Spinal CheatSheet - Tips and Tricks



```
Scala
         val myReady = Bool
val myready = nooi

foreach val vecStream(Bool),4)

foreach val vecStream.foreach(_ready := myReady) // Connect to each stream.ready the myReady
        val vecStream1 = Vec(Stream(Bool), 3)
zipped val vecStream2 = Vec(Stream(Bool), 3) (vecStream1, vecStream2), zipped.foreach(_>>_) // Connect all Streams of
         vecStream1 to vecStream2
reduce val myBits = B"00110011"
val xorBits = myBits.reduce(_ ^ _) // XOR all bits
         val addresses = Vec(UInt(8 bits),4)
         val key = UInt(8 bits)
         val hits = addresses.map(address => address === key) // hits is a Vector of Bool
         val vecStream = Vec(Stream(Bool), 4)
         val andValid = srcStreams.map(_.valid).reduce(_ && _) // AND all valid signals of
        the Stream together
                                                                          Miscellaneous
String to Bits
                     val vecOfBits = Vec("Salut".map(c => B(c.toInt,8 bits)))
                      val io = new Bundle{
                       val pulse = in Bool
Remove io prefix
                       val counter = out UInt(3 bits)
                      val area_clkB = new ClockingArea(ClockDomain(io.clkB,io.rstB)){
                       val buf0 = RegNext(area_clkA.reg) init(False)
                      addTag(crossClockDomain)
Cross Clock
                       val buf1 = RegNext(buf0) init(False)
                      } // Or by using a BufferCC
                      val area_clkB = new ClockingArea(clkB){
                       val buf1 = BufferCC(area_clkA.reg, False)
```