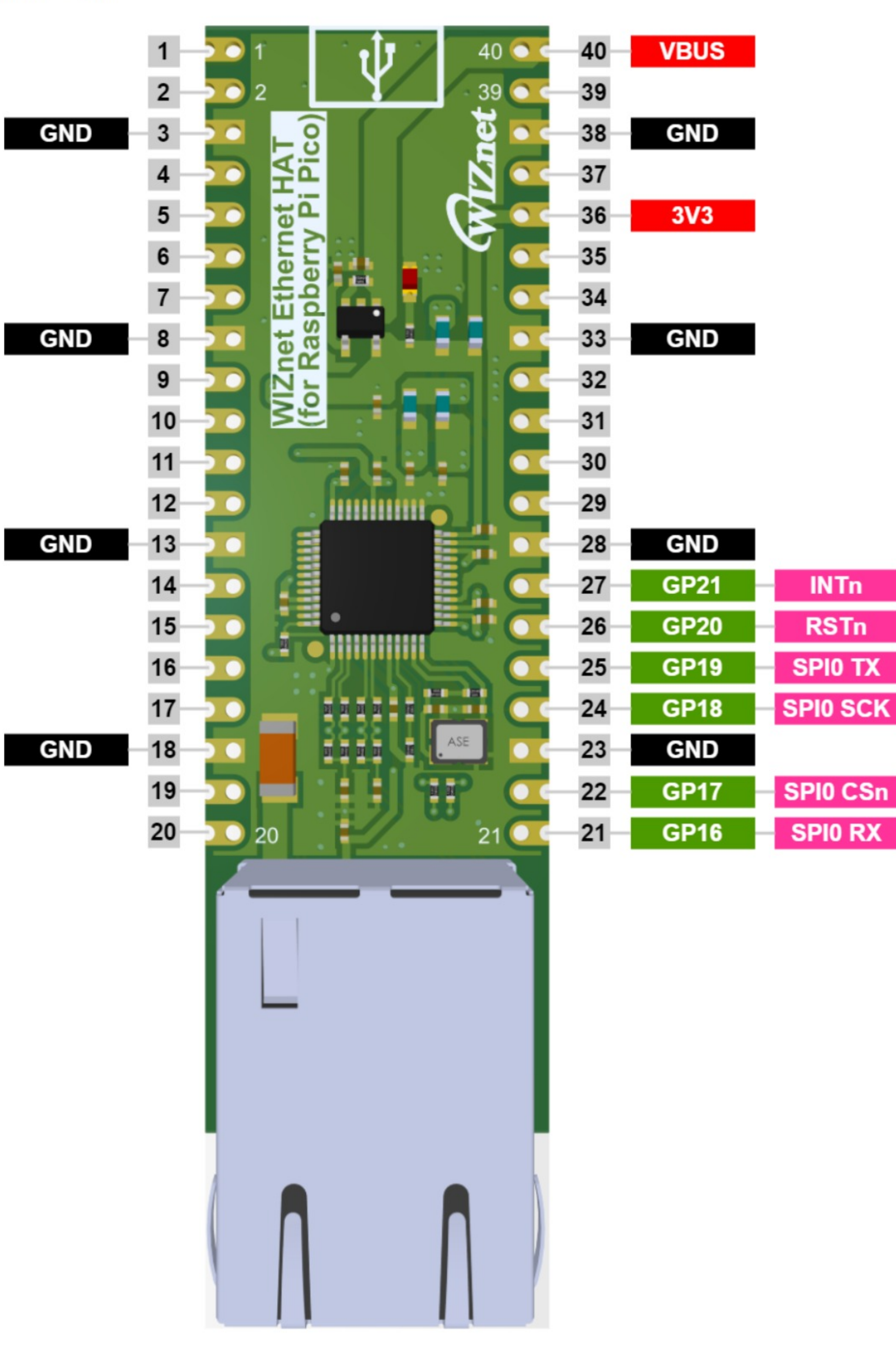


## Features

- Includes W5100S
  - Supports Hardwired Internet Protocols: TCP, UDP, WOL over UDP, ICMP, IGMPv1/v2, IPv4, ARP, PPPoE
  - Supports 4 Independent Hardware SOCKETS simultaneously
  - Internal 16 Kbytes Memory for TX/ RX Buffers
- Operation Voltage 3.3V / 5V
  - Built-in LDO (LM8805SF5-33V)
- SPI Interface
  - 5V I/O tolerance
- 10 / 100 Ethernet PHY embedded
- Supports Auto Negotiation
  - Full / Half Duplex
  - 10 / 100 Based
- Built-in RJ45 (RB1-125BAG1A)

## Hardware Specification

### Pin-out



### Pin Description

I/O	Pin Name	Description
P	VBUS	Power supply, 4.3~5.5 Voltage
P	3V3	Power supply, 3.3 Voltage
P	GND	Power ground
I	INTn	W5100S Interrupt : Low activity.
I	RSTn	W5100S Reset : Low activity
I	SPIO TX	SPI MOSI (Master Out Slave In)
I	SPIO SCK	SPI Clock
I	SPIO CSn	SPI Slave Select
O	SPIO RX	SPI MISO(Master In Slave Out)

## Electrical Specification

TBA

## Technical Reference

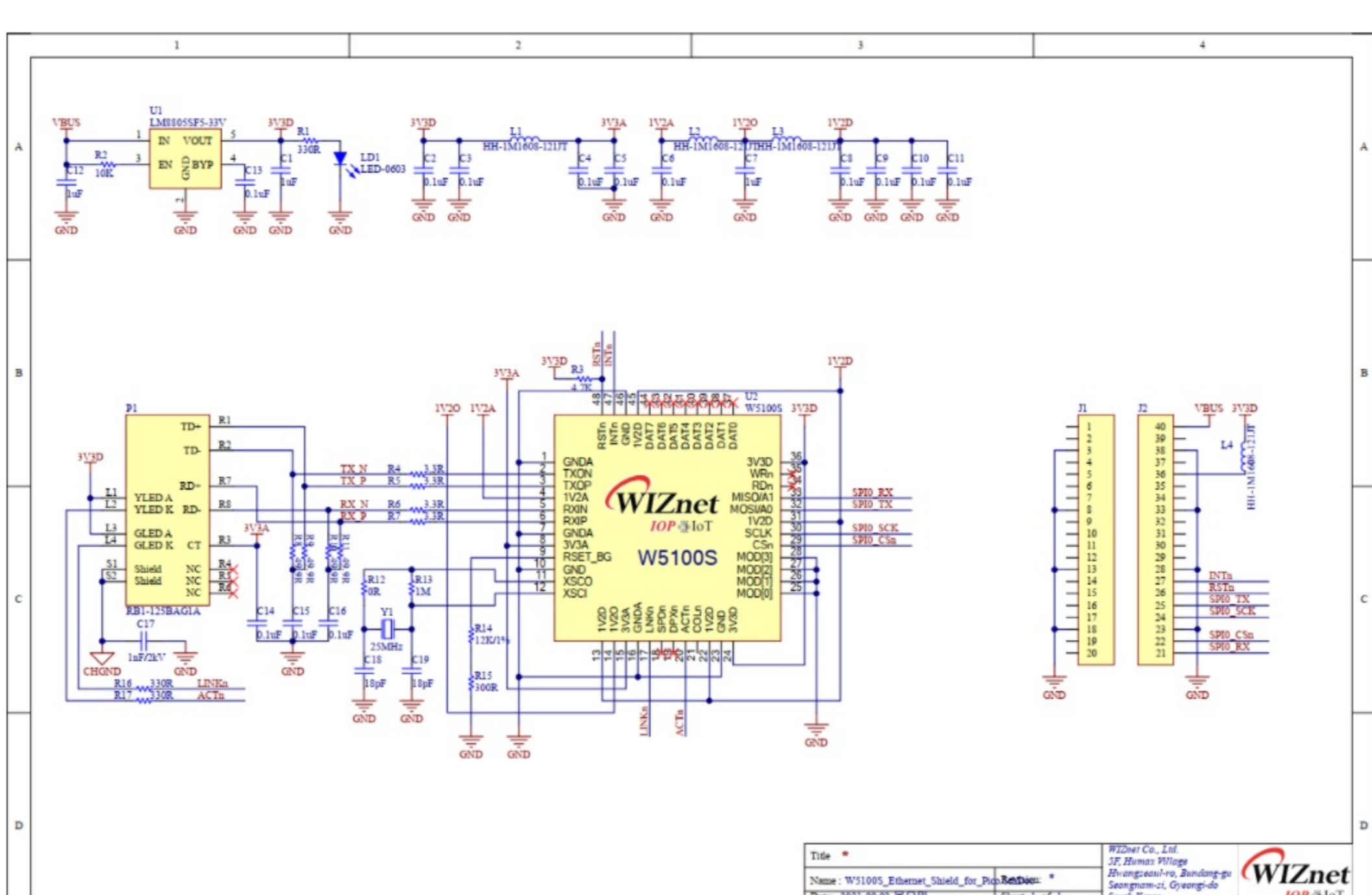
### W5100S Datasheet #

- [W5100S Datasheet v1.2.5](#)

### Schematic & Part list & Gerber File

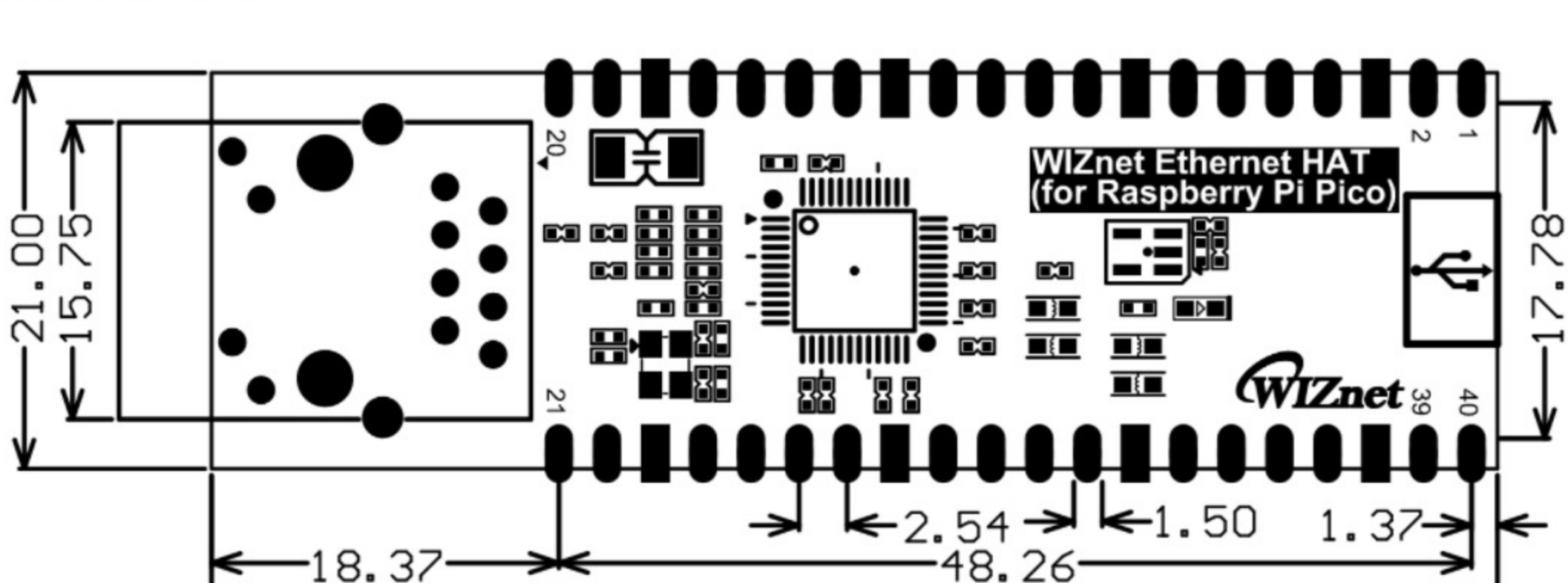
- [Go to Github](#)

### Schematic



### Dimension (Unit : mm)

21 x 68 x 18 (mm)



### Firmware Examples

Please refer to below links to find firmware example.

- [C/C++ Examples](#)

[Edit this page](#)