Registros CLCxSELn

Los registros CLCxSEL, contenidos en la celda lógica configurable (CLC) (https://microchip-dev.wikidot.com/8bit:clc), controlan qué entradas se usan con el CLC.

Fuentes de entrada CLC

El CLC tendrá múltiples entradas para seleccionar y cada una tendrá un código de 3 bits asociado, como se muestra en la siguiente tabla. Cada entrada se puede conectar a una de las dos puertas de datos de entrada a través de un multiplexor controlado por los registros CLCxSEL0 y CLCxSEL1.

| Data Input | lcxd1 D1S | lcxd2 D2S | lcxd3 D3S | lcxd4 D4S | CLC 1 | CLC 2 |
|------------|--------------|--------------|--------------|--------------|------------|------------|
| CLCxIN[0] | 000 | _ | _ | 100 | CLC1IN0 | CLC2IN0 |
| CLCxIN[1] | 001 | _ | _ | 101 | CLC1IN1 | CLC2IN1 |
| CLCxIN[2] | 010 | _ | _ | 110 | Reserved | Reserved |
| CLCxIN[3] | 011 | _ | _ | 111 | Reserved | Reserved |
| CLCxIN[4] | 100 | 000 | _ | _ | Fosc | Fosc |
| CLCxIN[5] | 101 | 001 | _ | _ | TMR0IF | TMR0IF |
| CLCxIN[6] | 110 | 010 | _ | _ | TMR1IF | TMR1IF |
| CLCxIN[7] | 111 | 011 | _ | _ | TMR2 = PR2 | TMR2 = PR2 |
| CLCxIN[8] | _ | 100 | 000 | _ | lcx1_out | lcx1_out |
| CLCxIN[9] | _ | 101 | 001 | _ | lcx2_out | lcx2_out |
| CLCxIN[10] | _ | 110 | 010 | _ | lcx3_out | lcx3_out |
| CLCxIN[11] | _ | 111 | 011 | _ | lcx4_out | lcx4_out |
| CLCxIN[12] | _ | _ | 100 | 000 | NCO10UT | LFINTOSC |
| CLCxIN[13] | _ | _ | 101 | 001 | HFINTOSC | ADCFRC |
| CLCxIN[14] | _ | _ | 110 | 010 | PWM3OUT | PWM1OUT |
| CLCxIN[15] | _ | _ | 111 | 011 | PWM4OUT | PWM2OUT |

(/local--files/8bit:clcsel/CLCInputs.png)

De la hoja de datos PIC16F1507

(http://ww1.microchip.com/downloads/en/DeviceDoc/40001586D.pdf).

Las selecciones de entrada están controladas por los registros CLCxSEL0 y CLCxSEL1 configurando el código de entrada de 3 bits.

• El registro CLCxSEL0 controla las puertas de entrada de datos 1 y 2. Los bits 0-2

CLCxSEL0: MULTIPLEXOR DATOS 1 Y 2 SELECCIONAR REGISTRO

| U-0 | R/W-x/u | R/W-x/u | R/W-x/u | U-0 | R/W-x/u | R/W-x/u | R/W-x/u | |
|--|---|------------------|-----------|--|------------------|-------------|-------------|--|
| _ | | LCxD2S<2:0> | | _ | | LCxD1S<2:0> | | |
| bit 7 | | | | | | | bit 0 | |
| Legend: | | | | | | | | |
| R = Readable | bit | W = Writable | bit | U = Unimple | mented bit, read | d as '0' | | |
| u = Bit is unch | anged | x = Bit is unk | nown | -n/n = Value at POR and BOR/Value at all other R | | | ther Resets | |
| '1' = Bit is set | | '0' = Bit is cle | ared | | | | | |
| bit 7 | Unimpleme | nted: Read as ' | 0' | | | | | |
| bit 6-4 | LCxD2S<2:0>: Input Data 2 Selection Control bits ⁽¹⁾ | | | | | | | |
| | 111 = CLCxIN[11] is selected for lcxd2 | | | | | | | |
| | 110 = CLCxIN[10] is selected for lcxd2 | | | | | | | |
| | | dN[9] is selecte | | | | | | |
| | 100 = CLCxIN[8] is selected for lcxd2 011 = CLCxIN[7] is selected for lcxd2 | | | | | | | |
| | | | | | | | | |
| 010 = CLCxIN[6] is selected for lcxd2 001 = CLCxIN[5] is selected for lcxd2 | | | | | | | | |
| | 000 = CLCxIN[4] is selected for lcxd2 | | | | | | | |
| bit 3 | Unimplemented: Read as '0' | | | | | | | |
| bit 2-0 | LCxD1S<2:0>: Input Data 1 Selection Control bits ⁽¹⁾ | | | | | | | |
| | 111 = CLCxIN[7] is selected for lcxd1 110 = CLCxIN[6] is selected for lcxd1 101 = CLCxIN[5] is selected for lcxd1 | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | 100 = CLCxIN[4] is selected for lcxd1 011 = CLCxIN[3] is selected for lcxd1 010 = CLCxIN[2] is selected for lcxd1 | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| 001 = CLCxIN[1] is selected for lcxd1 000 = CLCxIN[0] is selected for lcxd1 | | | | | | | | |
| UUU = GLOXIN[U] is selected for icxd i | | | | | | | | |
| localfiles/8bit:clcsel/CLCSEL0.png) | | | | | | | | |
| | | De la h | oja de da | atos PIC1 | l6F1507 | | | |

(http://ww1.microchip.com/downloads/en/DeviceDoc/40001586D.pdf) .

• El registro CLCxSEL1 controla las puertas de entrada de datos 3 y 4. Los bits 0-2 controlan la entrada 3 y los bits 4-6 controlan la entrada 4.

CLCxSEL1: MULTIPLEXOR DATOS 3 Y 4 SELECCIONAR REGISTRO

| U-0 | R/W-x/u | R/W-x/u | R/W-x/u | U-0 | R/W-x/u | R/W-x/u | R/W-x/u |
|-------|-------------|---------|---------|-----|-------------|---------|---------|
| _ | LCxD4S<2:0> | | | _ | LCxD3S<2:0> | | |
| bit 7 | | | | | | | bit 0 |

| Legend: | | |
|----------------------|----------------------|---|
| R = Readable bit | W = Writable bit | U = Unimplemented bit, read as '0' |
| u = Bit is unchanged | x = Bit is unknown | -n/n = Value at POR and BOR/Value at all other Resets |
| '1' = Bit is set | '0' = Bit is cleared | |

```
bit 7
                Unimplemented: Read as '0'
                LCxD4S<2:0>: Input Data 4 Selection Control bits<sup>(1)</sup>
bit 6-4
                111 = CLCxIN[3] is selected for lcxd4
                110 = CLCxIN[2] is selected for lcxd4
                101 = CLCxIN[1] is selected for lcxd4
                100 = CLCxIN[0] is selected for lcxd4
                011 = CLCxIN[15] is selected for lcxd4
                010 = CLCxIN[13] is selected for lcxd4
001 = CLCxIN[13] is selected for lcxd4
001 = CLCxIN[13] is selected for lcxd4
                000 = CLCxIN[12] is selected for lcxd4
bit 3
                Unimplemented: Read as '0'
                LCxD3S<2:0>: Input Data 3 Selection Control bits(1)
bit 2-0
                111 = CLCxIN[15] is selected for lcxd3
                 110 = CLCxIN[14] is selected for lcxd3
                101 = CLCxIN[13] is selected for lcxd3
                100 = CLCxIN[12] is selected for lcxd3
                 011 = CLCxIN[11] is selected for lcxd3
                 010 = CLCxIN[10] is selected for lcxd3
                 001 = CLCxIN[9] is selected for lcxd3
                000 = CLCxIN[8] is selected for lcxd3
```

(/local--files/8bit:clcsel/CLCSEL1.png)

De la hoja de datos PIC16F1507

(http://ww1.microchip.com/downloads/en/DeviceDoc/40001586D.pdf).