CPython -> CircuitPython

~29 megabytes -> ~650 kilobytes

CPython builtins

build_class	breakpoint	enumerate	id	next	setattr	
debug	bytearray	eval	input	object	slice	
doc	bytes	exec	int	oct	sorted	
import	callable	exit	isinstance	open	staticmethod	
loader	chr	filter	issubclass	ord	str	
name	classmethod	float	iter	pow	sum	
package	compile	format	len	print	super	
spec	complex	frozenset	license	property	tuple	
abs	copyright	getattr	list	quit	type	
all	credits	globals	locals	range	vars	
any	delattr	hasattr	map	repr	zip	
ascii	dict	hash	max	reversed		
bin	dir	help	memoryview	round		
bool	divmod	hex	min	set		

CircuitPython builtins

build_class		enumerate	id	next	setattr
	bytearray	eval	input	object	slice
	bytes	exec	int	oct	sorted
import	callable		isinstance	open	staticmethod
	chr	filter	issubclass	ord	str
name	classmethod	float	iter	pow	sum
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	complex	frozenset		property	tuple
abs		getattr	list		type
all		globals	locals	range	
any	delattr	hasattr	map	repr	zip
	dict	hash	max	reversed	
bin	dir	help	memoryview	round	
bool	divmod	hex	min	set	

CPython Modules

argparse array ast asynchat asyncio asyncore atexit audioop base64 bdb binascii binhex bisect builtins bz2 cProfile calendar cgi	contextlib contextvars copy copyreg crypt csv ctypes curses dataclasses datetime dbm	fcntl filecmp fileinput fnmatch fontforge formatter fractions ftplib functools gc genericpath	idlelib imaplib imghdr imp importlib inspect io ipaddress itertools json keyword	ntpath nturl2path numbers opcode operator optparse	pkgutil platform plistlib poplib posix posixpath pprint profile psMat pstats pty pwd py_compile pyaff	pydoc_data pyexpat queue quopri random re readline reprlib resource rlcompleter runpy sched secrets select selectors setuptools shelve shlex shutil signal site	sre_parse ssl stat statistics string stringprep struct subprocess sunau symbol symtable sys sysconfig syslog	tty turtle turtledemo types typing unicodedata	uu uuid venv warnings wave weakref webbrowser wheel wsgiref xdrlib xml xmlrpc xxlimited xxsubtype zipapp zipfile zipimport zlib zoneinfo
cgi cgitb	dbm decimal	genericpath getopt	keyword lib2to3	optparse os	pyaff pyclbr	site sitecustomize	<i>3</i>	unicodedata unittest	
chunk	difflib	getpass	linecache	harser	pydoc	smtpd	Callice	urllib	

CircuitPython Modules

random array collections re time wheel math errno binascii struct builtins io sys

json

gc

CPython random

Random randint triangular qauss SystemRandom getrandbits uniform random betavariate randrange vonmisesvariate getstate weibullvariate choice lognormvariate sample normalvariate choices seed expovariate setstate paretovariate gammavariate randbytes shuffle

CircuitPython random

getrandbits

randint

random uniform

randrange

choice

seed

1. The Python *feel* requires a small core.

Smaller core means Python in more places.

Things people have asked for:

- numpy
- f-strings
- pandas
- Jupyter
- pdb
- asyncio

2. Python is much bigger than just python