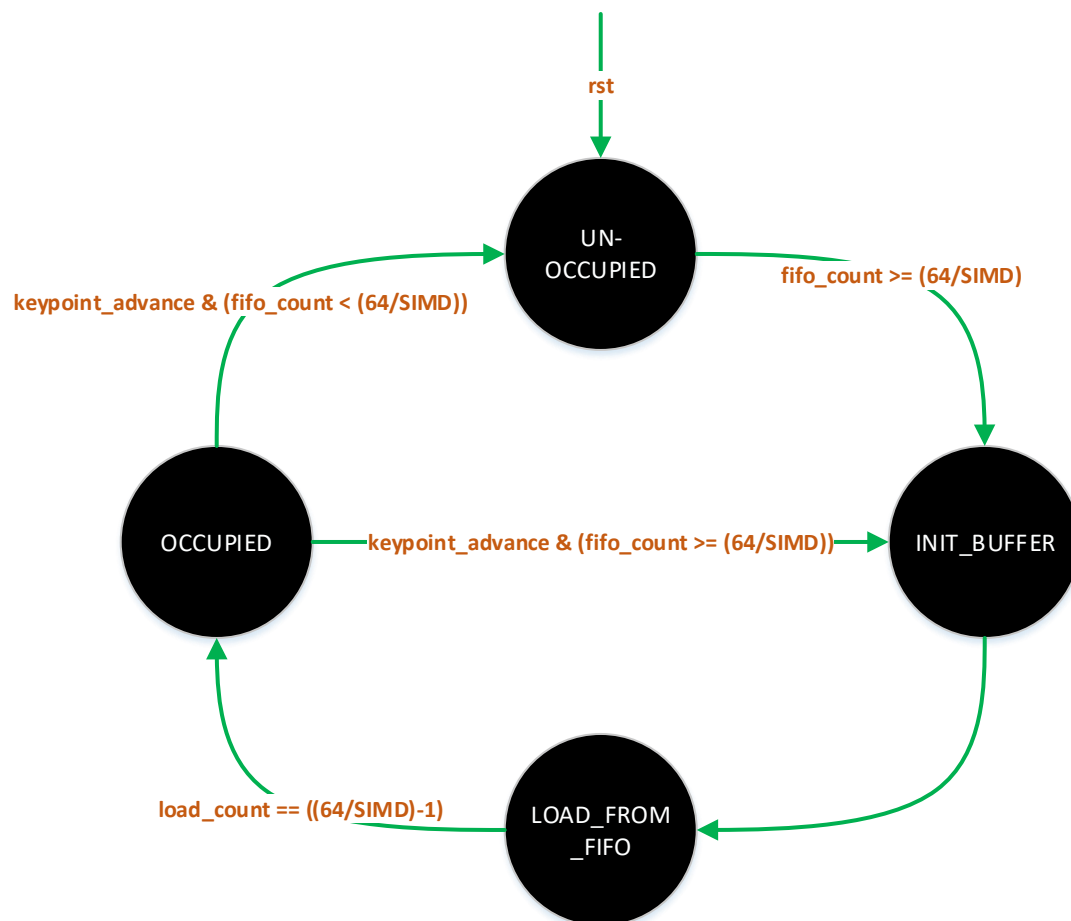


secondary_buffer



`descriptor_valid = (state == occupied)`

`queue_depleted = (state == unoccupied)`

`queue_space_available = (FIFO_DEPTH - fifo_count) >= (64/SIMD)`

`buffer_load_init = (state == INIT_BUFFER)`

`buffer_load_enable = (state == LOAD_FROM_FIFO)`

```

if (state == INIT_BUFFER)
    load_count <= 0;
else if (state == LOAD_FROM_FIFO)
    if (buffer_load_valid)
        load_count <= load_count + 1;
  
```