

```
24 _POWER_SUSPEND = const(0x02)
25
26
27 class BNO055:
28     """
29     Driver for the BNO055 9DOF IMU sensor.
30
31     Example::
32
33         import bno055
34         from machine import I2C, Pin
35
36         i2c = I2C(-1, Pin(5), Pin(4), timeout=1000)
37         s = bno055.BNO055(i2c)
38         print(s.temperature())
39         print(s.euler())
40     """
41
42     def __init__(self, i2c, address=0x28):
43         self.i2c = i2c
44         self.address = address
45         self.init()
46
47     def _registers(self, register, struct, value=None, scale=1):
48         if value is None:
49             size = ustruct.calcsize(struct)
50             data = self.i2c.readfrom_mem(self.address, register, size)
51             value = ustruct.unpack(struct, data)
52             if scale != 1:
53                 value = tuple(v * scale for v in value)
54             return value
55         if scale != 1:
56             value = tuple(v / scale for v in value)
57         data = ustruct.pack(struct, *value)
58         self.i2c.writeto_mem(self.address, register, data)
59
60     def _register(self, value=None, register=0x00, struct='B'):
61         if value is None:
62             return self._registers(register, struct=struct)[0]
63         self._registers(register, struct=struct, value=(value,))
64
65     _chip_id = partial(_register, register=0x00, value=None)
66     _power_mode = partial(_register, register=0x3e)
67     _system_trigger = partial(_register, register=0x3f)
68     _page_id = partial(_register, register=0x07)
69     operation_mode = partial(_register, register=0x3d)
70     temperature = partial(_register, register=0x34, value=None)
71     accelerometer = partial(_registers, register=0x08, struct='<hhh',
```