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# **PyEAGLE Documentation**

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**Scott Torborg**

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PyEAGLE is an interchange API to read and write Cadsoft EAGLE XML (v6 and later) schematic, library, and PCB layout files.

Some long term goals are:

- Comprehensive and round-trip-capable interface between Pythonic data structures and EAGLE's XML format, eliminating the impedance mismatch involved in manipulating EAGLE files in Python scripts.
- Traversal and net analysis helpers, to serve as a foundation for higher-level tools.
- Rendering capability in SVG.
- Command-line tools, including basic `grep` and `lint` tools.

At this point it is fairly incomplete and not 'production useful'.



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### Example Usage

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```
lib = pyeagle.open('SparkFun-Sensors.lbr')
for part in lib:
    print part
```





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## Screenshot

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Everyone loves screenshots.



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## Contents

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### 3.1 Quick Start

#### 3.1.1 Install

Install with pip:

```
$ pip install pyeagle
```

#### 3.1.2 Use

Open a library file, print some info about the contents.

```
import pyeagle

lib = pyeagle.open('SparkFun-Sensors.lbr')

for device_set in lib: # could also use lib.device_sets
    print device_set

for symbol in lib.symbols:
    print symbol

for package in lib.packages:
    print package
```

### 3.2 API Reference

### 3.3 Contributing

Patches and suggestions are strongly encouraged! GitHub pull requests are preferred, but other mechanisms of feedback are welcome.

PyEAGLE hopes to have a comprehensive test suite with 100% line and branch coverage, as reported by the excellent coverage module. To run the tests, simply run in the top level of the repo:

```
$ tox
```

This will also ensure that the Sphinx documentation builds correctly, and that there are no [PEP8](#) or [Pyflakes](#) warnings in the codebase.

### 3.3.1 Contributors

Thanks to [Bernard “Guyzmo” Pratz](#) for `zc.buildout` support.

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## Indices and Tables

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- `genindex`
- `modindex`