



The Adafruit PyBadge LC is a board the size of a credit card and can run CircuitPython, MakeCode Arcade or Arduino. Powered by ATSAM51, with 512KB of flash and 192KB of RAM. Also includes 2 MB of QSPI flash for file storage, handy for images, fonts, sounds, or game assets.

This is the Low Cost version of the more fully featured Adafruit PyBadge. The hardware was pared down to make it even more affordable, but you can still use it with MakeCode Arcade, CircuitPython or Arduino! The LC version has the same processor chip, QSPI Flash, on/off switch, buttons, buzzer, light sensor and battery circuit. It *does not have* Feather headers, JST STEMMA connectors, LIS3DH accelerometer, or optional speaker connection like the regular version. Instead of 5 NeoPixels there is only one in the center front.

On the front you get a 1.8" 160x128 color TFT display with dimmable backlight and DMA support for drawing, so updates are incredibly fast. There are also 8 silicone-top buttons, which are arranged to mimic a gaming handheld, with a d-pad, 2 menu-select buttons and 2 fire-action buttons. There's also a NeoPixel LED in the front to dazzle or track activity.

There's a light sensor that points out the front and a built in buzzer-speaker.

You can power the PyBadge from any LiPoly battery. An on-off switch will save battery power when not in use. Or power from the Micro USB port – it will also charge up the battery if one is attached.

Programming options:

- MakeCode Arcade is the easiest to start for making games, you can drag-and-drop blocks and load games over the disk-drive bootloader
- CircuitPython lets you draw graphics, play wave files and print out text in any fonts – all in Python! There's tons of sensor support as well.
- Arduino is low level, powerful, but a little more challenging. You can use Adafruit Arcada to interface with the hardware and it will abstract some of the nitty-gritty details like reading buttons for you.

List of contents:

- ATSAM51J19 @ 120MHz with 3.3V logic/power – 512KB of FLASH + 192KB of RAM
- 2 MB of SPI Flash for storing images, sounds, animations
- 1.8" 160x128 Color TFT Display connected to its own SPI port
- 8 x Game/Control Buttons with silicone button tops
- 1 x NeoPixel LED
- Light sensor, reverse-mount so that it points out the front
- Built in buzzer mini-speaker
- LiPoly battery port with built in recharging capability
- USB port for battery charging, programming and debugging
- Reset button
- On-Off switch

Product Dimensions: 85.7mm x 54.6mm x 10.0mm / 3.4" x 2.1" x 0.4"

Product Weight: 25.7g / 0.9oz