

# TensorFlow Lite for Microcontrollers Kit

## Product Overview

10-13-2021

For the most up-to-date information, visit [www.mouser.com](http://www.mouser.com) or the supplier's website.

## Description

Adafruit TensorFlow Lite for Microcontrollers Kit allows for developers to get started with TensorFlow models and machine learning. This kit uses the PyBadge as the edge processor. This compact credit-card-sized board is powered by the ATSAMD51 with 512KB of flash and 192KB of RAM. It has 2MB of QSPI flash for file storage that is useful for TensorFlow Lite files, images, fonts, sounds, or other assets. A microphone can be plugged in for micro speech recognition. The TensorFlow Lite for Microcontrollers Kit can utilize Arduino library that contains some demos to get started with and to recognize various word pairs like "yes/no", "up/down", and "cat/dog".



## Features

- ATSAMD51J19 @ 120MHz with 3.3V logic/power - 512KB of FLASH + 192KB of RAM
- 2MB of SPI Flash for storing images, sounds, and animations
- 1.8" 160 x 128 Color TFT Display connected to its own SPI port
- 8 x Game/Control Buttons with nice silicone button
- 5 x NeoPixels for badge dazzle or game score-keeping
- Triple-axis accelerometer (motion sensor)
- Light sensor, reverse-mount so that it points out the front
- Built-in buzzer mini-speaker
- Mono Class-D speaker driver for 4Ω-8Ω speakers, up to 2W
- LiPoly battery port with built in recharging capability
- USB port for battery charging, programming, and debugging
- Two female header strips with Feather-compatible pinout so you can plug any FeatherWings in
- JST ports for NeoPixels, sensor input, and I<sup>2</sup>C (you can fit I<sup>2</sup>C Grove connectors in here)
- Reset button
- On-Off switch

## Mouser Part Number(s)

[View Part](#)

To learn more, visit <https://www.mouser.com/new/adafruit/adafruit-tensorflow-lite-kit/>