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# **Adafruit***ImageLoadLibraryDocumentation*

## ***Release 1.0***

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This library decodes an image file into new bitmap and palette objects of the provided type. It's designed to load code needed during decoding as needed. This is meant to minimize the memory overhead of the decoding code.



# CHAPTER 1

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Usage Example

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## CHAPTER 2

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### Contributing

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Contributions are welcome! Please read our [Code of Conduct](#) before contributing to help this project stay welcoming.



### 3.1 Zip release files

To build this library locally you'll need to install the `circuitpython-build-tools` package.

```
python3 -m venv .env
source .env/bin/activate
pip install circuitpython-build-tools
```

Once installed, make sure you are in the virtual environment:

```
source .env/bin/activate
```

Then run the build:

```
circuitpython-build-bundles --filename_prefix adafruit-circuitpython-imageload --
↳library_location .
```

### 3.2 Sphinx documentation

Sphinx is used to build the documentation based on rST files and comments in the code. First, install dependencies (feel free to reuse the virtual environment from above):

```
python3 -m venv .env
source .env/bin/activate
pip install Sphinx sphinx-rtd-theme
```

Now, once you have the virtual environment activated:

```
cd docs
sphinx-build -E -W -b html . _build/html
```

This will output the documentation to `docs/_build/html`. Open the `index.html` in your browser to view them. It will also (due to `-W`) error out on any warning like Travis will. This is a good way to locally verify it will pass.

### 4.1 Simple test

Ensure your image loads with this simple test.

Listing 1: examples/imageload\_simpletest.py

```
1 import displayio
2 import adafruit_imageload
3
4 image, palette = adafruit_imageload.load("images/4bit.bmp", bitmap=displayio.Bitmap,
    ↪palette=displayio.Palette)
```

### 4.2 adafruit\_imageload

Load pixel values (indices or colors) into a bitmap and colors into a palette.

- Author(s): Scott Shawcroft

`adafruit_imageload.load(filename, *, bitmap=None, palette=None)`

Load pixel values (indices or colors) into a bitmap and colors into a palette.

`bitmap` is the desired type. It must take `width`, `height` and `color_depth` in the constructor. It must also have a `_load_row` method to load a row's worth of pixel data.

`palette` is the desired palette type. The constructor should take the number of colors and support assignment to indices via `[]`.

### 4.3 adafruit\_imageload.bmp

Load pixel values (indices or colors) into a bitmap and colors into a palette from a BMP file.

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## **4.4 `adafruit_imageload.bmp.indexed`**

Load pixel values (indices or colors) into a bitmap and colors into a palette from an indexed BMP.

- Author(s): Scott Shawcroft

## CHAPTER 5

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### Indices and tables

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