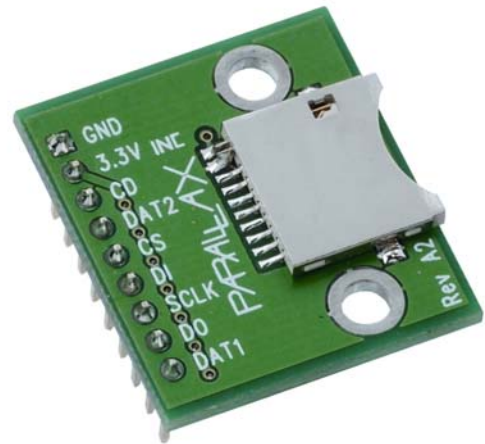


## micro-SD Card Adapter (#32312)

The micro-SD Card Adapter allows you to easily connect a micro-SD Flash memory card to your Propeller chip or other microcontroller. This adapter contains the components required for an SPI interface between the host microcontroller and a micro-SD memory card. The adapter also includes a card detect switch which allows you to detect when a memory card is physically present in the socket. Mounting holes allow you to install the adapter in your application.

### Features

- SPI support components already installed on the PCB
- Includes mounting holes for use in applications
- Card detect switch allows detection of memory card insertion
- SIP header makes breadboard use easy
- Supporting objects for the Propeller chip are available on the Propeller Object Exchange
- All I/O lines from the SD card are brought out to support SD Bus Mode if desired



### Key Specifications

- Power requirements: 3.3 VDC; power consumption determined by micro-SD card used + 0.5 mA when card is inserted
- Communication: SPI (or SD Bus Mode)
- Operating temperature: 32 to 158 °F (0 to 70 °C)
- Dimensions: 1.11" L x 1.00" W x 0.47" H (28.22 mm L x 25.40 mm W x 11.92 mm H)

### Application Ideas

- Mass Storage addition for project
- Datalogger
- Data portability

## Quick-Start Circuit

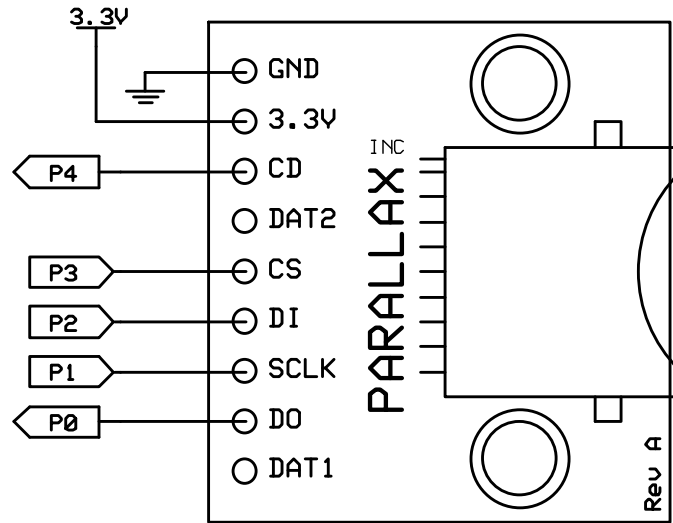


Figure 1: Connection Diagram

## Connecting and Testing

Connect the pins above to the specified I/O pins on your Propeller Demo Board (#32100), Propeller Education Kit (#32305 or #32306), Propeller Proto Board (#32212 or #32812), Professional Development Board (#32111), PropRPM Board (#32202) or any other Propeller system or microcontroller capable of accessing the micro-SD card. By using the I/O pins listed above you can use the FSRW object available on the Propeller Object Exchange to test access to FAT formatted micro-SD cards with this adapter.

## Downloads and Resources

You can obtain the Propeller Tool software from the Downloads link at <http://www.parallax.com/propeller>. You can obtain additional objects by visiting the object exchange at <http://obex.parallax.com>.

## Pin Definitions and Ratings

Pin	Name	Function
1	GND	Ground: 0 V
2	3.3V	Supply Voltage: 3.3V
3	CD	Card Detect
4	DAT2	Data Bit 2 (Bus Mode)
5	CS / DAT3	Chip Select / Data Bit 3 (Bus Mode)
6	DI / CMD	Serial Data Input / CMD (Bus Mode)
7	SCLK	Synchronous Clock Input
8	DO / DAT0	Serial Data Output / Data Bit 0 (Bus Mode)
9	DAT1	Data Bit 1 (Bus Mode)

This adapter is designed to support SPI mode, however all I/O lines from the SD card are brought out to support SD Bus Mode if you should want to use that connection method instead.

## Module Dimensions

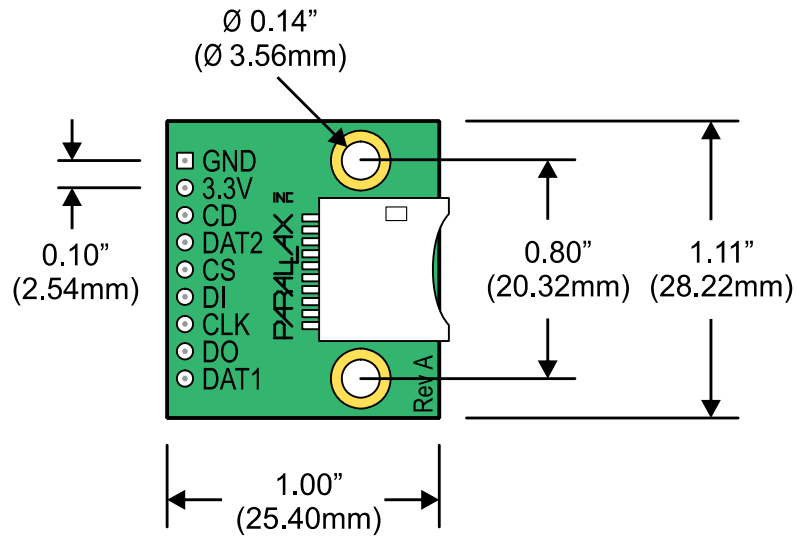


Figure 2: Module Dimensions

### Additional measurements:

From the center of the pins to the center of either mounting hole, is 0.60" (15.25mm)

From the center of the mounting hole to the opposite side of the board, regarding the pins, is 0.275" (7mm)

NOTES:  
 R1-R8 ARE 10K  
 CD IS LOW WHEN CARD IS PRESENT

