

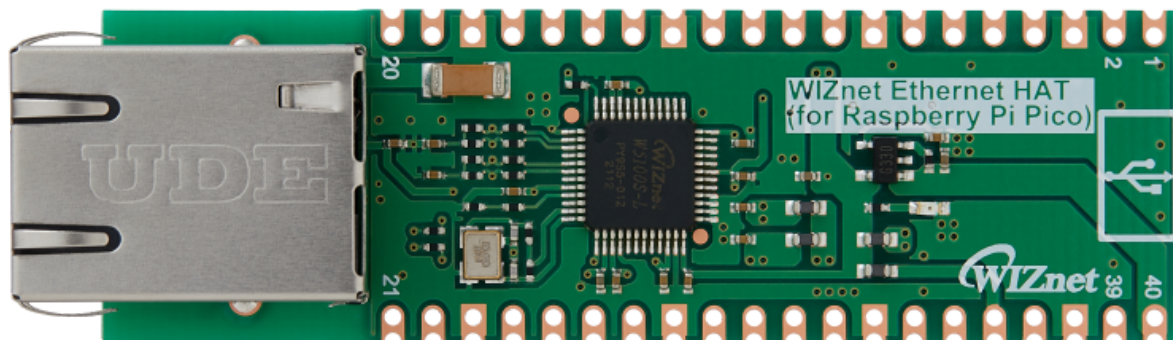
WIZnet Ethernet HAT

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

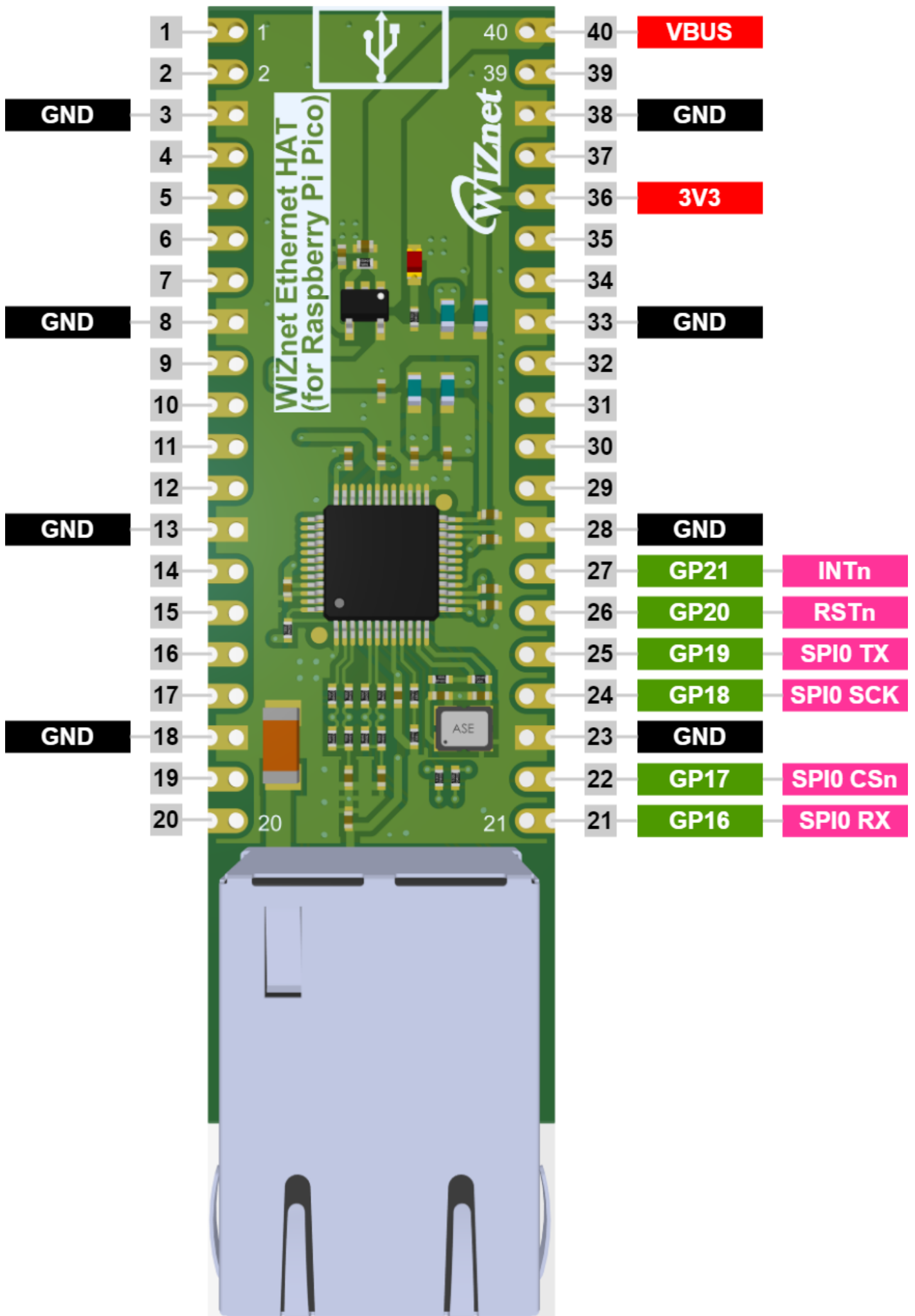
Full / Half Duplex

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	SPI0 TX	SPI MOSI (Master Out Slave In)
I	SPI0 SCK	SPI Clock
I	SPI0 CSn	SPI Slave Select
O	SPI0 RX	SPI MISO(Master In Slave Out)

Electrical Specification

TBA

Technical Reference

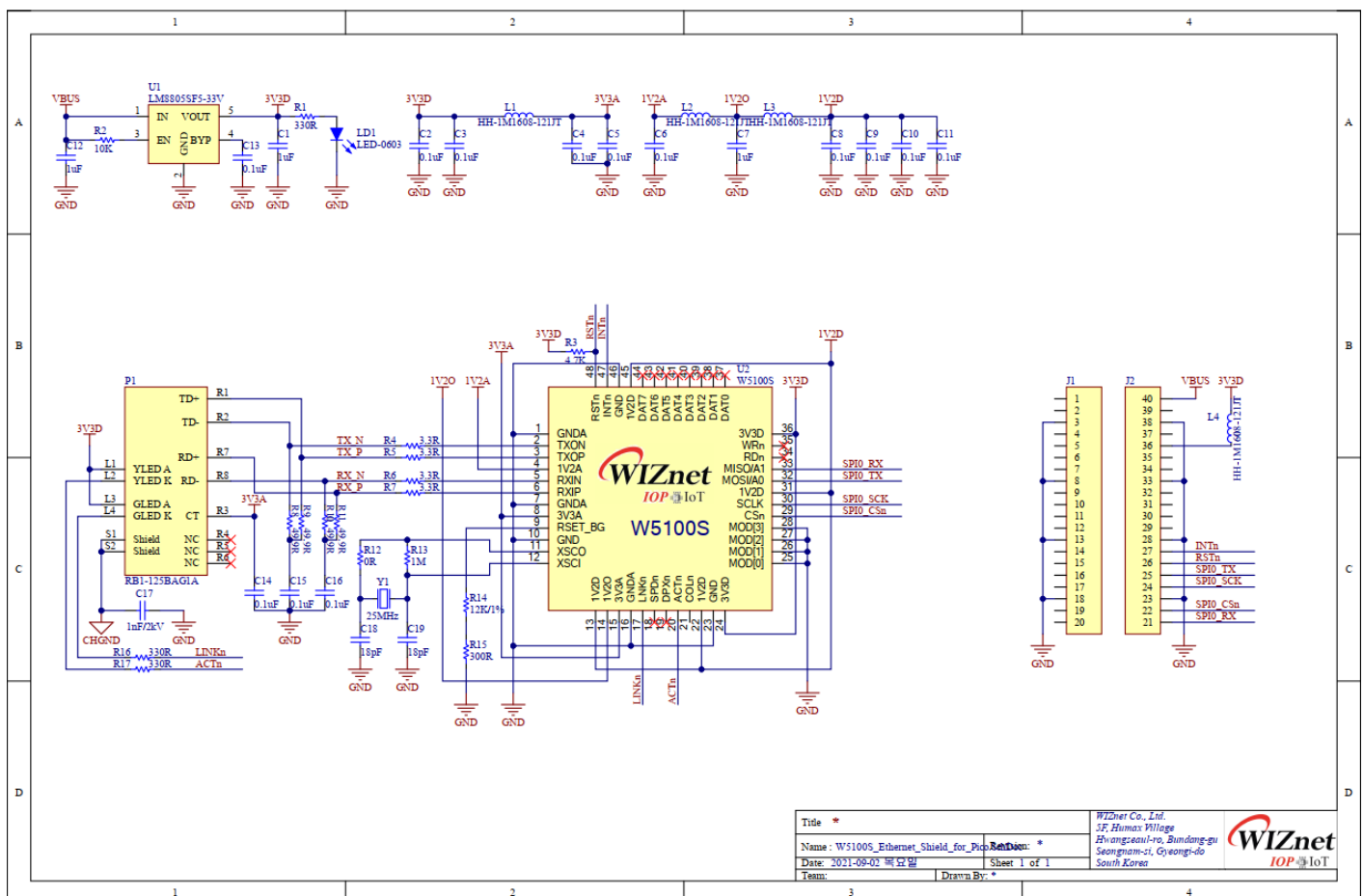
W5100S Datasheet

W5100S Datasheet v1.2.5

Schematic & Part list & Gerber File

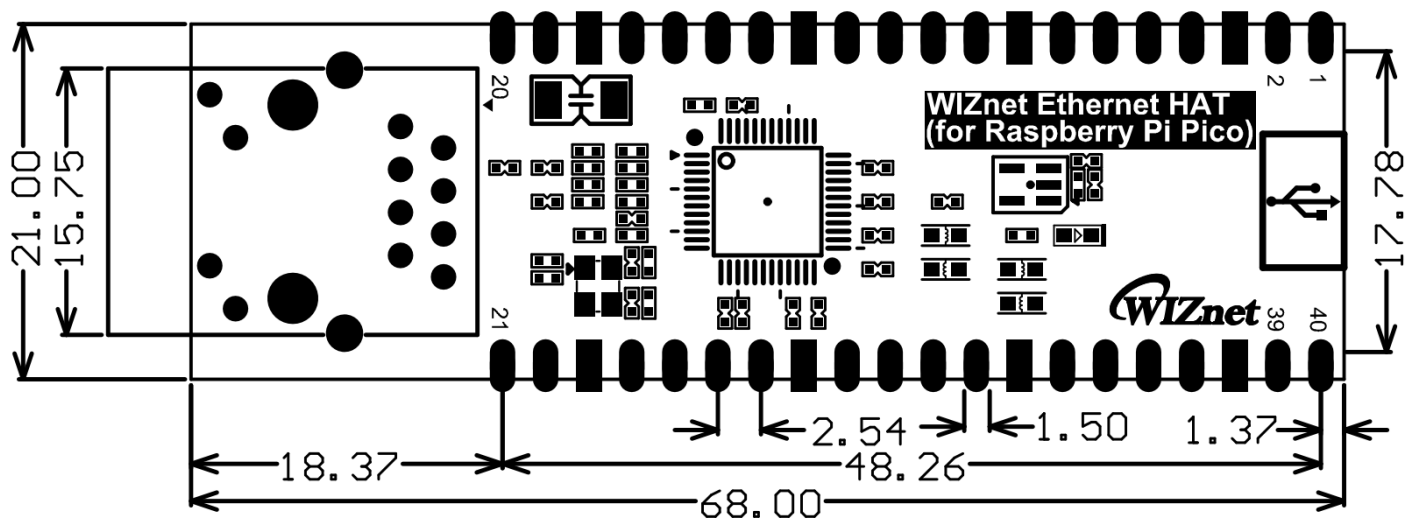
[Go to Github](#)

Schematic



Dimension (Unit : mm)

21 x 68 x 18 (mm)



Firmware Examples

Please refer to below links to find firmware example.

[C/C++ Examples](#)

[CircuitPython Examples](#)