



Next State Logic

```

if (clear)
    rollover_flag = 0
    next_count = 0
else if (count_enable)
    if (count >= rollover_val)
        rollover_flag = 1
        next_count = 1
    else
        next_count = count + 1
        rollover_flag = 0
else
    next_count = count;
    rollover_flag = 0

```