

17:AS  
b\_signed = (b[0] == 1'b1)? ~b : b;

```
graph TD; 17[17:AS  
b_signed = (b[0] == 1'b1)? ~b : b;] --> 19[19:AS  
s = a + b_signed;]; 17 --> 21[21:AS  
overflow = ((a[7] == b_signed[7]) && (a[7] != s[7]))? 1'b1 : 1'b0;]; 19 --> 21;
```

19:AS  
s = a + b\_signed;

21:AS  
overflow = ((a[7] == b\_signed[7]) && (a[7] != s[7]))? 1'b1 : 1'b0;