

18:AS
 $s[3] = a[3] \wedge b[3];$

24:AS
 $\text{overflow} = a[7] \& b[7] \mid a[7] \wedge b[7] \& (a[6] \& b[6]);$

16:AS
 $s[1] = a[1] \wedge b[1];$

20:AS
 $s[5] = a[5] \wedge b[5];$

19:AS
 $s[4] = a[4] \wedge b[4];$

21:AS
 $s[6] = a[6] \wedge b[6];$

22:AS
 $s[7] = a[7] \wedge b[7];$

15:AS
 $s[0] = a[0] \wedge b[0];$

17:AS
 $s[2] = a[2] \wedge b[2];$