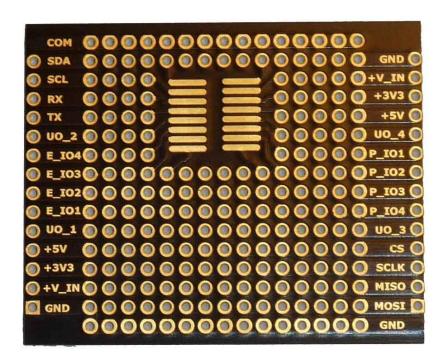


# Modular Expansion System for Raspberry Pi Prototyping module

User manual



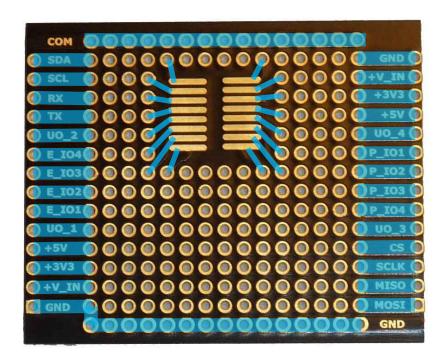
#### **Overview**

PiGo prototyping module is a module that can be attached to any of the PiGo module sockets (A, B, C or D). Module contains a grid of 15x16 metalized holes with a land pattern for a SO-16 SMD IC or smaller.

## **Architecture and physical specification**

#### PiGo prototyping module layout - top side

The following schematics shows the prototyping board layout with highlighted connections on board.



#### **Module connectors**

PiGo motor module can be attached to any of the PiGo module sockets (A, B, C or D). It has the following connections:

Left socket			Right socket
Pi <sub>SDA</sub>	SDA	Power Supply ground	GND
Pi <sub>scl</sub>	SCL	Raspberry DC power supply	V <sub>IN</sub>
$Pi_{RX}$	RX	3.3 V power supply	V <sub>3.3 V</sub>
$Pi_{TX}$	TX	V <sub>5 V</sub> power supply	$V_{5 V}$
$U_{IO2A/B/C/D}$	User IO 2	User IO 3	U <sub>IO3A/B/C/D</sub>
EXT10/12/14/16	Ext IO	IO	P <sub>IO1A/B/C/D</sub>
EXT9/11/13/15	Ext IO	Ю	P <sub>IO2A/B/C/D</sub>
EXT2/4/6/8	Ext IO	Ю	P <sub>IO3A/B/C/D</sub>
EXT1/3/5/7	Ext IO	Ю	P <sub>IO4A/B/C/D</sub>
U <sub>IO1A/B/C/D</sub>	User IO 1	User IO 4	U <sub>IO4A/B/C/D</sub>
$V_{5 V}$	Same as V <sub>5 V</sub> right	SPI CS	CS <sub>A/B/C/D</sub>
$V_{3.3 V}$	Same as V <sub>3.3</sub> V right	SPI SCLK	Pi <sub>SCLK</sub>
$V_{IN}$	Same as V <sub>IN</sub> right	SPI MISO	Pi <sub>MISO</sub>
GND	Same as GND right	SPI MOSI	Pi <sub>MOSI</sub>

### Module usage

PiGo motor module can be accessed using the basic PiGoBoard class from the PiGo Python library. This class gives access to serial communication, IO operations, SPI and I<sup>2</sup>C buses.

# **Frequently asked questions**

None yet