MODE SELECTOR:

Specification:

This component will detail the current mode that the bike light is in. It holds the state in-component, and will alternate cyclically between the 4 modes of OFF, ON, BLINKING, DIM. The device will switch upon a conditioned input.

Inputs:
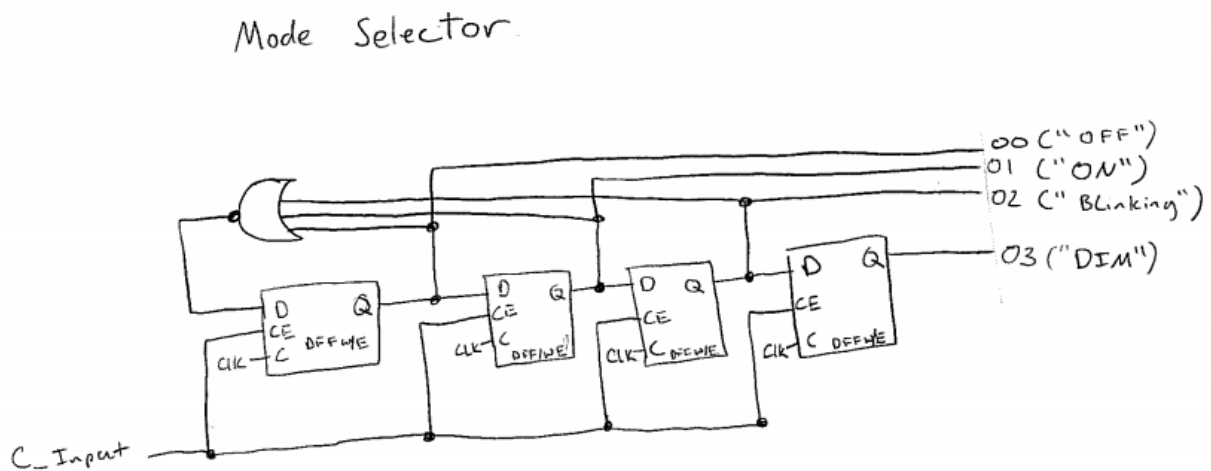
Conditioned Input: C_INPUT

Clock: CLK

Outputs:

Four OUTPUT enable wires for OFF, ON, BLINK, DIM.

Schematic:

Use Pre-Baked Component 4 stage Ring Counter Schematic as shown below:



Performance:

| Subcomponent | Cost per | #Used | Total |
|---|---|---|---|
| DFF w/E | 20 | 4 | 80 |
| 3NOR | 3 | 1 | 2 |

Total GIE: 82