| Inputs        |     |    |        |   |       | Outputs    |        |               |        |        |        |          |
|---------------|-----|----|--------|---|-------|------------|--------|---------------|--------|--------|--------|----------|
| Current State | rst | go | CNT==0 | R <y< th=""><th>error</th><th>Next State</th><th>mux_cw</th><th>UD_counter_cw</th><th>SRX_cw</th><th>SRY_cw</th><th>SRR_cw</th><th>done_err</th></y<> | error | Next State | mux_cw | UD_counter_cw | SRX_cw | SRY_cw | SRR_cw | done_err |
| -             | 1   | _  | _      | -   | -     | 0          | b100   | х             | х      | х      | х      | b00      |
| 0             | _   | 0  | -      | _   | -     | 0          | b100   | x             | х      | х      | х      | b00      |
| 0             | -   | 1  | _      | _   | -     | 1          | b100   | x             | Х      | х      | x      | b00      |
| 1             | _   | _  | -      | _   | -     | 2          | b100   | b1001011      | b0010  | b01    | b1000  | b00      |
| 2             | -   | -  | -      | -   | -     | 3          | b100   | b0000001      | b0100  | b00    | b0100  | b00      |
| 3             | -   | -  | -      | 0   | -     | 4          | b100   | b0000011      | b0000  | b00    | b0000  | b00      |
| 3             | -   | -  | -      | 1   | -     | 5          | b100   | b0000011      | b0000  | b00    | b0001  | b00      |
| 4             | -   | 0  | -      | -   | -     | 3          | b100   | b0000001      | b0101  | b00    | b0100  | b00      |
| 4             | _   | 1  | _      | _   | _     | 6          | b100   | b0000001      | b0101  | b00    | b0100  | b00      |
| 5             | -   | 0  | -      | -   | -     | 3          | b100   | b0000001      | b0101  | b00    | b0100  | b00      |
| 5             | -   | 1  | _      | -   | -     | 6          | b100   | b0000001      | b0101  | b00    | b0100  | b00      |
| 6             | _   | _  | _      | _   | _     | 7          | b100   | b0000001      | b0000  | b00    | b0010  | b00      |
| 7             | -   | -  | -      | _   | 0     | 0          | b111   | b0000001      | b0000  | b00    | b0010  | b10      |
| 7             | -   | -  | -      | -   | 1     | 7          | b100   | b0000001      | b0000  | b00    | b0010  | b01      |