Apendix 3. PCSpim peripherals

Keyboard

Interfaz del teclado (DB = 0xFFFF0000, Int0)

| Nombre | Dirección | Acceso | Estructura |
|----------------|-----------|--------|------------|
| Estado/órdenes | DB | LE | (,E,R |
| Datos | DB+4 | L | COD |

State and control register (Read/Write. Address = DB)

- R (bit 0, read only). Device ready flag: R = 1 every time a key is pressed
- Cancelation (R = 0): It is done when the data register is read
- E: (bit 1, read/write). Enables interrupt (if E = 1, while R = 1 the interrupt line is active)

Data register (Read only. Address = DB + 4)

COD (bits 7...0). ASCII code of the key pressed. Reading this register makes R = 0

Console

Interfaz de la consola (DB = 0xFFFF0008, Int1)

| Nombre | Dirección | Acceso | Estructura |
|----------------|-----------|--------|------------|
| Estado/órdenes | DB | LE | (,E,R |
| Datos | DB+4 | E | COD |

State and control register (Read/Write. Address = DB)

- R (bit 0, read only). Device ready flag: R = 1 when the console is available
- Cancelation (R = 0): It is done when the data register is written
- E: (bit 1, read/write). Enables interrupt (if E = 1, while R = 1 the interrupt line is active)

Data register (Read only. Address = DB + 4)

• COD (bits 7...0). ASCII code of the carácter to be written. Writing this register makes R = 0

Clock

Interfaz del reloj (DB = 0xFFFF0010, Int2)

| Nombre | Dirección | Acceso | Estructura |
|----------------|-----------|--------|------------|
| Estado/órdenes | DB | LE | (,R,E |

State and control register (Read/Write. Address = DB)

- R (bit 1, read/write). Device ready flag: R = 1 every second
- Cancelation (R = 0): It is done when writing 0 into bit R
- E: (bit 0, read/write). Enables interrupt (if E = 1, while R = 1 the interrupt line is active)