



KAmoRPi Pico Quad Expander



Rev. 20251017102700

Źródło: https://wiki.kamamilabs.com/index.php?title=KAmoRPi_Pico_Quad_Expander

Table of contents

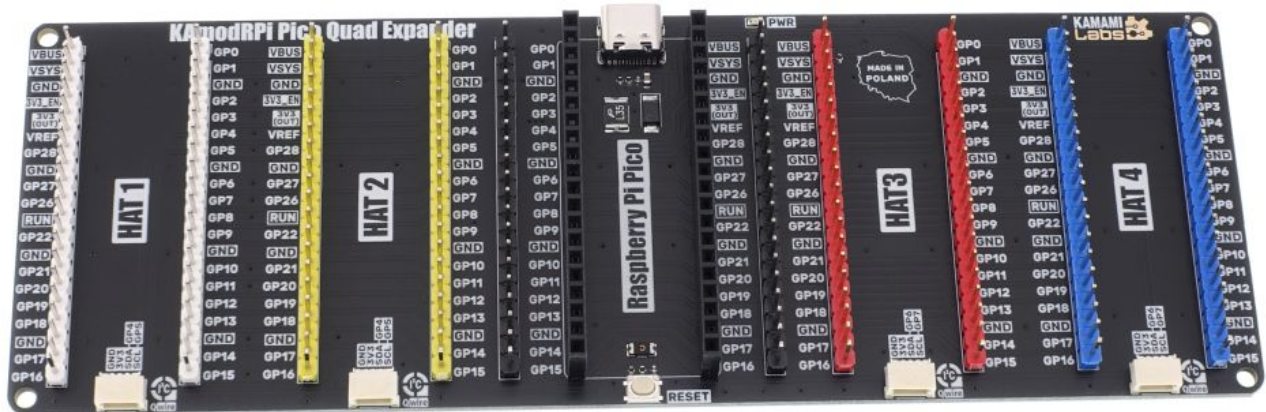
Description
Basic Parameters
Standard Equipment
Electrical Schematic
Power
I2C Qwire Connector
Additional Pins
Usage Example
Dimensions
Links

1
2
3
4
5
6
7
8
9
10

Description

KAModRPI Pico Quad Expander - Quad Pin Expander for Raspberry Pi Pico

The board features a standard 2x20-pin female connector for direct connection to the Raspberry Pi Pico. It also has four sets of 2x20-pin male connectors for connecting additional expansion modules. The board also features a reset button, a USB Type-C power connector, four I2C Qwire connectors (Qwiic/STEMMA QT compatible), additional 20-pin male connectors with all RPi Pico signals, and pinout labels on the top side for easy prototyping.



Basic Parameters

- Standard 2x20-pin female connector for Raspberry Pi Pico
- Four 2x20-pin male connectors for expansion modules
- 20-pin male connectors with all RPi Pico signals pinned out
- USB Type-C connector that supplies power to all modules connected to the expander
- RESET button
- Four 4-pin 1mm JST SH I2C Qwire connectors (compatible with Qwiic / STEMMA QT)
- Clear labels for all pins
- Dimensions: 59 x 170 mm

Standard Equipment

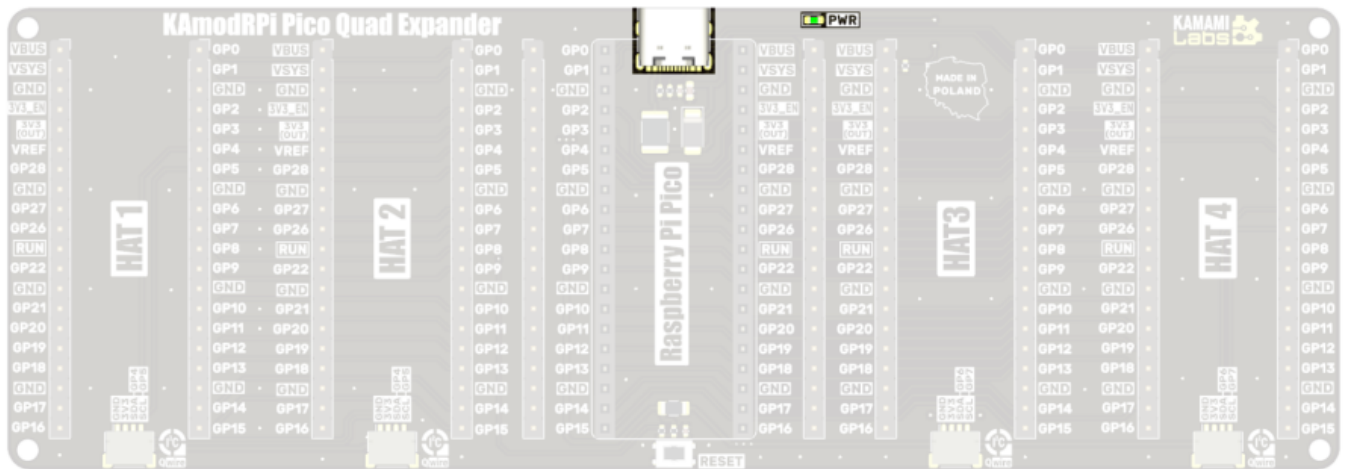
Code	Description
KAmoRPi Pico Quad Expander	• Assembled and powered-up module • 6 x rubber feet

Electrical Schematic

The Electrical Schematic for the KAmoRPi Pico Quad Expander module can be downloaded [here](#).

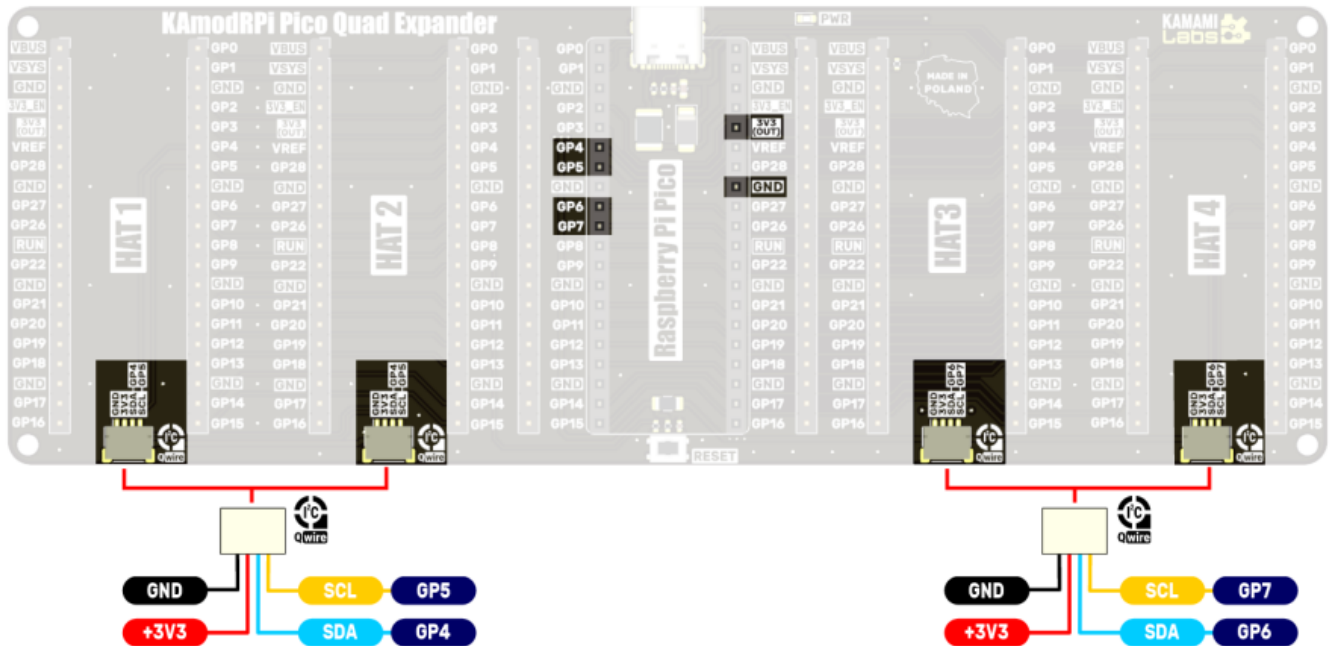
Power

A standard USB power source should be connected to the USB-C connector. The USB-C power supply is protected by a 3.5A polymer fuse and connected directly to the VBUS line and via a Schottky diode to the VSYS line. The PWR LED indicates the presence of VSYS voltage.



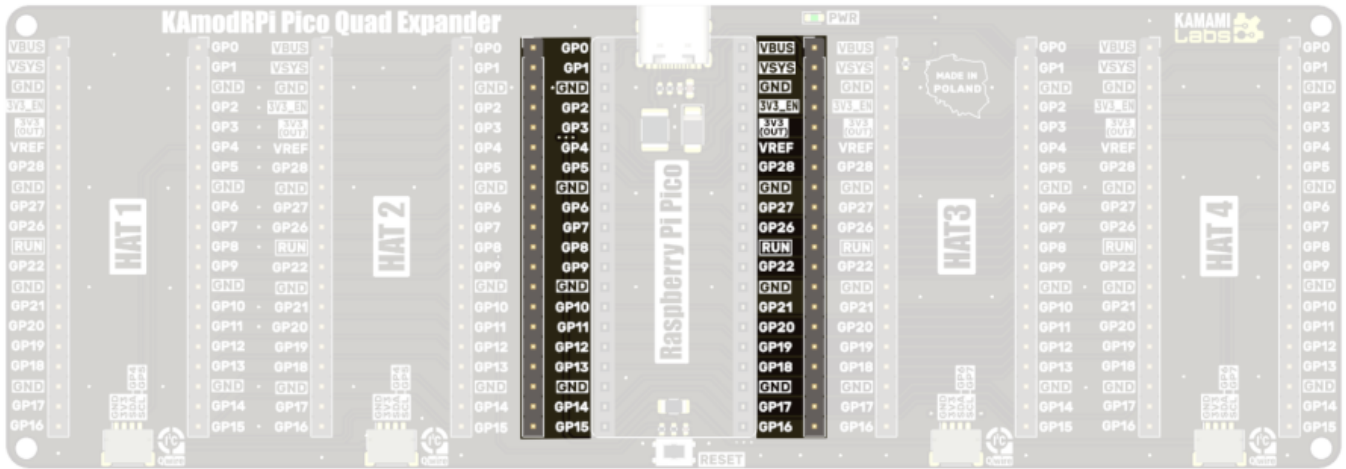
I2C Qwire Connector

The KAmoRPi Pico Quad Expander board features four 4-pin "I2C Qwire" connectors (JST SH 1 mm) compliant with the "Qwiic" / "STEMMA QT" standard. This connection standard for I2C-equipped modules allows for quick connection and expansion of module functions without the need for soldering. The Qwire connector pins are controlled by the "I2C0" interface on pins "GP4 (SDA)" and "GP5 (SCL)" and by the "I2C1" interface on pins "GP6 (SDA)" and "GP7 (SCL)".



Additional Pins

The **KAModRPI Pico Quad Expander** board is equipped with two additional 20-pin male connectors, which provide access to all signals from the Raspberry Pi Pico module.



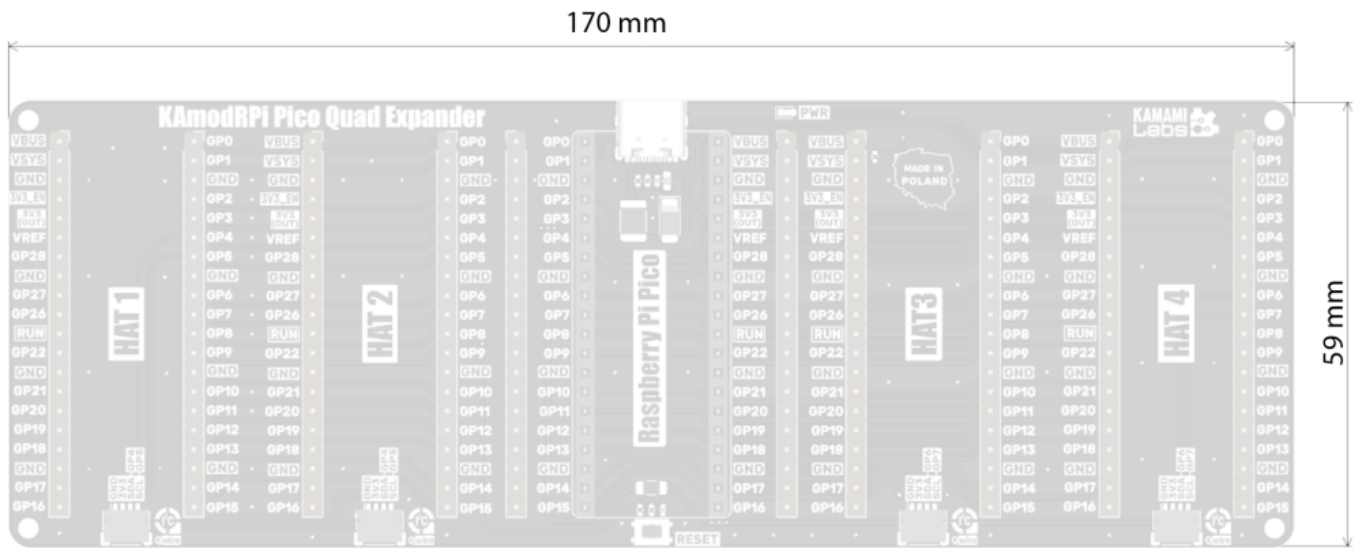
Usage Example

Before connecting the modules, make sure there are no signal conflicts (e.g., two modules using the same signal line) between the connected expansion modules.



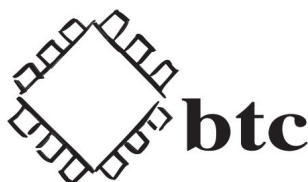
Dimensions

The dimensions of the KAmoRPi Pico Dual Expander board are 59 x 170 mm.



Links

- [CAD Model \(STEP\)](#)



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