

15:AS  
s = a + b;

```
graph TD; A([15:AS  
s = a + b;]) --> B([16:AS  
overflow = ~a[7] & b[7] & s[7] | a[7] & ~b[7] & ~s[7] | a[7] & b[7] & s[7];]);
```

16:AS  
overflow = ~a[7] & b[7] & s[7] | a[7] & ~b[7] & ~s[7] | a[7] & b[7] & s[7];