

17:AS
b_signed = ~b[7] + 1;

```
graph TD; A([17:AS  
b_signed = ~b[7] + 1;]) --> B([20:AS  
s = (a[7] ^ b_signed[7])? a + b_signed : a - b_signed;]); A --> C([22:AS  
overflow = (a[7] ^ b_signed[7])? 1'b1 : 1'b0;]);
```

20:AS
s = (a[7] ^ b_signed[7])? a + b_signed : a - b_signed;

22:AS
overflow = (a[7] ^ b_signed[7])? 1'b1 : 1'b0;