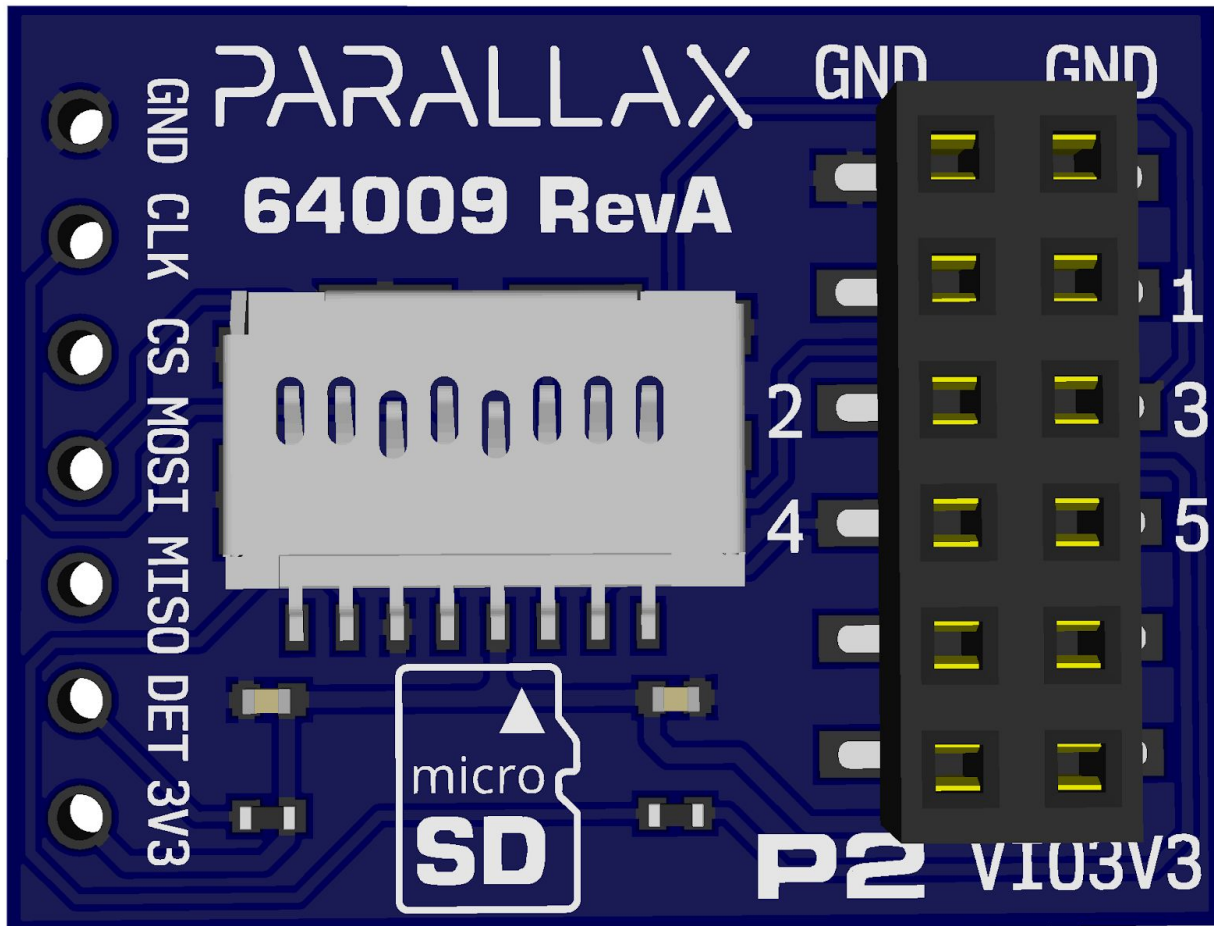# P2 microSD Add-on Board (#64009)

This adapter provides a convenient way to connect a microSD card to the Parallax Propeller P2 microcontroller, and optionally to any other microcontroller or breadboard project.

The adapter connects a microSD card to any P2 development board with a standard 2x6 way accessory header. Connecting this accessory to any P2 accessory header allows for general data read/write capabilities (such as data logging or reading program data). Connecting this accessory to the special P2 programming header (IO pins 56-63) would also allow booting from a firmware image stored on the microSD card.

The adapter also has seven 0.1" pitch through-hole pads which provide connection to all of the microSD card signals, and accept a standard vertical or right-angle pin header (not supplied) for connection to other microcontrollers or breadboards, such as for the Parallax FLiP try-it kit.

Features

- Connects a microSD card (not included) to the Propeller 2 Accessory Header
- Allows booting from a binary firmware file saved on the microSD card when connected to the P2 programming header (IOs 56-63)
- Connect to any 2x6 way accessory header for general data reading and writing
- Unpopulated pads allow access to all the microSD card power and control signals, handy for attaching logic probes, or connecting the adapter to a breadboard and/or other microcontroller.
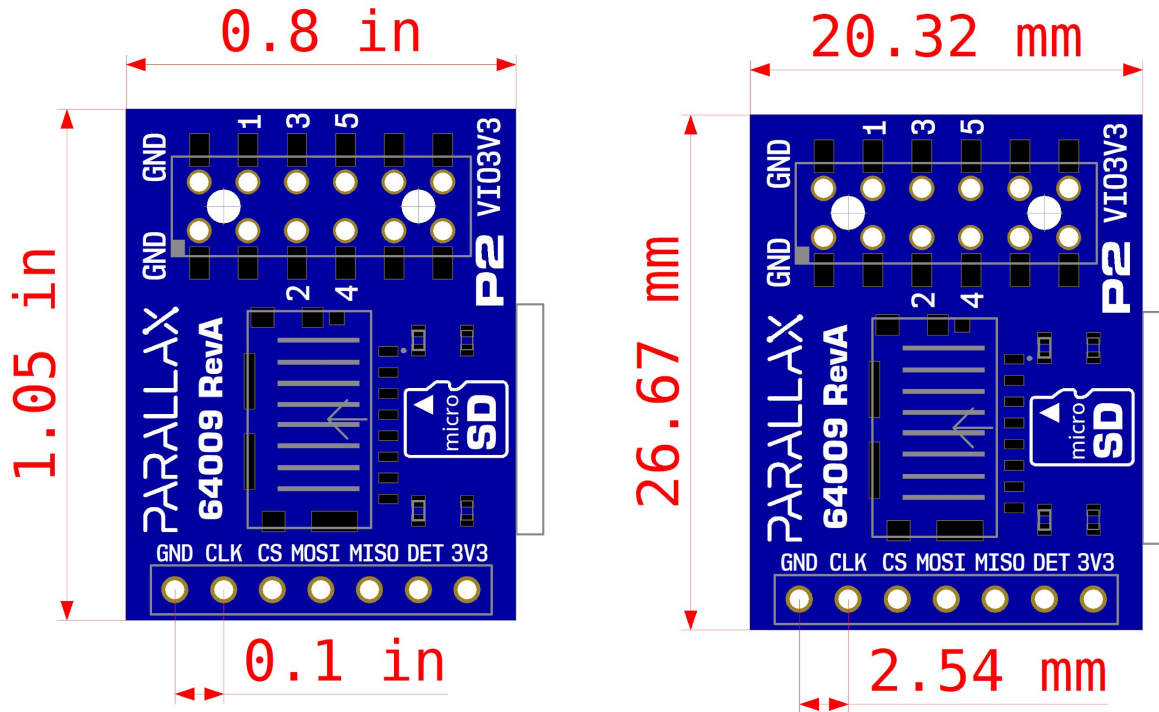
Specifications

- 2x6 female socket with 0.1" spacing compatible with the standard Parallax P2 Accessory sockets
- Unpopulated 7-pin SIP through-hole pads with 0.1" spacing for access to the microSD card signals: 3V3, DET, MISO, MOSI, CS, CLK and GND
- PCB Dimensions: 0.8 x 1.05 in (20.32 x 26.67 mm)
- Operating temperature: -40 to +185 °F (-40 to +85 °C)

Pin Connections

Accessory header pin	SIP breakout pad	Function
VIO3V3	3V3	Supply voltage to microSD card - 3.3V voltage required to power the microSD card - Do not supply power to both the accessory header pin and SIP breakout pad at the same time
5V	N/C	Supply voltage from P2 accessory header - Not Connected and Not Labelled
+7, +6, +0	N/C	Not Connected
+5	CLK	Connects to SD-CLK
+4	CS	Connects to SD-CS (CD/DAT3/CS)
+3	MOSI	Connects to SD-DI (CMD/MOSI)
+2	MISO	Series 240R from SD-DO (MISO) - Resistor provided for P2 boot compatibility
+1	DET	Card detect Internal 470K pull-up to 3V3, active low when card inserted
GND	GND	Common Ground reference connection

Dimensions

Resources and Downloads

Check for the latest version of this document and the schematic diagram from the P2 microSD Accessory product page. Go to www.parallax.com and search 64009.

Revision History

Version 1.0: Original release.