```
sel
class mux2 extends Component {
                                               Bits
                                                       Bits
                                        Bits
  val io = new Bundle {
    val a = Bits(INPUT, 1)
    val b = Bits(INPUT, 1)
    val sel = Bits(INPUT, 1)
    val out = Bits(OUTPUT, 1)
                                           Bits
                                                   Bits
  io.out := io.a & io.sel |
                                     \mathbf{I} mux 2
             io.b & io.sel
                                               Bits
```