

```
1  module q_decode
2  Title 'q_decode'
3
4  Declarations
5
6  S2 PIN;
7  S1 PIN;
8  B PIN;
9  A PIN;
10 S4 PIN;
11 S3 PIN istype 'reg';
12
13 " <<add your declarations here>>
14
15 Equations
16
17 S3 = (!S1 & S2 & S4 & !A & !B)
18      # ( S1 & !S2 & !S4 & !A & !B);
19
20 end q_decode
```