Pi CAP

Technical Data Sheet

PRODUCT DESCRIPTION

The **Pi Cap** is an addon board for the Raspberry Pi A+, B+, 2 B, 3 B and Zero. It features a dedicated capacitive sensing IC, 3.5mm stereo audio output, push switch, RGB LED and prototyping area.

SUMMARY

- Touch IC – Resurgent Semiconductor MPR121

- Audio output – 15mW into 32Ω via 3.5mm stereo socket

- Input voltage – 3.3V (via 40-way Raspberry Pi GPIO connector)

- Input current – 17mA idle, 36mA with all features in concurrent use.

- Capacitive touch electrodes – 12 (of which 8 can be configured as 3.3V digital I/O)

- Digital I/O Pins – 7, brought out from 40-way Raspberry Pi GPIO connector – pins 12, 13, 15, 16, 18, 22, 36

- Push switch – active low momentary push switch connected to pin 7 on the 40-way Raspberry Pi GPIO connector (requires the Pi's onboard pullup resistor to be enabled in software)

- Active low, red connected to J8.31 (5mA when on), green to J8.29 (1mA when on), blue to J8.37 (4mA when on)

- Prototyping area – 84 pads (7 x 12) with 1mm diameter drills spaced 2.54mm apart.

- Dimensions – 85mm x 40mm x 7mm