

PROGRAMMING TRIS REGISTER TO SET PIN DIRECTIONS

There is the switch to input data and TRISC3 = '1', meaning that the RC3 pin is INPUT. Reading function works right:

TRISC3 = '1' → RC3 is input

```

PORTC = 0x00; // Reset all Flip-Flops at PORTC
LATC  = 0x00;
TRISC = 0b11001000; // RC7, RC6 and RC3 are inputs
                        // RC3 is E_L input
    
```

Name	Value
TRISC	0b11001000
PORTC	0b00001000
LATC	'\0'
Var_E	'\0'

RSM variable read and make active-high

Let us simulate an error when configuring TRISC3: there is the switch as input circuit but TRISC3 = '0' (meaning that it is output!!) . The switch cannot be polled and reading DO NOT work.

```

PORTC = 0x00; // Reset all Flip-Flops at PORTC
LATC  = 0x00;
//TRISC = 0b11001000; // RC7, RC6 and RC3 are inputs
                        // RC3 is E_L input
// Let's simulate an error configuring RC3 as output when it is an input:
TRISC = 0b11000000;
    
```

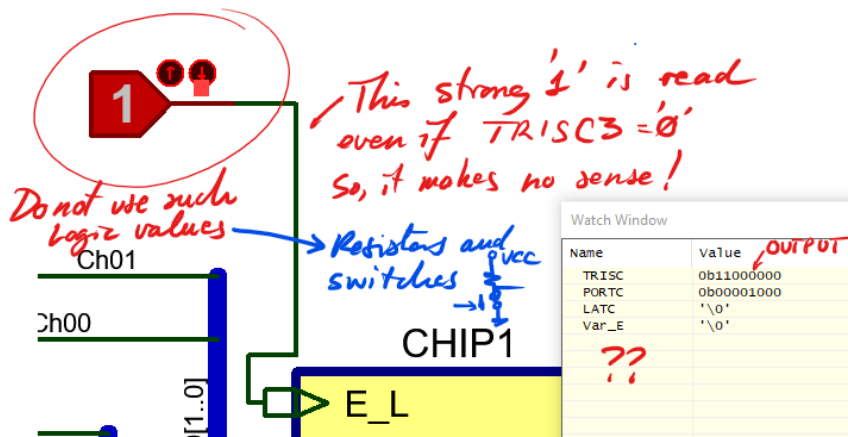
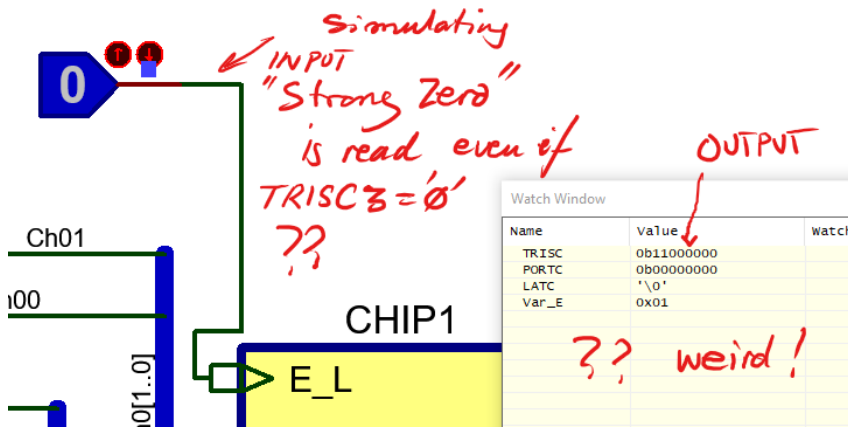
'0' → output TRISC3 = '0' → error!

Name	Value
TRISC	0b11000000
PORTC	0b00000000
LATC	'\0'
Var_E	0x01

output

IMPORTANT NOTE

Be careful with I/O when implementing the hardware circuit: DO NOT USE STRONG '1' and STRONG '0' (LOGIC STATE symbol) as inputs because TRIS values do not work correctly. For example:



If you use LOGIC STATE as inputs, be aware that TRIS register will seem that is not working properly.

Use resistors and switches or buttons to set *real* digital inputs

