.CSEG

.ORG 0x01

1 SEI

2 MOV R0, 0

Main: 3 BRN Main

ISR: 4 ADD R0, 1

5 OUT R0, 0x01

6 RETIE

.ORG 0x3FF

3FF BRN ISR

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| INT\_IN | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| State | INIT | F | E | F | E | F | E | F | E | I | F | E | F | E | F | E | F | E | F | E | I | F | E | F | E | F |  |
| PC | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 3 | 3ff | 0 | 4 | 5 | 5 | 6 | 6 | 7 | 3 | 4 | 3 | 3ff | 0 | 4 | 5 | 5 |  |
| Instruction |  | AN | AN | SE | SE | MO | MO | BR | BR | AD | BR | BR | AN | AD | OU | OU | RE | RE | AN | BR | AD | BR | BR | AN | AD | O |  |
| PC\_LD |  |  |  |  |  |  |  |  | 1 | 1 |  | 1 |  |  |  |  |  | 1 |  | 1 | 1 |  | 1 |  |  |  |  |
| I\_SET |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| **I\_FLAG** |  |  |  |  |  | 1 | 1 | 1 | 1 | 1 |  |  |  |  |  |  |  |  | 1 | 1 | 1 |  |  |  |  |  |  |
| SP\_INCR |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| SP\_DECR |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |
| SCR\_DATA\_SEL |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |
| FLG\_LD\_SEL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| **SP** |  |  |  |  |  |  |  |  |  |  | FF | FF | FF | FF | FF | FF | FF | FF |  |  |  | FF | FF | FF | FF | FF |  |
| **R0** |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |  |
| Adry |  | 0 | 0 | 0 | 0 |  |  | 3 | 3 |  | 3 |  |  | 0 |  |  |  |  |  | 3 |  | 3 |  |  | 0 |  |  |