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Legende: Links and Buttons

ein Link

Gleicher Tab. Link innerhalb dieses Dokumentes

MP Home

Neuer Tab. Die offizielle Micropython Referenz des entsprechenden Modules wird geöffnet

MP Home highlight

Neuer Tab. Die offizielle Micropython Referenz wird geöffnet und das entsprechende Module highlighted

MP ESP32 highlight

Neuer Tab. Die ESP32 Micropython Referenz wird geöffnet und das entsprechende Module highlighted

Extern

Neuer Tab. Interessante Seite in Bezug zum entsprechenden Micropython Modul wird geöffnet

Extern highlight

Neuer Tab. Interessante Seite wird geöffnet und das entsprechende Module highlighted

YouTube

Neuer Tab. YouTube Clip, welche das Thema behandelt

Overview of all modules

_boot	esp	onewire	uctypes	upip_utarfile	utime
_onewire	esp32	uarray	uerrno	uplatform	utimeq
_thread	flashbdev	uasyncio/core	uhashlib	upysh	uwebsocket
_uasyncio	framebuf	uasyncio/event	uheapq	urandom	uzlib
_webrepl	gc	uasyncio/funcs	uio	ure	webrepl
apa106	inisetup	uasyncio/lock	ujson	urequests	webrepl_setup
btree	math	uasyncio/stream	umachine	uselect	websocket_helper
builtins	micropython	ubinascii	umqtt/robust	usocket	
cmath	neopixel	ubluetooth	umqtt/simple	ussl	
dht	network	ucollections	uos	ustruct	
ds18x20	ntptime	ucryptolib	upip	usys	

_boot

- `object <module '_boot' from '_boot.py'> is of type module`
- `uos -- <module 'uos'>`
- `__name__ -- _boot`
- `gc -- <module 'gc'>`

- `__file__` -- `_boot.py`
- `bdev` -- `<Partition type=1, subtype=129, address=2097152, size=2097152, label=vfs, encrypted=0>`

--> [Overview](#)

`_onewire`

- object `<module 'onewire'>` is of type module
- `__name__` -- `onewire`
- `reset` -- `<function>`
- `readbit` -- `<function>`
- `readbyte` -- `<function>`
- `writebit` -- `<function>`
- `writebyte` -- `<function>`
- `crc8` -- `<function>`

--> [Overview](#)

`_thread`

MP Home

- object `<module '_thread'>` is of type module
- `__name__` -- `_thread`
- `LockType` -- `<class 'lock'>`
- `get_ident` -- `<function>`
- `stack_size` -- `<function>`
- `start_new_thread` -- `<function>`
- `exit` -- `<function>`
- `allocate_lock` -- `<function>`

--> [Overview](#)

`_thread` --> `LockType`

- `__enter__` -- `<function>`
- `__exit__` -- `<function>`
- `acquire` -- `<function>`
- `locked` -- `<function>`
- object `<class 'lock'>` is of type type
- `release` -- `<function>`

--> `_thread`

--> [Overview](#)

_uasyncio

- `object <module '_uasyncio'> is of type module`
- `__name__ -- _uasyncio`
- `TaskQueue -- <class 'TaskQueue'>`
- `Task -- <class 'Task'>`

[--> Overview](#)

_uasyncio --> TaskQueue

- `object <class 'TaskQueue'> is of type type`
- `peek -- <function>`
- `pop -- <function>`
- `push -- <function>`
- `remove -- <function>`

[--> _uasyncio](#)

[--> Overview](#)

_uasyncio --> Task

- `object <class 'Task'> is of type type`

[--> _uasyncio](#)

[--> Overview](#)

_webrepl

- `object <module '_webrepl'> is of type module`
- `__name__ -- _webrepl`
- `_webrepl -- <class '_webrepl'>`
- `password -- <function>`

[--> Overview](#)

_webrepl --> _webrepl

- `close -- <function>`
- `object <class '_webrepl'> is of type type`
- `read -- <function>`
- `readinto -- <function>`
- `write -- <function>`

[--> _webrepl](#)

[--> Overview](#)

apa106

MP ESP32 highlight

- `object <module 'apa106' from 'apa106.py'> is of type module`
- `APA106 -- <class 'APA106'>`
- `NeoPixel -- <class 'NeoPixel'>`
- `__name__ -- apa106`
- `__file__ -- apa106.py`

--> [Overview](#)

apa106 --> APA106

MP ESP32 highlight

- `ORDER -- (0, 1, 2, 3)`
- `__module__ -- apa106`
- `__qualname__ -- APA106`
- `object <class 'APA106'> is of type type`

--> [apa106](#)

--> [Overview](#)

apa106 --> NeoPixel

MP ESP32 highlight

- `ORDER -- (1, 0, 2, 3)`
- `__getitem__ -- <function __getitem__ at 0x3ffe8e10>`
- `__init__ -- <function __init__ at 0x3ffe8e20>`
- `__len__ -- <function __len__ at 0x3ffe8e40>`
- `__module__ -- neopixel`
- `__qualname__ -- NeoPixel`
- `__setitem__ -- <function __setitem__ at 0x3ffe8e00>`
- `fill -- <function fill at 0x3ffe8e50>`
- `object <class 'NeoPixel'> is of type type`
- `write -- <function write at 0x3ffe8e60>`

--> [apa106](#)

--> [Overview](#)

bt tree

MP Home

- object <module 'btree'> is of type module
- __name__ -- btree
- open -- <function>
- INCL -- 1
- DESC -- 2

--> [Overview](#)

builtins

MP Home

- object <module 'builtins'> is of type module
- __name__ -- builtins
- __build_class__ -- <function>
- __import__ -- <function>
- __repl_print__ -- <function>
- bool -- <class 'bool'>
- bytes -- <class 'bytes'>
- bytearray -- <class 'bytearray'>
- complex -- <class 'complex'>
- dict -- <class 'dict'>
- enumerate -- <class 'enumerate'>
- filter -- <class 'filter'>
- float -- <class 'float'>
- frozenset -- <class 'frozenset'>
- int -- <class 'int'>
- list -- <class 'list'>
- map -- <class 'map'>
- memoryview -- <class 'memoryview'>
- object -- <class 'object'>
- property -- <class 'property'>
- range -- <class 'range'>
- reversed -- <class 'reversed'>
- set -- <class 'set'>
- slice -- <class 'slice'>
- str -- <class 'str'>
- super -- <class 'super'>
- tuple -- <class 'tuple'>
- type -- <class 'type'>
- zip -- <class 'zip'>
- classmethod -- <class 'classmethod'>
- staticmethod -- <class 'staticmethod'>
- Ellipsis -- Ellipsis
- NotImplemented -- NotImplemented
- abs -- <function>

- `all` -- <function>
- `any` -- <function>
- `bin` -- <function>
- `callable` -- <function>
- `compile` -- <function>
- `chr` -- <function>
- `delattr` -- <function>
- `dir` -- <function>
- `divmod` -- <function>
- `eval` -- <function>
- `exec` -- <function>
- `execfile` -- <function>
- `getattr` -- <function>
- `setattr` -- <function>
- `globals` -- <function>
- `hasattr` -- <function>
- `hash` -- <function>
- `help` -- <function>
- `hex` -- <function>
- `id` -- <function>
- `input` -- <function>
- `isinstance` -- <function>
- `issubclass` -- <function>
- `iter` -- <function>
- `len` -- <function>
- `locals` -- <function>
- `max` -- <function>
- `min` -- <function>
- `next` -- <function>
- `oct` -- <function>
- `open` -- <function>
- `ord` -- <function>
- `pow` -- <function>
- `print` -- <function>
- `repr` -- <function>
- `round` -- <function>
- `sorted` -- <function>
- `sum` -- <function>
- `BaseException` -- <class 'BaseException'>
- `ArithmeticError` -- <class 'ArithmeticError'>
- `AssertionError` -- <class 'AssertionError'>
- `AttributeError` -- <class 'AttributeError'>
- `EOFError` -- <class 'EOFError'>
- `Exception` -- <class 'Exception'>
- `GeneratorExit` -- <class 'GeneratorExit'>
- `ImportError` -- <class 'ImportError'>

- `IndentationError` -- `<class 'IndentationError'>`
- `IndexError` -- `<class 'IndexError'>`
- `KeyboardInterrupt` -- `<class 'KeyboardInterrupt'>`
- `KeyError` -- `<class 'KeyError'>`
- `LookupError` -- `<class 'LookupError'>`
- `MemoryError` -- `<class 'MemoryError'>`
- `NameError` -- `<class 'NameError'>`
- `NotImplementedError` -- `<class 'NotImplementedError'>`
- `OSError` -- `<class 'OSError'>`
- `OverflowError` -- `<class 'OverflowError'>`
- `RuntimeError` -- `<class 'RuntimeError'>`
- `StopAsyncIteration` -- `<class 'StopAsyncIteration'>`
- `StopIteration` -- `<class 'StopIteration'>`
- `SyntaxError` -- `<class 'SyntaxError'>`
- `SystemExit` -- `<class 'SystemExit'>`
- `TypeError` -- `<class 'TypeError'>`
- `UnicodeError` -- `<class 'UnicodeError'>`
- `ValueError` -- `<class 'ValueError'>`
- `ViperTypeError` -- `<class 'ViperTypeError'>`
- `ZeroDivisionError` -- `<class 'ZeroDivisionError'>`

--> [Overview](#)

builtins --> bool

MP Home highlight

- `object <class 'bool'>` is of type `type`

--> [builtins](#)

--> [Overview](#)

builtins --> bytes

MP Home highlight

- `center` -- `<function>`
- `count` -- `<function>`
- `decode` -- `<function>`
- `endswith` -- `<function>`
- `find` -- `<function>`
- `format` -- `<function>`
- `index` -- `<function>`
- `isalpha` -- `<function>`
- `isdigit` -- `<function>`
- `islower` -- `<function>`
- `isspace` -- `<function>`

- `isupper -- <function>`
- `join -- <function>`
- `lower -- <function>`
- `lstrip -- <function>`
- `object <class 'bytes'> is of type type`
- `partition -- <function>`
- `replace -- <function>`
- `rfind -- <function>`
- `rindex -- <function>`
- `rpartition -- <function>`
- `rsplit -- <function>`
- `rstrip -- <function>`
- `split -- <function>`
- `splitlines -- <function>`
- `startswith -- <function>`
- `strip -- <function>`
- `upper -- <function>`

--> [builtins](#)

--> [Overview](#)

builtins --> bytearray

MP Home highlight

- `append -- <function>`
- `decode -- <function>`
- `extend -- <function>`
- `object <class 'bytearray'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> complex

MP Home highlight

- `object <class 'complex'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> dict

MP Home highlight

- `__delitem__` -- <function>
- `__getitem__` -- <function>
- `__setitem__` -- <function>
- `clear` -- <function>
- `copy` -- <function>
- `fromkeys` -- <classmethod>
- `get` -- <function>
- `items` -- <function>
- `keys` -- <function>
- `object` <class 'dict'> is of type type
- `pop` -- <function>
- `popitem` -- <function>
- `setdefault` -- <function>
- `update` -- <function>
- `values` -- <function>

--> [builtins](#)

--> [Overview](#)

builtins --> enumerate

MP Home highlight

- `object` <class 'enumerate'> is of type type

--> [builtins](#)

--> [Overview](#)

builtins --> filter

MP Home highlight

- `object` <class 'filter'> is of type type

--> [builtins](#)

--> [Overview](#)

builtins --> float

MP Home highlight

- `object` <class 'float'> is of type type

--> [builtins](#)

--> [Overview](#)

builtins --> frozenset

MP Home highlight

- `__contains__` -- <function>
- `copy` -- <function>
- `difference` -- <function>
- `intersection` -- <function>
- `isdisjoint` -- <function>
- `issubset` -- <function>
- `issuperset` -- <function>
- `object <class 'frozenset'> is of type type`
- `symmetric_difference` -- <function>
- `union` -- <function>

[--> builtins](#)

[--> Overview](#)

builtins --> int

MP Home highlight

- `from_bytes` -- <classmethod>
- `object <class 'int'> is of type type`
- `to_bytes` -- <function>

[--> builtins](#)

[--> Overview](#)

builtins --> list

MP Home highlight

- `append` -- <function>
- `clear` -- <function>
- `copy` -- <function>
- `count` -- <function>
- `extend` -- <function>
- `index` -- <function>
- `insert` -- <function>
- `object <class 'list'> is of type type`
- `pop` -- <function>
- `remove` -- <function>
- `reverse` -- <function>
- `sort` -- <function>

[--> builtins](#)

[--> Overview](#)

builtins --> map

MP Home highlight

- `object <class 'map'> is of type type`

[--> builtins](#)

[--> Overview](#)

builtins --> memoryview

MP Home highlight

- `object <class 'memoryview'> is of type type`

[--> builtins](#)

[--> Overview](#)

builtins --> object

MP Home highlight

- `__delattr__ -- <function>`
- `__init__ -- <function>`
- `__new__ -- <staticmethod>`
- `__setattr__ -- <function>`
- `object <class 'object'> is of type type`

[--> builtins](#)

[--> Overview](#)

builtins --> property

MP Home highlight

- `deleter -- <function>`
- `getter -- <function>`
- `object <class 'property'> is of type type`
- `setter -- <function>`

[--> builtins](#)

[--> Overview](#)

builtins --> range

MP Home highlight

- `object <class 'range'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> reversed

MP Home highlight

- `object <class 'reversed'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> set

MP Home highlight

- `__contains__ -- <function>`
- `add -- <function>`
- `clear -- <function>`
- `copy -- <function>`
- `difference -- <function>`
- `difference_update -- <function>`
- `discard -- <function>`
- `intersection -- <function>`
- `intersection_update -- <function>`
- `isdisjoint -- <function>`
- `issubset -- <function>`
- `issuperset -- <function>`
- `object <class 'set'> is of type type`
- `pop -- <function>`
- `remove -- <function>`
- `symmetric_difference -- <function>`
- `symmetric_difference_update -- <function>`
- `union -- <function>`
- `update -- <function>`

--> [builtins](#)

--> [Overview](#)

builtins --> slice

MP Home highlight

- `object <class 'slice'> is of type type`

[--> builtins](#)

[--> Overview](#)

builtins --> str

MP Home highlight

Extern

- `center -- <function>`
- `count -- <function>`
- `encode -- <function>`
- `endswith -- <function>`
- `find -- <function>`
- `format -- <function>`
- `index -- <function>`
- `isalpha -- <function>`
- `isdigit -- <function>`
- `islower -- <function>`
- `isspace -- <function>`
- `isupper -- <function>`
- `join -- <function>`
- `lower -- <function>`
- `lstrip -- <function>`
- `object <class 'str'> is of type type`
- `partition -- <function>`
- `replace -- <function>`
- `rfind -- <function>`
- `rindex -- <function>`
- `rpartition -- <function>`
- `rsplit -- <function>`
- `rstrip -- <function>`
- `split -- <function>`
- `splitlines -- <function>`
- `startswith -- <function>`
- `strip -- <function>`
- `upper -- <function>`

[--> builtins](#)

[--> Overview](#)

builtins --> super

MP Home highlight

- `object <class 'super'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> tuple

MP Home highlight

- `count` -- `<function>`
- `index` -- `<function>`
- `object <class 'tuple'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> type

MP Home highlight

- `object <class 'type'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> zip

MP Home highlight

- `object <class 'zip'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> classmethod

MP Home highlight

- `object <class 'classmethod'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> staticmethod

MP Home highlight

- `object <class 'staticmethod'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> BaseException

- `object <class 'BaseException'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> ArithmeticError

Extern highlight

- `object <class 'ArithmeticError'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> AssertionError

MP Home highlight

- `object <class 'AssertionError'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> AttributeError

MP Home highlight

- `object <class 'AttributeError'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> EOFError

Extern highlight

- `object <class 'EOFError'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> Exception

MP Home highlight

- `object <class 'Exception'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> GeneratorExit

- `object <class 'GeneratorExit'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> ImportError

MP Home highlight

- `object <class 'ImportError'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> IndentationError

Extern highlight

- `object <class 'IndentationError'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> IndexError

MP Home highlight

- `object <class 'IndexError'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> KeyboardInterrupt

MP Home highlight

- `object <class 'KeyboardInterrupt'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> KeyError

MP Home highlight

- `object <class 'KeyError'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> LookupError

Extern highlight

- `object <class 'LookupError'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> MemoryError

MP Home highlight

- `object <class 'MemoryError'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> NameError

MP Home highlight

- `object <class 'NameError'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> NotImplementedError

MP Home highlight

- `object <class 'NotImplementedError'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> OSError

MP Home highlight

- `object <class 'OSError'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> OverflowError

Extern highlight

- `object <class 'OverflowError'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> RuntimeError

MP Home highlight

- `object <class 'RuntimeError'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> StopAsyncIteration

- `object <class 'StopAsyncIteration'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> StopIteration

MP Home highlight

- `object <class 'StopIteration'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> SyntaxError

MP Home highlight

- `object <class 'SyntaxError'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> SystemExit

MP Home highlight

- `object <class 'SystemExit'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> TypeError

MP Home highlight

- `object <class 'TypeError'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> UnicodeError

Extern highlight

- `object <class 'UnicodeError'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> ValueError

MP Home highlight

- `object <class 'ValueError'> is of type type`

--> [builtins](#)

--> [Overview](#)

builtins --> ViperTypeError

- `object <class 'ViperTypeError'> is of type type`

[--> builtins](#)

[--> Overview](#)

builtins --> ZeroDivisionError

MP Home highlight

- `object <class 'ZeroDivisionError'> is of type type`

[--> builtins](#)

[--> Overview](#)

cmath

MP Home

- `object <module 'cmath'> is of type module`
- `__name__ -- cmath`
- `e -- 2.718282`
- `pi -- 3.141593`
- `phase -- <function>`
- `polar -- <function>`
- `rect -- <function>`
- `exp -- <function>`
- `log -- <function>`
- `log10 -- <function>`
- `sqrt -- <function>`
- `cos -- <function>`
- `sin -- <function>`

[--> Overview](#)

dht

MP ESP32 highlight

- `object <module 'dht' from 'dht.py'> is of type module`
- `DHTBase -- <class 'DHTBase'>`
- `__name__ -- dht`
- `__file__ -- dht.py`
- `sys -- <module 'sys'>`
- `DHT11 -- <class 'DHT11'>`
- `dht_readinto -- <function>`

- `DHT22 -- <class 'DHT22'>`

--> [Overview](#)

dht --> DHTBase

- `__init__ -- <function __init__ at 0x3fff9e20>`
- `__module__ -- dht`
- `__qualname__ -- DHTBase`
- `measure -- <function measure at 0x3fff9e10>`
- `object <class 'DHTBase'> is of type type`

--> [dht](#)

--> [Overview](#)

dht --> DHT11

MP ESP32 highlight

- `__module__ -- dht`
- `__qualname__ -- DHT11`
- `humidity -- <function humidity at 0x3fff9ed0>`
- `object <class 'DHT11'> is of type type`
- `temperature -- <function temperature at 0x3fff9ec0>`

--> [dht](#)

--> [Overview](#)

dht --> DHT22

MP ESP32 highlight

- `__module__ -- dht`
- `__qualname__ -- DHT22`
- `humidity -- <function humidity at 0x3fff9f80>`
- `object <class 'DHT22'> is of type type`
- `temperature -- <function temperature at 0x3fff9f70>`

--> [dht](#)

--> [Overview](#)

ds18x20

MP ESP32 highlight

- `object <module 'ds18x20' from 'ds18x20.py'> is of type module`

- `const` -- <function>
- `DS18X20` -- <class 'DS18X20'>
- `__name__` -- `ds18x20`
- `__file__` -- `ds18x20.py`

--> [Overview](#)

ds18x20 --> DS18X20

MP ESP32 highlight

- `__init__` -- <function `__init__` at 0x3fffb5a0>
- `__module__` -- `ds18x20`
- `__qualname__` -- `DS18X20`
- `convert_temp` -- <function `convert_temp` at 0x3fffb5d0>
- `object` <class 'DS18X20'> is of type `type`
- `read_scratch` -- <function `read_scratch` at 0x3fffb5b0>
- `read_temp` -- <function `read_temp` at 0x3fffb5e0>
- `scan` -- <function `scan` at 0x3fffb590>
- `write_scratch` -- <function `write_scratch` at 0x3fffb5c0>

--> `ds18x20`

--> [Overview](#)

esp

MP Home

- `object` <module 'esp'> is of type `module`
- `__name__` -- `esp`
- `osdebug` -- <function>
- `flash_read` -- <function>
- `flash_write` -- <function>
- `flash_erase` -- <function>
- `flash_size` -- <function>
- `flash_user_start` -- <function>
- `gpio_matrix_in` -- <function>
- `gpio_matrix_out` -- <function>
- `dht_readinto` -- <function>
- `LOG_NONE` -- 0
- `LOG_ERROR` -- 1
- `LOG_WARNING` -- 2
- `LOG_INFO` -- 3
- `LOG_DEBUG` -- 4
- `LOG_VERBOSE` -- 5

[--> Overview](#)

esp32

MP Home

- `object <module 'esp32'> is of type module`
- `__name__ -- esp32`
- `wake_on_touch -- <function>`
- `wake_on_ext0 -- <function>`
- `wake_on_ext1 -- <function>`
- `gpio_deep_sleep_hold -- <function>`
- `raw_temperature -- <function>`
- `hall_sensor -- <function>`
- `idf_heap_info -- <function>`
- `NVS -- <class 'NVS'>`
- `Partition -- <class 'Partition'>`
- `RMT -- <class 'RMT'>`
- `ULP -- <class 'ULP'>`
- `WAKEUP_ALL_LOW -- False`
- `WAKEUP_ANY_HIGH -- True`
- `HEAP_DATA -- 4`
- `HEAP_EXEC -- 1`

[--> Overview](#)

esp32 --> NVS

Extern

MP Home highlight

Extern

YouTube

- `commit -- <function>`
- `erase_key -- <function>`
- `get_blob -- <function>`
- `get_i32 -- <function>`
- `object <class 'NVS'> is of type type`
- `set_blob -- <function>`
- `set_i32 -- <function>`

[--> esp32](#)[--> Overview](#)

esp32 --> Partition

MP Home highlight

- `BOOT -- 0`

- `RUNNING -- 1`
- `TYPE_APP -- 0`
- `TYPE_DATA -- 1`
- `find -- <staticmethod>`
- `get_next_update -- <function>`
- `info -- <function>`
- `ioctl -- <function>`
- `mark_app_valid_cancel_rollback -- <classmethod>`
- `object <class 'Partition'> is of type type`
- `readblocks -- <function>`
- `set_boot -- <function>`
- `writeblocks -- <function>`

--> [esp32](#)

--> [Overview](#)

esp32 --> RMT

MP ESP32 highlight

- `__del__ -- <function>`
- `bitstream_channel -- <staticmethod>`
- `clock_div -- <function>`
- `deinit -- <function>`
- `loop -- <function>`
- `object <class 'RMT'> is of type type`
- `source_freq -- <function>`
- `wait_done -- <function>`
- `write_pulses -- <function>`

--> [esp32](#)

--> [Overview](#)

esp32 --> ULP

MP ESP32 highlight

- `RESERVE_MEM -- 512`
- `load_binary -- <function>`
- `object <class 'ULP'> is of type type`
- `run -- <function>`
- `set_wakeup_period -- <function>`

--> [esp32](#)

--> [Overview](#)

flashbdev

Extern highlight

- object <module 'flashbdev' from 'flashbdev.py'> is of type module
- Partition -- <class 'Partition'>
- bdev -- <Partition type=1, subtype=129, address=2097152, size=2097152, label=vfs, encrypted=0>
- __name__ -- flashbdev
- __file__ -- flashbdev.py

--> [Overview](#)

flashbdev --> Partition

Extern highlight

- BOOT -- 0
- RUNNING -- 1
- TYPE_APP -- 0
- TYPE_DATA -- 1
- find -- <staticmethod>
- get_next_update -- <function>
- info -- <function>
- ioctl -- <function>
- mark_app_valid_cancel_rollback -- <classmethod>
- object <class 'Partition'> is of type type
- readblocks -- <function>
- set_boot -- <function>
- writeblocks -- <function>

--> [flashbdev](#)

--> [Overview](#)

framebuf

MP Home

- object <module 'framebuf'> is of type module
- __name__ -- framebuf
- FrameBuffer -- <class 'FrameBuffer'>
- FrameBuffer1 -- <function>
- MVLSB -- 0
- MONO_VLSB -- 0
- RGB565 -- 1

- `GS2_HMSB -- 5`
- `GS4_HMSB -- 2`
- `GS8 -- 6`
- `MONO_HLSB -- 3`
- `MONO_HMSB -- 4`

[--> Overview](#)

framebuf --> FrameBuffer

[Extern](#)[MP Home](#)[YouTube](#)

- `blit -- <function>`
- `fill -- <function>`
- `fill_rect -- <function>`
- `hline -- <function>`
- `line -- <function>`
- `object <class 'FrameBuffer'> is of type type`
- `pixel -- <function>`
- `rect -- <function>`
- `scroll -- <function>`
- `text -- <function>`
- `vline -- <function>`

[--> framebuf](#)

[--> Overview](#)

gc

[MP Home](#)

- `object <module 'gc'> is of type module`
- `__name__ -- gc`
- `collect -- <function>`
- `disable -- <function>`
- `enable -- <function>`
- `isenabled -- <function>`
- `mem_free -- <function>`
- `mem_alloc -- <function>`
- `threshold -- <function>`

[--> Overview](#)

inisetup

Extern

- object <module 'inisetup' from 'inisetup.py'> is of type module
- bdev -- <Partition type=1, subtype=129, address=2097152, size=2097152, label=vfs, encrypted=0>
- __name__ -- inisetup
- __file__ -- inisetup.py
- uos -- <module 'uos'>
- fs_corrupted -- <function fs_corrupted at 0x3ffe7980>
- setup -- <function setup at 0x3ffe7990>
- check_bootsec -- <function check_bootsec at 0x3ffe79a0>

--> [Overview](#)

math

MP Home

- object <module 'math'> is of type module
- __name__ -- math
- e -- 2.718282
- pi -- 3.141593
- tau -- 6.283185
- inf -- inf
- nan -- nan
- sqrt -- <function>
- pow -- <function>
- exp -- <function>
- expm1 -- <function>
- log -- <function>
- log2 -- <function>
- log10 -- <function>
- cosh -- <function>
- sinh -- <function>
- tanh -- <function>
- acosh -- <function>
- asinh -- <function>
- atanh -- <function>
- cos -- <function>
- sin -- <function>
- tan -- <function>
- acos -- <function>
- asin -- <function>
- atan -- <function>
- atan2 -- <function>
- ceil -- <function>

- `copysign -- <function>`
- `fabs -- <function>`
- `floor -- <function>`
- `fmod -- <function>`
- `frexp -- <function>`
- `ldexp -- <function>`
- `modf -- <function>`
- `isfinite -- <function>`
- `isinf -- <function>`
- `isnan -- <function>`
- `isclose -- <function>`
- `trunc -- <function>`
- `radians -- <function>`
- `degrees -- <function>`
- `factorial -- <function>`
- `erf -- <function>`
- `erfc -- <function>`
- `gamma -- <function>`
- `lgamma -- <function>`

--> [Overview](#)

micropython

MP Home

- `object <module 'micropython'> is of type module`
- `__name__ -- micropython`
- `const -- <function>`
- `opt_level -- <function>`
- `mem_info -- <function>`
- `qstr_info -- <function>`
- `stack_use -- <function>`
- `alloc_emergency_exception_buf -- <function>`
- `heap_lock -- <function>`
- `heap_unlock -- <function>`
- `kbd_intr -- <function>`
- `schedule -- <function>`

--> [Overview](#)

neopixel

MP Home

- `object <module 'neopixel' from 'neopixel.py'> is of type module`

- `bitstream` -- <function>
- `NeoPixel` -- <class 'NeoPixel'>
- `__name__` -- `neopixel`
- `__file__` -- `neopixel.py`

--> [Overview](#)

neopixel --> NeoPixel

MP ESP32 highlight

- `ORDER` -- (1, 0, 2, 3)
- `__getitem__` -- <function `__getitem__` at 0x3ffe8e10>
- `__init__` -- <function `__init__` at 0x3ffe8e20>
- `__len__` -- <function `__len__` at 0x3ffe8e40>
- `__module__` -- `neopixel`
- `__qualname__` -- `NeoPixel`
- `__setitem__` -- <function `__setitem__` at 0x3ffe8e00>
- `fill` -- <function `fill` at 0x3ffe8e50>
- `object` <class 'NeoPixel'> is of type `type`
- `write` -- <function `write` at 0x3ffe8e60>

--> [neopixel](#)

--> [Overview](#)

network

MP Home

- `object` <module 'network'> is of type `module`
- `__name__` -- `network`
- `__init__` -- <function>
- `WLAN` -- <function>
- `LAN` -- <function>
- `PPP` -- <function>
- `phy_mode` -- <function>
- `STA_IF` -- 0
- `AP_IF` -- 1
- `MODE_11B` -- 1
- `MODE_11G` -- 2
- `MODE_11N` -- 4
- `AUTH_OPEN` -- 0
- `AUTH_WEP` -- 1
- `AUTH_WPA_PSK` -- 2
- `AUTH_WPA2_PSK` -- 3
- `AUTH_WPA_WPA2_PSK` -- 4

- AUTH_WPA2_ENTERPRISE -- 5
- AUTH_WPA3_PSK -- 6
- AUTH_WPA2_WPA3_PSK -- 7
- AUTH_MAX -- 8
- PHY_LAN8720 -- 0
- PHY_IP101 -- 1
- PHY_RTL8201 -- 2
- PHY_DP83848 -- 3
- ETH_INITIALIZED -- 0
- ETH_STARTED -- 1
- ETH_STOPPED -- 2
- ETH_CONNECTED -- 3
- ETH_DISCONNECTED -- 4
- ETH_GOT_IP -- 5
- STAT_IDLE -- 1000
- STAT_CONNECTING -- 1001
- STAT_GOT_IP -- 1010
- STAT_NO_AP_FOUND -- 201
- STAT_WRONG_PASSWORD -- 202
- STAT_BEACON_TIMEOUT -- 200
- STAT_ASSOC_FAIL -- 203
- STAT_HANDSHAKE_TIMEOUT -- 204

--> [Overview](#)

ntptime

Extern

Extern

- object <module 'ntptime' from 'ntptime.py'> is of type module
- socket -- <module 'socket'>
- NTP_DELTA -- 3155673600
- struct -- <module 'struct'>
- __name__ -- ntptime
- __file__ -- ntptime.py
- host -- pool.ntp.org
- time -- <function time at 0x3ffe7930>
- settime -- <function settime at 0x3ffed280>

--> [Overview](#)

onewire

MP ESP32 highlight

- object <module 'onewire' from 'onewire.py'> is of type module

- `__name__` -- onewire
- `_ow` -- <module 'onewire'>
- `OneWireError` -- <class 'OneWireError'>
- `__file__` -- onewire.py
- `OneWire` -- <class 'OneWire'>

--> [Overview](#)

onewire --> OneWireError

- `__module__` -- onewire
- `__qualname__` -- OneWireError
- `object` <class 'OneWireError'> is of type type

--> [onewire](#)

--> [Overview](#)

onewire --> OneWire

MP ESP32 highlight

- `MATCH_ROM` -- 85
- `SEARCH_ROM` -- 240
- `SKIP_ROM` -- 204
- `__init__` -- <function `__init__` at 0x3ffedb60>
- `__module__` -- onewire
- `__qualname__` -- OneWire
- `_search_rom` -- <function `_search_rom` at 0x3ffedc20>
- `crc8` -- <function `crc8` at 0x3ffedc30>
- `object` <class 'OneWire'> is of type type
- `readbit` -- <function `readbit` at 0x3ffedb80>
- `readbyte` -- <function `readbyte` at 0x3ffedb90>
- `readinto` -- <function `readinto` at 0x3ffedba0>
- `reset` -- <function `reset` at 0x3ffedbc0>
- `scan` -- <function `scan` at 0x3ffedc10>
- `select_rom` -- <function `select_rom` at 0x3ffedc00>
- `write` -- <function `write` at 0x3ffedbf0>
- `writebit` -- <function `writebit` at 0x3ffedbb0>
- `writebyte` -- <function `writebyte` at 0x3ffedbe0>

--> [onewire](#)

--> [Overview](#)

uarray

MP Home

- object <module 'uarray'> is of type module
- __name__ -- uarray
- array -- <class 'array'>

--> [Overview](#)

uarray --> array

MP Home

- append -- <function>
- decode -- <function>
- extend -- <function>
- object <class 'array'> is of type type

--> [uarray](#)

--> [Overview](#)

uasyncio/core

MP Home

Extern

Extern

- object <module 'uasyncio/core' from 'uasyncio/core.py'> is of type module
- sys -- <module 'sys'>
- Task -- <class 'Task'>
- new_event_loop -- <function new_event_loop at 0x3fff00d0>
- _promote_to_task -- <function _promote_to_task at 0x3fff0050>
- __name__ -- uasyncio/core
- run -- <function run at 0x3ffeff30>
- current_task -- <function current_task at 0x3fff00c0>
- _task_queue -- <TaskQueue>
- _io_queue -- <IOQueue object at 3fff00f0>
- sleep_ms -- <function sleep_ms at 0x3ffefe20>
- sleep -- <function sleep at 0x3ffefe60>
- ticks_add -- <function>
- _exc_context -- {'future': None, 'message': "Task exception wasn't retrieved", 'exception': None}
- ticks_diff -- <function>
- TaskQueue -- <class 'TaskQueue'>
- SingletonGenerator -- <class 'SingletonGenerator'>
- TimeoutError -- <class 'TimeoutError'>
- __file__ -- uasyncio/core.py
- _stopper -- <generator>
- Loop -- <class 'Loop'>
- IOQueue -- <class 'IOQueue'>
- select -- <module 'select'>

- `_stop_task` -- `None`
- `CancelledError` -- `<class 'CancelledError'>`
- `get_event_loop` -- `<function get_event_loop at 0x3fff0240>`
- `run_until_complete` -- `<function run_until_complete at 0x3ffeff10>`
- `ticks` -- `<function>`
- `create_task` -- `<function create_task at 0x3fff00b0>`

[--> Overview](#)

uasyncio/core --> Task

[MP Home](#)

- `object <class 'Task'>` is of type `type`

[--> uasyncio/core](#)

[--> Overview](#)

uasyncio/core --> TaskQueue

[MP Home](#)

- `object <class 'TaskQueue'>` is of type `type`
- `peek` -- `<function>`
- `pop` -- `<function>`
- `push` -- `<function>`
- `remove` -- `<function>`

[--> uasyncio/core](#)

[--> Overview](#)

uasyncio/core --> SingletonGenerator

[MP Home](#)

- `__init__` -- `<function __init__ at 0x3ffefe50>`
- `__iter__` -- `<function __iter__ at 0x3ffefe40>`
- `__module__` -- `uasyncio/core`
- `__next__` -- `<function __next__ at 0x3ffefe80>`
- `__qualname__` -- `SingletonGenerator`
- `object <class 'SingletonGenerator'>` is of type `type`

[--> uasyncio/core](#)

[--> Overview](#)

uasyncio/core --> TimeoutError

MP Home

- `__module__` -- `uasyncio/core`
- `__qualname__` -- `TimeoutError`
- `object <class 'TimeoutError'> is of type type`

--> [uasyncio/core](#)

--> [Overview](#)

uasyncio/core --> Loop

MP Home

- `__module__` -- `uasyncio/core`
- `__qualname__` -- `Loop`
- `_exc_handler` -- `None`
- `call_exception_handler` -- `<function call_exception_handler at 0x3fff01e0>`
- `close` -- `<function close at 0x3fff01a0>`
- `create_task` -- `<function create_task at 0x3ffeff70>`
- `default_exception_handler` -- `<function default_exception_handler at 0x3fff01d0>`
- `get_exception_handler` -- `<function get_exception_handler at 0x3fff01c0>`
- `object <class 'Loop'> is of type type`
- `run_forever` -- `<function run_forever at 0x3ffeff80>`
- `run_until_complete` -- `<function run_until_complete at 0x3fff0180>`
- `set_exception_handler` -- `<function set_exception_handler at 0x3fff01b0>`
- `stop` -- `<function stop at 0x3fff0190>`

--> [uasyncio/core](#)

--> [Overview](#)

uasyncio/core --> IOQueue

MP Home

- `__init__` -- `<function __init__ at 0x3ffeffb0>`
- `__module__` -- `uasyncio/core`
- `__qualname__` -- `IOQueue`
- `_dequeue` -- `<function _dequeue at 0x3ffeffe0>`
- `_enqueue` -- `<function _enqueue at 0x3ffeffa0>`
- `object <class 'IOQueue'> is of type type`
- `queue_read` -- `<function queue_read at 0x3ffeffc0>`
- `queue_write` -- `<function queue_write at 0x3ffeffd0>`
- `remove` -- `<function remove at 0x3ffefff0>`
- `wait_io_event` -- `<function wait_io_event at 0x3fff0000>`

--> [uasyncio/core](#)

[--> Overview](#)

uasyncio/core --> CancelledError

MP Home

- `__module__` -- `uasyncio/core`
- `__qualname__` -- `CancelledError`
- `object <class 'CancelledError'> is of type type`

[--> uasyncio/core](#)

[--> Overview](#)

uasyncio/event

MP Home

- `object <module 'ubinascii'> is of type module`
- `__name__` -- `ubinascii`
- `hexlify` -- `<function>`
- `unhexlify` -- `<function>`
- `a2b_base64` -- `<function>`
- `b2a_base64` -- `<function>`
- `crc32` -- `<function>`

[--> Overview](#)

ubluetooth

MP Home

- `object <module 'ubluetooth'> is of type module`
- `__name__` -- `ubluetooth`
- `BLE` -- `<class 'BLE'>`
- `UUID` -- `<class 'UUID'>`
- `FLAG_READ` -- `2`
- `FLAG_WRITE` -- `8`
- `FLAG_NOTIFY` -- `16`
- `FLAG_INDICATE` -- `32`
- `FLAG_WRITE_NO_RESPONSE` -- `4`

[--> Overview](#)

ubluetooth --> BLE

MP Home

- `active -- <function>`
- `config -- <function>`
- `gap_advertise -- <function>`
- `gap_connect -- <function>`
- `gap_disconnect -- <function>`
- `gap_scan -- <function>`
- `gattc_discover_characteristics -- <function>`
- `gattc_discover_descriptors -- <function>`
- `gattc_discover_services -- <function>`
- `gattc_exchange_mtu -- <function>`
- `gattc_read -- <function>`
- `gattc_write -- <function>`
- `gatts_indicate -- <function>`
- `gatts_notify -- <function>`
- `gatts_read -- <function>`
- `gatts_register_services -- <function>`
- `gatts_set_buffer -- <function>`
- `gatts_write -- <function>`
- `irq -- <function>`
- `object <class 'BLE'> is of type type`

--> [ubluetooth](#)

--> [Overview](#)

ubluetooth --> UUID

MP Home

- `object <class 'UUID'> is of type type`

--> [ubluetooth](#)

--> [Overview](#)

ucollections

MP Home

- `object <module 'ucollections'> is of type module`
- `__name__ -- ucollections`
- `deque -- <class 'deque'>`
- `namedtuple -- <function>`
- `OrderedDict -- <class 'OrderedDict'>`

--> [Overview](#)

ucollections --> deque

[MP Home](#)[MP Home highlight](#)

- `append -- <function>`
- `object <class 'deque'> is of type type`
- `popleft -- <function>`

[--> ucollections](#)[--> Overview](#)

ucollections --> OrderedDict

[MP Home](#)[MP Home highlight](#)

- `__delitem__ -- <function>`
- `__getitem__ -- <function>`
- `__setitem__ -- <function>`
- `clear -- <function>`
- `copy -- <function>`
- `fromkeys -- <classmethod>`
- `get -- <function>`
- `items -- <function>`
- `keys -- <function>`
- `object <class 'OrderedDict'> is of type type`
- `pop -- <function>`
- `popitem -- <function>`
- `setdefault -- <function>`
- `update -- <function>`
- `values -- <function>`

[--> ucollections](#)[--> Overview](#)

ucryptolib

[MP Home](#)

- `object <module 'ucryptolib'> is of type module`
- `__name__ -- ucryptolib`
- `aes -- <class 'aes'>`

[--> Overview](#)

ucryptolib --> aes

[MP Home](#)[MP Home highlight](#)[Extern](#)

- `decrypt -- <function>`
- `encrypt -- <function>`
- `object <class 'aes'> is of type type`

--> [ucryptolib](#)

--> [Overview](#)

uctypes

MP Home

- `object <module 'uctypes'> is of type module`
- `__name__ -- uctypes`
- `struct -- <class 'struct'>`
- `sizeof -- <function>`
- `offsetof -- <function>`
- `bytes_at -- <function>`
- `bytearray_at -- <function>`
- `NATIVE -- 2`
- `LITTLE_ENDIAN -- 0`
- `BIG_ENDIAN -- 1`
- `VOID -- 0`
- `UINT8 -- 0`
- `INT8 -- 134217728`
- `UINT16 -- 268435456`
- `INT16 -- 402653184`
- `UINT32 -- 536870912`
- `INT32 -- 671088640`
- `UINT64 -- 805306368`
- `INT64 -- 939524096`
- `BFUINT8 -- -1073741824`
- `BFINT8 -- -939524096`
- `BFUINT16 -- -805306368`
- `BFINT16 -- -671088640`
- `BFUINT32 -- -536870912`
- `BFINT32 -- -402653184`
- `BF_POS -- 17`
- `BF_LEN -- 22`
- `FLOAT32 -- -268435456`
- `FLOAT64 -- -134217728`
- `SHORT -- 402653184`
- `USHORT -- 268435456`
- `INT -- 671088640`
- `UINT -- 536870912`
- `LONG -- 671088640`

- ULONG -- 536870912
- LONGLONG -- 939524096
- ULONGLONG -- 805306368
- PTR -- 536870912
- ARRAY -- -1073741824

--> [Overview](#)

uctypes --> struct

MP ESP32 highlight

- object <class 'struct'> is of type type

--> [uctypes](#)

--> [Overview](#)

uerrno

MP Home

- object <module 'uerrno'> is of type module
- __name__ -- uerrno
- errorcode -- {1: 'EPERM', 2: 'ENOENT', 5: 'EIO', 9: 'EBADF', 11: 'EAGAIN', 12: 'ENOMEM', 13: 'EACCES', 17: 'EEXIST', 19: 'ENODEV', 21: 'EISDIR', 22: 'EINVAL', 95: 'EOPNOTSUPP', 112: 'EADDRINUSE', 113: 'ECONNABORTED', 104: 'ECONNRESET', 105: 'ENOBUFS', 128: 'ENOTCONN', 116: 'ETIMEDOUT', 111: 'ECONNREFUSED', 118: 'EHOSTUNREACH', 120: 'EALREADY', 119: 'EINPROGRESS'}
- EPERM -- 1
- ENOENT -- 2
- EIO -- 5
- EBADF -- 9
- EAGAIN -- 11
- ENOMEM -- 12
- EACCES -- 13
- EEXIST -- 17
- ENODEV -- 19
- EISDIR -- 21
- EINVAL -- 22
- EOPNOTSUPP -- 95
- EADDRINUSE -- 112
- ECONNABORTED -- 113
- ECONNRESET -- 104
- ENOBUFS -- 105
- ENOTCONN -- 128
- ETIMEDOUT -- 116

- ECONNREFUSED -- 111
- EHOSTUNREACH -- 118
- EALREADY -- 120
- EINPROGRESS -- 119

--> [Overview](#)

uhashlib

MP Home

- object <module 'uhashlib'> is of type module
- __name__ -- uhashlib
- sha256 -- <class 'sha256'>
- sha1 -- <class 'sha1'>

--> [Overview](#)

uhashlib --> sha256

MP Home

- digest -- <function>
- object <class 'sha256'> is of type type
- update -- <function>

--> [uhashlib](#)

--> [Overview](#)

uhashlib --> sha1

MP Home

- digest -- <function>
- object <class 'sha1'> is of type type
- update -- <function>

--> [uhashlib](#)

--> [Overview](#)

uheapq

MP Home

- object <module 'uheapq'> is of type module
- __name__ -- uheapq

- `heappush -- <function>`
- `heappop -- <function>`
- `heapify -- <function>`

[--> Overview](#)

uio

MP Home

- `object <module 'uio'> is of type module`
- `__name__ -- uio`
- `open -- <function>`
- `IOBase -- <class 'IOBase'>`
- `FileIO -- <class 'FileIO'>`
- `TextIOWrapper -- <class 'TextIOWrapper'>`
- `StringIO -- <class 'StringIO'>`
- `BytesIO -- <class 'BytesIO'>`
- `BufferedWriter -- <class 'BufferedWriter'>`

[--> Overview](#)

uio --> IOBase

MP Home

- `object <class 'IOBase'> is of type type`

[--> uio](#)

[--> Overview](#)

uio --> FileIO

MP Home

- `__del__ -- <function>`
- `__enter__ -- <function>`
- `__exit__ -- <function>`
- `close -- <function>`
- `flush -- <function>`
- `object <class 'FileIO'> is of type type`
- `read -- <function>`
- `readinto -- <function>`
- `readline -- <function>`
- `readlines -- <function>`
- `seek -- <function>`
- `tell -- <function>`

- `write -- <function>`

--> [uio](#)

--> [Overview](#)

uio --> TextIOWrapper

MP Home

- `__del__ -- <function>`
- `__enter__ -- <function>`
- `__exit__ -- <function>`
- `close -- <function>`
- `flush -- <function>`
- `object <class 'TextIOWrapper'> is of type type`
- `read -- <function>`
- `readinto -- <function>`
- `readline -- <function>`
- `readlines -- <function>`
- `seek -- <function>`
- `tell -- <function>`
- `write -- <function>`

--> [uio](#)

--> [Overview](#)

uio --> StringIO

MP Home

- `__enter__ -- <function>`
- `__exit__ -- <function>`
- `close -- <function>`
- `flush -- <function>`
- `getvalue -- <function>`
- `object <class 'StringIO'> is of type type`
- `read -- <function>`
- `readinto -- <function>`
- `readline -- <function>`
- `seek -- <function>`
- `tell -- <function>`
- `write -- <function>`

--> [uio](#)

--> [Overview](#)

uio --> BytesIO

[MP Home](#)

- `__enter__` -- <function>
- `__exit__` -- <function>
- `close` -- <function>
- `flush` -- <function>
- `getvalue` -- <function>
- `object` <class 'BytesIO'> is of type type
- `read` -- <function>
- `readinto` -- <function>
- `readline` -- <function>
- `seek` -- <function>
- `tell` -- <function>
- `write` -- <function>

[--> uio](#)[--> Overview](#)

uio --> BufferedWriter

[MP Home](#)

- `flush` -- <function>
- `object` <class 'BufferedWriter'> is of type type
- `write` -- <function>

[--> uio](#)[--> Overview](#)

ujson

[MP Home](#)

- `object` <module 'ujson'> is of type module
- `__name__` -- ujson
- `dump` -- <function>
- `dumps` -- <function>
- `load` -- <function>
- `loads` -- <function>

[--> Overview](#)

umachine

MP Home

- object <module 'umachine'> is of type module
- `__name__` -- umachine
- `mem8` -- <8-bit memory>
- `mem16` -- <16-bit memory>
- `mem32` -- <32-bit memory>
- `freq` -- <function>
- `reset` -- <function>
- `soft_reset` -- <function>
- `unique_id` -- <function>
- `sleep` -- <function>
- `lightsleep` -- <function>
- `deepsleep` -- <function>
- `idle` -- <function>
- `disable_irq` -- <function>
- `enable_irq` -- <function>
- `bitstream` -- <function>
- `time_pulse_us` -- <function>
- `Timer` -- <class 'Timer'>
- `WDT` -- <class 'WDT'>
- `SDCard` -- <class 'SDCard'>
- `SLEEP` -- 2
- `DEEPSLEEP` -- 4
- `Pin` -- <class 'Pin'>
- `Signal` -- <class 'Signal'>
- `TouchPad` -- <class 'TouchPad'>
- `ADC` -- <class 'ADC'>
- `ADCBlock` -- <class 'ADCBlock'>
- `DAC` -- <class 'DAC'>
- `I2C` -- <class 'I2C'>
- `SoftI2C` -- <class 'SoftI2C'>
- `I2S` -- <class 'I2S'>
- `PWM` -- <class 'PWM'>
- `RTC` -- <class 'RTC'>
- `SPI` -- <class 'SPI'>
- `SoftSPI` -- <class 'SoftSPI'>
- `UART` -- <class 'UART'>
- `reset_cause` -- <function>
- `HARD_RESET` -- 2
- `PWRON_RESET` -- 1
- `WDT_RESET` -- 3
- `DEEPSLEEP_RESET` -- 4
- `SOFT_RESET` -- 5
- `wake_reason` -- <function>
- `PIN_WAKE` -- 2

- EXT0_WAKE -- 2
- EXT1_WAKE -- 3
- TIMER_WAKE -- 4
- TOUCHPAD_WAKE -- 5
- ULP_WAKE -- 6

--> [Overview](#)

umachine --> Timer

MP Home

- ONE_SHOT -- 0
- PERIODIC -- 1
- __del__ -- <function>
- deinit -- <function>
- init -- <function>
- object <class 'Timer'> is of type type
- value -- <function>

--> [umachine](#)

--> [Overview](#)

umachine --> WDT

MP Home

- feed -- <function>
- object <class 'WDT'> is of type type

--> [umachine](#)

--> [Overview](#)

umachine --> SDCard

MP Home

- __del__ -- <function>
- deinit -- <function>
- info -- <function>
- ioctl -- <function>
- object <class 'SDCard'> is of type type
- readblocks -- <function>
- writeblocks -- <function>

--> [umachine](#)

--> [Overview](#)

umachine --> Pin

MP Home

- `DRIVE_0 -- 0`
- `DRIVE_1 -- 1`
- `DRIVE_2 -- 2`
- `DRIVE_3 -- 3`
- `IN -- 1`
- `IRQ_FALLING -- 2`
- `IRQ_RISING -- 1`
- `OPEN_DRAIN -- 7`
- `OUT -- 3`
- `PULL_DOWN -- 1`
- `PULL_UP -- 2`
- `WAKE_HIGH -- 5`
- `WAKE_LOW -- 4`
- `init -- <function>`
- `irq -- <function>`
- `object <class 'Pin'> is of type type`
- `off -- <function>`
- `on -- <function>`
- `value -- <function>`

--> [umachine](#)

--> [Overview](#)

umachine --> Signal

MP Home

- `object <class 'Signal'> is of type type`
- `off -- <function>`
- `on -- <function>`
- `value -- <function>`

--> [umachine](#)

--> [Overview](#)

umachine --> TouchPad

MP Home

- `config -- <function>`
- `object <class 'TouchPad'> is of type type`
- `read -- <function>`

[--> umachine](#)

[--> Overview](#)

umachine --> ADC

MP Home

- `ATTN_0DB -- 0`
- `ATTN_11DB -- 3`
- `ATTN_2_5DB -- 1`
- `ATTN_6DB -- 2`
- `WIDTH_10BIT -- 10`
- `WIDTH_11BIT -- 11`
- `WIDTH_12BIT -- 12`
- `WIDTH_9BIT -- 9`
- `atten -- <function>`
- `block -- <function>`
- `init -- <function>`
- `object <class 'ADC'> is of type type`
- `read -- <function>`
- `read_u16 -- <function>`
- `read_uv -- <function>`
- `width -- <function>`

[--> umachine](#)

[--> Overview](#)

umachine --> ADCBlock

MP Home

- `connect -- <function>`
- `init -- <function>`
- `object <class 'ADCBlock'> is of type type`

[--> umachine](#)

[--> Overview](#)

umachine --> DAC

MP Home

- `object <class 'DAC'> is of type type`
- `write -- <function>`

[--> umachine](#)

[--> Overview](#)

umachine --> I2C

MP Home

- `init` -- <function>
- `object` <class 'I2C'> is of type `type`
- `readfrom` -- <function>
- `readfrom_into` -- <function>
- `readfrom_mem` -- <function>
- `readfrom_mem_into` -- <function>
- `readinto` -- <function>
- `scan` -- <function>
- `start` -- <function>
- `stop` -- <function>
- `write` -- <function>
- `writeto` -- <function>
- `writeto_mem` -- <function>
- `writevto` -- <function>

[--> umachine](#)[--> Overview](#)

umachine --> SoftI2C

MP Home

- `init` -- <function>
- `object` <class 'SoftI2C'> is of type `type`
- `readfrom` -- <function>
- `readfrom_into` -- <function>
- `readfrom_mem` -- <function>
- `readfrom_mem_into` -- <function>
- `readinto` -- <function>
- `scan` -- <function>
- `start` -- <function>
- `stop` -- <function>
- `write` -- <function>
- `writeto` -- <function>
- `writeto_mem` -- <function>
- `writevto` -- <function>

[--> umachine](#)[--> Overview](#)

umachine --> I2S

MP Home

- `MONO -- 0`
- `RX -- 9`
- `STEREO -- 1`
- `TX -- 5`
- `deinit -- <function>`
- `init -- <function>`
- `irq -- <function>`
- `object <class 'I2S'> is of type type`
- `readinto -- <function>`
- `shift -- <staticmethod>`
- `write -- <function>`

[--> umachine](#)

[--> Overview](#)

umachine --> PWM

MP Home

- `deinit -- <function>`
- `duty -- <function>`
- `duty_ns -- <function>`
- `duty_u16 -- <function>`
- `freq -- <function>`
- `init -- <function>`
- `object <class 'PWM'> is of type type`

[--> umachine](#)

[--> Overview](#)

umachine --> RTC

MP Home

- `datetime -- <function>`
- `init -- <function>`
- `memory -- <function>`
- `object <class 'RTC'> is of type type`

[--> umachine](#)

[--> Overview](#)

umachine --> SPI

MP Home

- LSB -- 1
- MSB -- 0
- deinit -- <function>
- init -- <function>
- object <class 'SPI'> is of type type
- read -- <function>
- readinto -- <function>
- write -- <function>
- write_readinto -- <function>

--> [umachine](#)

--> [Overview](#)

umachine --> SoftSPI

MP Home

- LSB -- 1
- MSB -- 0
- deinit -- <function>
- init -- <function>
- object <class 'SoftSPI'> is of type type
- read -- <function>
- readinto -- <function>
- write -- <function>
- write_readinto -- <function>

--> [umachine](#)

--> [Overview](#)

umachine --> UART

MP Home

- CTS -- 2
- INV_CTS -- 8
- INV_RTS -- 64
- INV_RX -- 4
- INV_TX -- 32
- RTS -- 1
- any -- <function>
- deinit -- <function>
- init -- <function>
- object <class 'UART'> is of type type

- `read` -- <function>
- `readinto` -- <function>
- `readline` -- <function>
- `sendbreak` -- <function>
- `write` -- <function>

--> [umachine](#)

--> [Overview](#)

umqtt/robust

- `object` <module 'umqtt/simple' from 'umqtt/simple.py'> is of type module
- `socket` -- <module 'usocket'>
- `MQTTClient` -- <class 'MQTTClient'>
- `struct` -- <module 'ustruct'>
- `__name__` -- umqtt/simple
- `__file__` -- umqtt/simple.py
- `hexlify` -- <function>
- `MQTTException` -- <class 'MQTTException'>

--> [Overview](#)

umqtt/simple --> MQTTClient

- `__init__` -- <function __init__ at 0x3ffeec70>
- `__module__` -- umqtt/simple
- `__qualname__` -- MQTTClient
- `_recv_len` -- <function _recv_len at 0x3ffeecc0>
- `_send_str` -- <function _send_str at 0x3ffeec30>
- `check_msg` -- <function check_msg at 0x3ffeedb0>
- `connect` -- <function connect at 0x3ffeece0>
- `disconnect` -- <function disconnect at 0x3ffeed60>
- `object` <class 'MQTTClient'> is of type type
- `ping` -- <function ping at 0x3ffeed20>
- `publish` -- <function publish at 0x3ffeed40>
- `set_callback` -- <function set_callback at 0x3ffeeeca0>
- `set_last_will` -- <function set_last_will at 0x3ffeed00>
- `subscribe` -- <function subscribe at 0x3ffeed80>
- `wait_msg` -- <function wait_msg at 0x3ffeeda0>

--> [umqtt/simple](#)

--> [Overview](#)

umqtt/simple --> MQTTException

- `__module__` -- umqtt/simple

- `__qualname__` -- `MQTTException`
- `object <class 'MQTTException'>` is of type `type`

[--> umqtt/simple](#)

[--> Overview](#)

UOS

MP Home

- `object <module 'uos'>` is of type `module`
- `__name__` -- `uos`
- `uname` -- `<function>`
- `urandom` -- `<function>`
- `chdir` -- `<function>`
- `getcwd` -- `<function>`
- `listdir` -- `<function>`
- `mkdir` -- `<function>`
- `remove` -- `<function>`
- `rename` -- `<function>`
- `rmdir` -- `<function>`
- `stat` -- `<function>`
- `statvfs` -- `<function>`
- `unlink` -- `<function>`
- `dupterm` -- `<function>`
- `dupterm_notify` -- `<function>`
- `ilistdir` -- `<function>`
- `mount` -- `<function>`
- `umount` -- `<function>`
- `VfsFat` -- `<class 'VfsFat'>`
- `VfsLfs2` -- `<class 'VfsLfs2'>`

[--> Overview](#)

uos --> VfsFat

MP Home

- `chdir` -- `<function>`
- `getcwd` -- `<function>`
- `ilistdir` -- `<function>`
- `mkdir` -- `<function>`
- `mkfs` -- `<staticmethod>`
- `mount` -- `<function>`
- `object <class 'VfsFat'>` is of type `type`
- `open` -- `<function>`

- `remove -- <function>`
- `rename -- <function>`
- `rmdir -- <function>`
- `stat -- <function>`
- `statvfs -- <function>`
- `umount -- <function>`

--> uos

--> Overview

uos --> VfsLfs2

MP Home

- `chdir -- <function>`
- `getcwd -- <function>`
- `ilistdir -- <function>`
- `mkdir -- <function>`
- `mkfs -- <staticmethod>`
- `mount -- <function>`
- `object <class 'VfsLfs2'> is of type type`
- `open -- <function>`
- `remove -- <function>`
- `rename -- <function>`
- `rmdir -- <function>`
- `stat -- <function>`
- `statvfs -- <function>`
- `umount -- <function>`

--> uos

--> Overview

upip

- `object <module 'upip' from 'upip.py'> is of type module`
- `main -- <function main at 0x3ffe5520>`
- `url_open -- <function url_open at 0x3ffe51c0>`
- `fatal -- <function fatal at 0x3ffe51f0>`
- `ssl -- <module 'ssl'>`
- `socket -- <module 'socket'>`
- `_makedirs -- <function _makedirs at 0x3ffe52e0>`
- `save_file -- <function save_file at 0x3ffe5190>`
- `NotFoundError -- <class 'NotFoundError'>`
- `os -- <module 'os'>`
- `expandhome -- <function expandhome at 0x3ffe51b0>`

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- `warn_ussl -- True`
- `get_install_path -- <function get_install_path at 0x3ffe5460>`

--> [Overview](#)

upip --> NotFoundError

- `__module__ -- upip`
- `__qualname__ -- NotFoundError`
- `object <class 'NotFoundError'> is of type type`

--> [upip](#)

--> [Overview](#)

upip_utarfile

- `object <module 'upip_utarfile' from 'upip_utarfile.py'> is of type module`
- `FileSection -- <class 'FileSection'>`
- `TarInfo -- <class 'TarInfo'>`
- `__name__ -- upip_utarfile`
- `TarFile -- <class 'TarFile'>`
- `DIRTYPE -- dir`
- `TAR_HEADER -- {'name': (-1073741824, 100), 'size': (-1073741700, 11)}`
- `uctypes -- <module 'uctypes'>`
- `__file__ -- upip_utarfile.py`
- `roundup -- <function roundup at 0x3fff2f30>`
- `REGTYPE -- file`

--> [Overview](#)

upip_utarfile --> FileSection

- `__init__ -- <function __init__ at 0x3fff2fe0>`
- `__module__ -- upip_utarfile`
- `__qualname__ -- FileSection`
- `object <class 'FileSection'> is of type type`
- `read -- <function read at 0x3fff3050>`
- `readinto -- <function readinto at 0x3fff3070>`
- `skip -- <function skip at 0x3fff3030>`

--> [upip_utarfile](#)

--> [Overview](#)

upip_utarfile --> TarInfo

- `__module__ -- upip_utarfile`
- `__qualname__ -- TarInfo`

- `__str__` -- <function `__str__` at 0x3fff3110>
- `object` <class 'TarInfo'> is of type `type`

--> `upip_utarfile`

--> [Overview](#)

upip_utarfile --> TarFile

- `__init__` -- <function `__init__` at 0x3fff31d0>
- `__iter__` -- <function `__iter__` at 0x3fff3100>
- `__module__` -- `upip_utarfile`
- `__next__` -- <function `__next__` at 0x3fff31f0>
- `__qualname__` -- `TarFile`
- `extractfile` -- <function `extractfile` at 0x3fff3200>
- `next` -- <function `next` at 0x3fff3010>
- `object` <class 'TarFile'> is of type `type`

--> `upip_utarfile`

--> [Overview](#)

uplatform

- `object` <module 'uplatform'> is of type `module`
- `__name__` -- `uplatform`
- `platform` -- <function>
- `python_compiler` -- <function>
- `libc_ver` -- <function>

--> [Overview](#)

upysh

- `upysh` is intended to be imported using:
- `from upysh import *`
- To see this help text again, type `"man"`.
- `upysh` commands:
- `pwd`, `cd("new_dir")`, `ls`, `ls(...)`, `head(...)`, `cat(...)`
- `newfile(...)`, `mv("old", "new")`, `rm(...)`, `mkdir(...)`, `rmdir(...)`,
- `clear`
- `object` <module 'upysh' from 'upysh.py'> is of type `module`
- `man` --
- `upysh` is intended to be imported using:
- `from upysh import *`
- To see this help text again, type `"man"`.
- `upysh` commands:

- `pwd`, `cd("new_dir")`, `ls`, `ls(...)`, `head(...)`, `cat(...)`
- `newfile(...)`, `mv("old", "new")`, `rm(...)`, `mkdir(...)`, `rmdir(...)`,
- `clear`
- `ls -- 29 boot.py`
- `448 main.py`
- `1047 micropython_help.txt`
- `1057 micropython_help_02.txt`
- `1047 micropython_help_05.txt`
- `1463 micropython_help_06.txt`
- `0 python_help.txt`
- `__file__ -- upysh.py`
- `rm -- <function>`
- `cd -- <function>`
- `__name__ -- upysh`
- `clear --`
- `pwd -- /`
- `Man -- <class 'Man'>`
- `mkdir -- <function>`
- `head -- <function head at 0x3ffed010>`
- `CLEAR -- <class 'CLEAR'>`
- `cat -- <function cat at 0x3ffed030>`
- `mv -- <function>`
- `sys -- <module 'sys'>`
- `os -- <module 'uos'>`
- `rmdir -- <function>`
- `PWD -- <class 'PWD'>`
- `newfile -- <function newfile at 0x3ffed040>`
- `LS -- <class 'LS'>`

--> [Overview](#)

upysh --> Man

- `__module__ -- upysh`
- `__qualname__ -- Man`
- `__repr__ -- <function __repr__ at 0x3ffecfa0>`
- `object <class 'Man'> is of type type`

--> [upysh](#)

--> [Overview](#)

upysh --> CLEAR

- `__call__ -- <function __call__ at 0x3ffecf0>`
- `__module__ -- upysh`
- `__qualname__ -- CLEAR`
- `__repr__ -- <function __repr__ at 0x3ffecf00>`

- object <class 'CLEAR'> is of type type

--> upysh

--> [Overview](#)

upysh --> PWD

- `__call__` -- <function `__call__` at 0x3ffece50>
- `__module__` -- upysh
- `__qualname__` -- PWD
- `__repr__` -- <function `__repr__` at 0x3ffece60>
- object <class 'PWD'> is of type type

--> upysh

--> [Overview](#)

upysh --> LS

- `__call__` -- <function `__call__` at 0x3ffecdc0>
- `__module__` -- upysh
- `__qualname__` -- LS
- `__repr__` -- <function `__repr__` at 0x3ffecd90>
- object <class 'LS'> is of type type

--> upysh

--> [Overview](#)

urandom

MP Home

- object <module 'urandom'> is of type module
- `__name__` -- urandom
- `__init__` -- <function>
- `getrandbits` -- <function>
- `seed` -- <function>
- `randrange` -- <function>
- `randint` -- <function>
- `choice` -- <function>
- `random` -- <function>
- `uniform` -- <function>

--> [Overview](#)

ure

MP Home

- object <module 'ure'> is of type module
- `__name__` -- ure
- `compile` -- <function>
- `match` -- <function>
- `search` -- <function>
- `sub` -- <function>

--> [Overview](#)

urequests

MP ESP32 highlight

- object <module 'urequests' from 'urequests.py'> is of type module
- `put` -- <function put at 0x3fff24e0>
- `post` -- <function post at 0x3fff24d0>
- `usocket` -- <module 'usocket'>
- `patch` -- <function patch at 0x3fff24f0>
- `request` -- <function request at 0x3fff24b0>
- `__file__` -- urequests.py
- `__name__` -- urequests
- `delete` -- <function delete at 0x3fff2500>
- `head` -- <function head at 0x3fff2360>
- `Response` -- <class 'Response'>
- `get` -- <function get at 0x3fff2370>

--> [Overview](#)

urequests --> Response

- `__init__` -- <function __init__ at 0x3fff23a0>
- `__module__` -- urequests
- `__qualname__` -- Response
- `close` -- <function close at 0x3fff2390>
- `content` -- <property>
- `json` -- <function json at 0x3fff2420>
- object <class 'Response'> is of type type
- `text` -- <property>

--> [urequests](#)

--> [Overview](#)

uselect

MP Home

- `object <module 'select'> is of type module`
- `__name__ -- select`
- `select -- <function>`
- `poll -- <function>`
- `POLLIN -- 1`
- `POLLOUT -- 4`
- `POLLERR -- 8`
- `POLLHUP -- 16`

[--> Overview](#)

usocket

MP Home

- `object <module 'usocket'> is of type module`
- `__name__ -- usocket`
- `__init__ -- <function>`
- `socket -- <class 'socket'>`
- `getaddrinfo -- <function>`
- `AF_INET -- 2`
- `AF_INET6 -- 10`
- `SOCK_STREAM -- 1`
- `SOCK_DGRAM -- 2`
- `SOCK_RAW -- 3`
- `IPPROTO_TCP -- 6`
- `IPPROTO_UDP -- 17`
- `IPPROTO_IP -- 0`
- `SOL_SOCKET -- 4095`
- `SO_REUSEADDR -- 4`
- `IP_ADD_MEMBERSHIP -- 3`

[--> Overview](#)

usocket --> socket

MP Home

- `__del__ -- <function>`
- `accept -- <function>`
- `bind -- <function>`
- `close -- <function>`
- `connect -- <function>`
- `fileno -- <function>`

- `listen -- <function>`
- `makefile -- <function>`
- `object <class 'socket'> is of type type`
- `read -- <function>`
- `readinto -- <function>`
- `readline -- <function>`
- `recv -- <function>`
- `recvfrom -- <function>`
- `send -- <function>`
- `sendall -- <function>`
- `sendto -- <function>`
- `setblocking -- <function>`
- `setsockopt -- <function>`
- `settimeout -- <function>`
- `write -- <function>`

--> [usocket](#)

--> [Overview](#)

ussl

MP Home

- `object <module 'ussl'> is of type module`
- `__name__ -- ssl`
- `wrap_socket -- <function>`

--> [Overview](#)

ustruct

MP Home

- `object <module 'ustruct'> is of type module`
- `__name__ -- ustruct`
- `calcsiz -- <function>`
- `pack -- <function>`
- `pack_into -- <function>`
- `unpack -- <function>`
- `unpack_from -- <function>`

--> [Overview](#)

usys

[MP Home](#)

Hile in Micropython hat fehlgeschlagen

[--> Overview](#)

utime

[MP Home](#)

- object <module 'utime'> is of type module
- `__name__` -- utime
- `gmtime` -- <function>
- `localtime` -- <function>
- `mktime` -- <function>
- `time` -- <function>
- `sleep` -- <function>
- `sleep_ms` -- <function>
- `sleep_us` -- <function>
- `ticks_ms` -- <function>
- `ticks_us` -- <function>
- `ticks_cpu` -- <function>
- `ticks_add` -- <function>
- `ticks_diff` -- <function>
- `time_ns` -- <function>

[--> Overview](#)

utimeq

- object <module 'utimeq'> is of type module
- `__name__` -- utimeq
- `utimeq` -- <class 'utimeq'>

[--> Overview](#)

utimeq --> utimeq

- object <class 'utimeq'> is of type type
- `peektime` -- <function>
- `pop` -- <function>
- `push` -- <function>

[--> utimeq](#)

[--> Overview](#)

uwebsocket

- `object <module 'uwebsocket'> is of type module`
- `__name__ -- uwebsocket`
- `websocket -- <class 'websocket'>`

[--> Overview](#)

uwebsocket --> websocket

- `close -- <function>`
- `ioctl -- <function>`
- `object <class 'websocket'> is of type type`
- `read -- <function>`
- `readinto -- <function>`
- `readline -- <function>`
- `write -- <function>`

[--> uwebsocket](#)

[--> Overview](#)

uzlib

MP Home

- `object <module 'uzlib'> is of type module`
- `__name__ -- uzlib`
- `decompress -- <function>`
- `DecompIO -- <class 'DecompIO'>`

[--> Overview](#)

uzlib --> DecompIO

MP Home

- `object <class 'DecompIO'> is of type type`
- `read -- <function>`
- `readinto -- <function>`
- `readline -- <function>`

[--> uzlib](#)

[--> Overview](#)

webrepl

MP ESP32 highlight

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--> [Overview](#)

webrepl_setup

MP ESP32 highlight

Hile in Micropython hat fehlgeschlagen

--> [Overview](#)

websocket_helper

- object <module 'websocket_helper' from 'websocket_helper.py'> is of type module
- hashlib -- <module 'uhashlib'>
- binascii -- <module 'ubinascii'>
- __name__ -- websocket_helper
- __file__ -- websocket_helper.py
- sys -- <module 'sys'>
- DEBUG -- 0
- server_handshake -- <function server_handshake at 0x3ffeea90>
- client_handshake -- <function client_handshake at 0x3ffeeaa0>

--> [Overview](#)