|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| state | SerIn | uc3co | finish\_signal | uc3r | uc3e | sre | error\_flag | valid\_output | uc9e | uc9l | next state |
| start | 1 | x | x | 1 | 0 | 0 | 0 | 0 | 0 | 0 | start |
| start | 0 | x | x | 1 | 0 | 0 | 0 | 0 | 0 | 0 | get info |
| get info | x | 1 | x | 0 | 1 | 1 | 0 | 0 | 0 | 0 | get first data |
| get info | x | 0 | x | 0 | 1 | 1 | 0 | 0 | 0 | 0 | get info |
| get first data | x | x | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | finish |
| get first data | x | x | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | get data |
| get data | x | x | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | finish |
| get data | x | x | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | get data |
| finish | 1 | x | x | 0 | 0 | 0 | 0 | 0 | 0 | 0 | start |
| finish | 0 | x | x | 0 | 0 | 0 | 0 | 0 | 0 | 0 | error |
| error | 1 | x | x | 0 | 0 | 0 | 1 | 0 | 0 | 0 | start |
| error | 0 | x | x | 0 | 0 | 0 | 1 | 0 | 0 | 0 | error |

start = 000 get first data = 101 finish = 011

get info = 001 get data = 010 error = 100