

20:AS

$s = (a[7] \wedge b[7]) ? \sim(a[7] \wedge b[7]) \wedge (a[6:0] \wedge b[6:0]) \wedge (a[7] \wedge b[7]) : a[7] \wedge b[7] \wedge (a[6:0] \wedge b[6:0]);$

22:AS

$\text{overflow} = a[7] \wedge b[7] \wedge (a[6:0] \wedge b[6:0]) \wedge (a[7] \wedge b[7]);$