1.

a. 0x00000020, cacheable, data ram
b. 0x00000020, non-cacheable, data ram
c. 0x1F800001, non-cacheable, sfrs
d. 0x1FC00111, cacheable, bootflash
e. 0x1D001000, cacheable, program flash

3. a.
Port B: 0 -15
Port C: 12-15
Port D: 0-11
Port E: 0-7
Port F: 0,1,3,4,5
Port G: 2,3,6,7,8,9
Pin 60
b. 5-7,11,13-15,17-31

7. The processor.o file has more information than what is necessary to run on the pic32 so when the program is compiled into a hex executable it is stripped down to just what the pic needs to run which is much smaller.

8. a.

```
_start_bss_init:
        la      t0,_bss_begin
        la      t1,_bss_end
        b       _bss_check
        nop

_bss_init:
        sw      zero,0x0(t0)
        addu    t0,4
_bss_check:
        bltu    t0,t1,_bss_init
        nop

#if defined(INIT_L1_CACHE) || defined(__PIC32_HAS_L1CACHE)
```

b.
ffffffffbf88cb4c A C2FIFOCI31INV
ffffffffbfc02ff0 A DEVCFG3
ffffffffbfc02ff4 A DEVCFG2
ffffffffbfc02ff8 A DEVCFG1
ffffffffbfc02ffc A DEVCFG0

c. SPIRBF 1, SPITBF 1, SPITBE 1, SPIRBE 1, SPIROV 1, SRMT 1, SPITUR 1, SPIBUSY 1, TXBUFELM 5, RXBUFELM 5

9.
TRIDSET = 0xc
TRISDCLR = 0x22
TRISDINV = 0X11