

```
In [1]: #Now Let's deal with the two RGBLEDs  
from pynq.overlays.base import BaseOverlay  
import pynq.lib.rgbled as rgbled  
import time  
base = BaseOverlay("base.bit")
```

```
In [2]: help(rgbled)
```

Help on module pynq.lib.rgbled in pynq.lib:

#### NAME

pynq.lib.rgbled

#### DESCRIPTION

```
# Copyright (c) 2016, Xilinx, Inc.
# SPDX-License-Identifier: BSD-3-Clause
```

#### CLASSES

builtins.object  
RGBLED

```
class RGBLED(builtins.object)
| RGBLED(index, ip_name='rgbleds_gpio', start_index=inf)
|
| This class controls the onboard RGB LEDs.
|
| Attributes
| -----
| index : int
|     The index of the RGB LED. Can be an arbitrary value.
| _mmio : MMIO
|     Shared memory map for the RGBLED GPIO controller.
| _rgbleds_val : int
|     Global value of the RGBLED GPIO pins.
| _rgbleds_start_index : int
|     Global value representing the lowest index for RGB LEDs
|
| Methods defined here:
|
| __init__(self, index, ip_name='rgbleds_gpio', start_index=inf)
|     Create a new RGB LED object.
|
| Parameters
| -----
| index : int
|     Index of the RGBLED, Can be an arbitrary value.
|     The smallest index given will set the global value
|     `_rgbleds_start_index`. This behavior can be overridden by defining
|     `start_index`.
| ip_name : str
|     Name of the IP in the `ip_dict`. Defaults to "rgbleds_gpio".
| start_index : int
|     If defined, will be used to update the global value
|     `_rgbleds_start_index`.
|
| off(self)
|     Turn off a single RGBLED.
|
| Returns
| -----
| None
|
| on(self, color)
|     Turn on a single RGB LED with a color value (see color constants).
|
| Parameters
| -----
```

```

        color : int
            Color of RGB specified by a 3-bit RGB integer value.

        Returns
        -----
        None

    read(self)
        Retrieve the RGBLED state.

        Returns
        -----
        int
            The color value stored in the RGBLED.

    write(self, color)
        Set the RGBLED state according to the input value.

        Parameters
        -----
        color : int
            Color of RGB specified by a 3-bit RGB integer value.

        Returns
        -----
        None

    -----
    Data descriptors defined here:

    __dict__
        dictionary for instance variables (if defined)

    __weakref__
        list of weak references to the object (if defined)

```

**DATA**

```

RGBLEDS_XGPIO_OFFSET = 0
RGB_BLUE = 1
RGB_CLEAR = 0
RGB_CYAN = 3
RGB_GREEN = 2
RGB_MAGENTA = 5
RGB_RED = 4
RGB_WHITE = 7
RGB_YELLOW = 6

```

**FILE**

```

/usr/local/share/pynq-venv/lib/python3.10/site-packages/pynq/lib/rgbled.py

```

```

In [4]: #Assign the rgbleds to a variable
led4 = rgbled.RGBLED(4)
led5 = rgbled.RGBLED(5)

```

```
In [10]: #RGBLEDs take a hex value for color  
led4.write(0x7)  
led5.write(0x4)
```

```
In [11]: #Turn off the RGBLEDs  
led4.write(0x0)  
led5.write(0x0)
```

```
In [ ]:
```