

## BCD to Excess 3 Code Converter

```
1
2  library ieee;
3  use ieee.std_logic_1164.all;
4
5  entity bin_to_e3 is
6  port(b: in bit_vector(0 to 3);
7        e: out bit_vector(0 to 3));
8  end bin_to_e3;
9
10
11 architecture dataflow of bin_to_e3 is
12 begin
13 e(0)<=b(0) or ( b(1)and(b(2) or b(3)) );
14 e(1)<=b(1) xor (b(2) or b(3));
15 e(2)<=not (b(2) xor b(3));
16 e(3)<= not b(3);
17 end dataflow;
```

