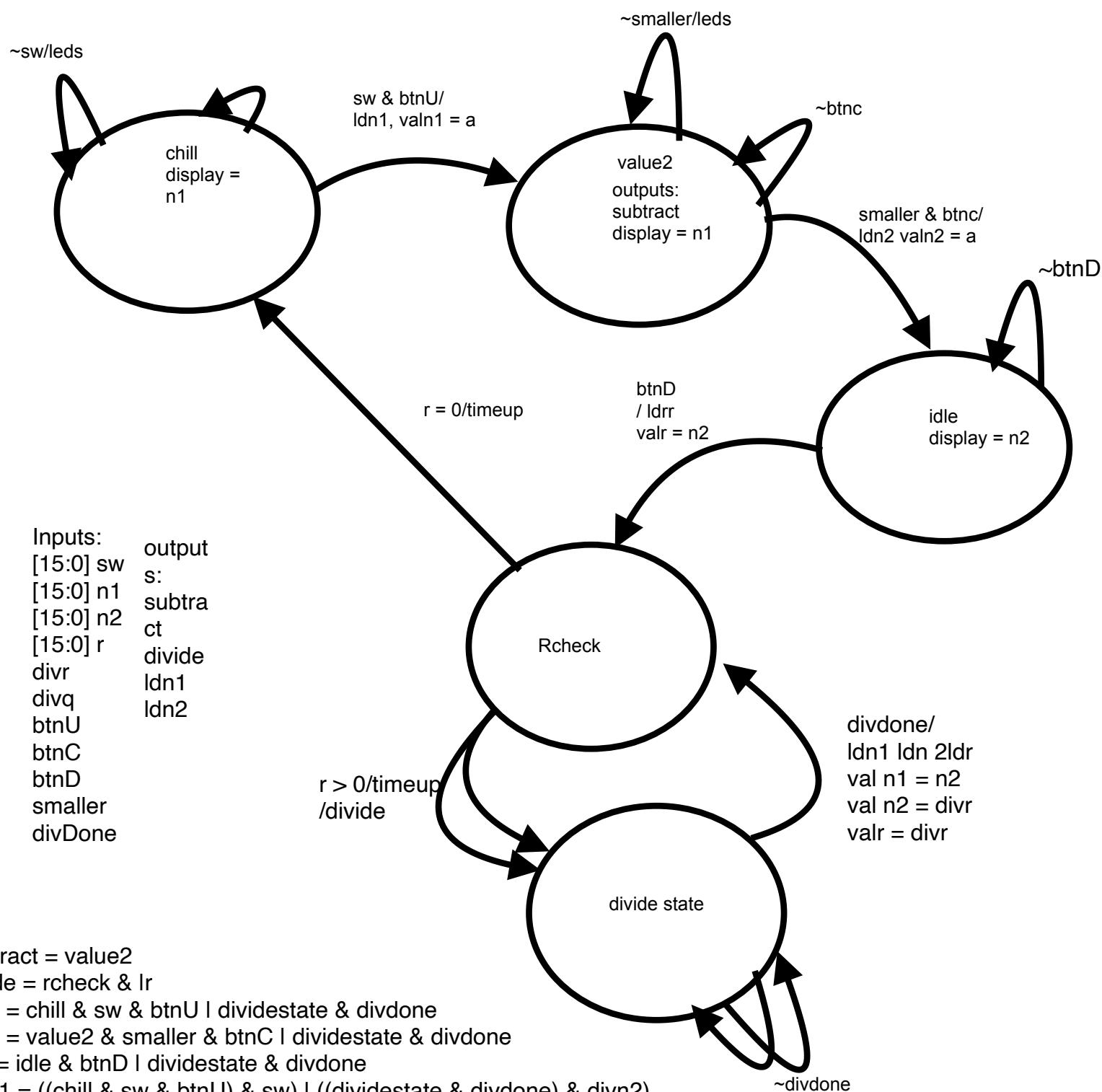


wires:  
 [15:0] n1  
 [15:0] n2  
 [15:0] r  
 [15:0] val to loadn1  
 [15:0] val to loadn2  
 [15:0] val to load r

subtract is going to send out the two values and see if n2 is bigger than n1

register n1, register n2, register r



subtract = value2

divide = rcheck & lr

ldn1 = chill & sw & btnU | dividestate & divdone

ldn2 = value2 & smaller & btnC | dividestate & divdone

ldrr = idle & btnD | dividestate & divdone

valn1 = ((chill & sw & btnU) & sw) | ((dividestate & divdone) & divn2)

valn2 = ((value2 & smaller & btnC) & sw) | ((dividestate & divdone) & divnr)

valr = ((idle & btnD) & n2) | ((dividestate & divdone) & divr)

next\_chill = Rcheck & ~r | chill & ~sw | chill & ~btnU

next\_value2 = chill & sw & btnu | value2 & ~smaller | value2 & ~btnC

next\_idle = value2 & smaller & btnC | idle & btnD

nextRcheck = idle & btnD | dividestate & divdone

nextdividestate = rcheck & r | divide & ~divdone