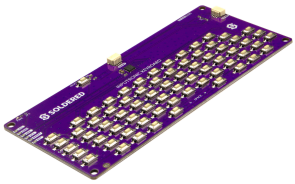
PRODUCT DATASHEET

Soldered Inputronic KEYBOARD



333360

The Inputronic Keyboard features an 80-key I2C keypad with built-in debouncing and a 10-event FIFO for efficient key event handling.

Full product documentation, files and tutorials: **solde.red/333360**

CORE ATTRIBUTES

SKU **333360**

WEIGHT **100 g**

BARCODE **732388642908**

DESCRIPTION

Inputronic Keyboard is a complete 80-key keypad built around TI's **TCA8418** I2C keypad scanner. All 80 tactile switches are wired into an 8×10 matrix connected to the chip's row and column pins, so the board handles scanning and debouncing on its own instead of needing 18 GPIO pins on your microcontroller.

It talks over **I2C** at a fixed address of **0x34**, which can't be changed since there's no address-select jumper. The chip runs a 10-event FIFO so key presses and releases queue up instead of getting lost, includes hardware debouncing, and supports a programmable two-key lock and unlock sequence. Soldered Arduino and MicroPython libraries are available that decode the raw FIFO events into key press and release events you can use directly, without dealing with row and column scan codes yourself. Two **Qwiic connectors** handle the wiring without soldering.

The board runs on **1.65V to 3.6V**, draws about 3 µA in standby, and is rated for 2000V HBM and 1000V CDM ESD protection on every pin. It measures **136 × 60 mm**, with two mounting holes sized for M3 screws.

TECHNICAL DETAILS

- **IC:** TI TCA8418
- **Keys:** 80 tactile switches, 8×10 matrix
- **Communication:** I2C, up to 1 MHz (Fast Mode Plus)
- **I2C address:** 0x34 (fixed)
- **Event buffer:** 10-event FIFO
- **Debounce:** Hardware, 50 µs
- **Lock/unlock:** Programmable two-key sequence
- **Operating voltage:** 1.65V to 3.6V
- **Standby current:** 3 µA
- **ESD protection:** 2000V HBM, 1000V CDM

- **Software:** Arduino and MicroPython libraries available
- **Connector:** 2x Qwiic
- **Mounting holes:** 2x M3 (3.2 mm diameter)
- **Dimensions:** 136 × 60 mm

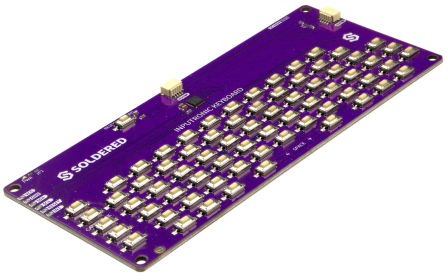
SPECIFICATIONS

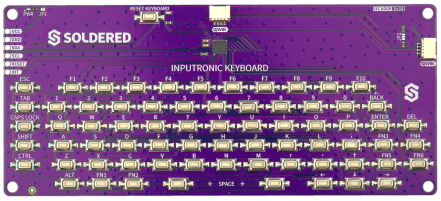
INTERFACE	I2C
QWIIC COMPATIBLE	Yes
I2C ADDRESS DEFAULT	0x34
BREADBOARD COMPATIBLE	Yes
IC PART NUMBER	TCA8418

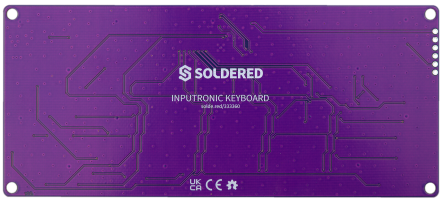
LINKS

Arduino Library	https://github.com/SolderedElectronics/Soldered-Inputronic-Keyboard-Arduino-Library
MicroPython Module	https://github.com/SolderedElectronics/Soldered-Inputronic-KEYBOARD-MicroPython-Library
Arduino Library Documentation	https://docs.soldered.com/inputronic-keyboard/arduino/keyboard-poll/
Arduino: Get Started	https://docs.soldered.com/inputronic-keyboard/arduino/getting-started/
Full Documentation	https://docs.soldered.com/inputronic-keyboard/overview/
MicroPython: Get Started	https://docs.soldered.com/inputronic-keyboard/micropython/getting-started/
mim_package	https://checkmim.com/packages/solderedelectronics+Soldered-Inputronic-KEYBOARD-MicroPython-Library
Pinout	https://cms.soldered.com/products/333360/media/333360_pinout-png_7decc7.svg

GALLERY




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