



## IO Pi Plus

### Features

- 32 Digital Inputs/Outputs
- Control via the Raspberry Pi I2C port
- Stack up to 4 IO Pi boards on a single Raspberry Pi
- Solder jumper selectable I2C addresses
- External 5V Input with isolation solder jumper
- Based on the MCP23017 from Microchip Technologies Inc
- Configurable interrupt output pins - Configurable as active-high, active-low or open-drain
- INTA and INTB can be configured to operate independently or together
- Configurable interrupt source - Interrupt-on-change from configured register defaults or pin changes
- Polarity Inversion register to configure the polarity of the input port data

The IO Pi Plus is a 32 channel digital expansion board designed for use on the Raspberry Pi. The board is based around

the MCP23017 16-bit I/O expander from Microchip Technology Inc. A pair of MCP23017 expanders are included on the board allowing you to connect up to 32 digital inputs or outputs to the Raspberry Pi. The IO Pi Plus is powered through the host Raspberry Pi using the GPIO port and extended pins on the GPIO connector allow you to stack the IO Pi Plus along with other expansion boards.

The I2C address bits are selectable using the on-board solder jumpers. The MCP23017 supports up to 8 different I2C addresses so with two MCP23017 devices on each IO Pi you can stack up to 4 IO Pi boards on a single Raspberry Pi giving a maximum of 128 I/O ports.

The IO Pi includes a 5V port that can be isolated from the Raspberry Pi via an isolation solder jumper marked "Link" on the PCB so you can use a separate high current power supply to power the IO Pi reducing the load on the Raspberry Pi. Use of an external supply is recommended if you plan on connecting more than one IO Pi Plus to your Raspberry Pi. The 5V input is compatible with our 5mm screw terminals.



<https://uk.pi-supply.com/products/io-pi-plus/3-20-19>