

In [1]: `print("Hello World")`

Hello World

In [2]: `#import the base overlay, rgbleds, and leds
from pynq.overlays.base import BaseOverlay
import time
base = BaseOverlay("base.bit")`

In [3]: `help(base)`

Help on BaseOverlay in module pynq.overlays.base.base:

<pynq.overlays.base.base.BaseOverlay object>

Default documentation for overlay base.bit. The following attributes are available on this overlay:

IP Blocks

```
switches_gpio      : pynq.lib.axigpio.AxiGPIO
btns_gpio          : pynq.lib.axigpio.AxiGPIO
video/hdmi_in/frontend/axi_gpio_hdmiin : pynq.lib.axigpio.AxiGPIO
video/hdmi_out/frontend/hdmi_out_hpd_video : pynq.lib.axigpio.AxiGPIO
rgbleds_gpio       : pynq.lib.axigpio.AxiGPIO
leds_gpio          : pynq.lib.axigpio.AxiGPIO
system_interrupts  : pynq.overlay.DefaultIP
video/axi_vdma      : pynq.lib.video.dma.AxiVDMA
audio_codec_ctrl_0 : pynq.lib.audio.AudioADAU1761
video/hdmi_out/frontend/axi_dyncclk : pynq.overlay.DefaultIP
video/hdmi_out/frontend/vtc_out : pynq.overlay.DefaultIP
video/hdmi_in/frontend/vtc_in : pynq.overlay.DefaultIP
video/hdmi_in/pixel_pack : pynq.lib.video.pipeline.PixelPacker
video/hdmi_in/color_convert : pynq.lib.video.pipeline.ColorConverter
video/hdmi_out/color_convert : pynq.lib.video.pipeline.ColorConverter
video/hdmi_out/pixel_unpack : pynq.lib.video.pipeline.PixelPacker
trace_analyzer_pmodb/axi_dma_0 : pynq.lib.dma.DMA
trace_analyzer_pi/axi_dma_0 : pynq.lib.dma.DMA
trace_analyzer_pi/trace_cntrl_64_0 : pynq.overlay.DefaultIP
trace_analyzer_pmodb/trace_cntrl_32_0 : pynq.overlay.DefaultIP
ps7_0              : pynq.overlay.DefaultIP
```

Hierarchies

```
iop_arduino        : pynq.lib.pynqmicroblaze.pynqmicroblaze.MicroblazeHierarc
hy
iop_pmoda           : pynq.lib.pynqmicroblaze.pynqmicroblaze.MicroblazeHierarc
hy
iop_pmodb           : pynq.lib.pynqmicroblaze.pynqmicroblaze.MicroblazeHierarc
hy
iop_rpi             : pynq.lib.pynqmicroblaze.pynqmicroblaze.MicroblazeHierarc
hy
trace_analyzer_pi   : pynq.overlay.DefaultHierarchy
trace_analyzer_pmodb : pynq.overlay.DefaultHierarchy
video               : pynq.lib.video.hierarchies.HDMIWrapper
video/hdmi_in        : pynq.lib.video.hierarchies.VideoIn
video/hdmi_in/frontend : pynq.lib.video.dvi.HDMIInFrontend
video/hdmi_out        : pynq.lib.video.hierarchies.VideoOut
video/hdmi_out/frontend : pynq.lib.video.dvi.HDMIOutFrontend
```

Interrupts

None

GPIO Outputs

None

Memories

```
iop_pmodamb_bram_ctrl : Memory
```

```
iop_pmodbmb_bram_ctrl : Memory  
iop_arduino_bram_ctrl : Memory  
iop_rpim_bram_ctrl    : Memory  
PSDDR                 : Memory
```

```
In [7]: led0 = base.leds[0]  
        led0.on()  
        time.sleep(2)  
        led0.off()
```

```
In [ ]:
```