```
MODULE* Blinky;  (*PDR 19.11.2019*)
  IMPORT SYSTEM;

VAR z: INTEGER;

BEGIN z := 0;
  REPEAT LED(ROR(z, 20)); INC(z)
  UNTIL FALSE
END Blinky.
```

```
$ ../bin/oberon compile Blinky.Mod
...
$ ../bin/oberon decode Blinky.rsc
   0  E7000007 B       7              entry point always at 0,
branch to body
   ...
   8  5E00FFC0 MOV SP  R0    -64      initial stack pointer value
   9  40000000 MOV  R0         0      z := 0
  10  41000000 MOV  R1         0
  11  A0100000 STR  R0  R1      0
  12  40000000 MOV  R0         0      LED(ROR(z, 20))
  13  80000000 LDR  R0  R0      0
  14  40030014 ROR  R0  R0     20
  15  5100FFC4 MOV  R1        -60     (LED port address)
  16  A0100000 STR  R0  R1      0     (write LED port)
  17  40000000 MOV  R0         0      INC(z)
  18  40080000 ADD  R0  R0      0
  19  81000000 LDR  R1  R0      0
  20  41180001 ADD  R1  R1      1
  21  A1000000 STR  R1  R0      0
  22  E7FFFFF5 B     -11             UNTIL FALSE
  23  40000000 MOV  R0         0      termination code unused
  24  C7000000 B  R0
```

```
# RISC0.pcf PDR 7.11.19 / 20.11.19
set_io OSCIN 21     # (GBIN6) 100MHz osc
set_io rstBtn 62    # FLASH HLD, PIC RA4, ext. 10K pullup
set_io LED 37       # J5-3, network enable & LED

# 5V SPI interface (J2)
set_io MISO 93      # J2-8
set_io MOSI 106     # J2-2 - also KBD-1 (DAT)
set_io SCLK 98      # J2-5 - also MOU-1 (DAT)
set_io SS[0] 105    # J2-3 - also KBD-5 (CLK)
set_io SS[1] 97     # J2-6 - also MOU-5 (CLK)

# GPIO (J5)
set_io gpio[0] 45   # J2-8
set_io gpio[1] 43   # J2-6
set_io gpio[2] 41   # J2-4
set_io gpio[3] 38   # J2-2
```

```
$ yosys -q -p 'synth_ice40 -blif risc0.blif' RISC0.v Blinky.Mod.v
$ arachne-pnr -d 8k -P tq144:4k -p RISC0.pcf \
    -o risc0.asc risc0.blif
...
$ icetime -d hx8k -P tq144:4k -p RISC0.pcf risc0.asc
...
$ icepack risc0.asc risc0.bin
$ cat 64xFF.bin risc0.bin 8xFF.bin > risc0.dfu \
    && dfu-suffix -a risc0.dfu
...
$ dfu-util -D risc0.dfu
...
```