**State 2:**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  | | --- | --- | --- | | MemToReg |  |  | | RW | MW | MR | SP? | ALUSrc | FetchEnable | DecEnable |  |
| 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | LDM |
| 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | LDD |
| X | 0 | 1 | 0 | 0 | 1 | 1 | 1 | STD |
| X | 0 | 0 | 1 | 1 | X | 0 | 0 | Interrupt(S1) |
| X | 0 | 1 | 0 | 1 | X | 0 | 0 | Interrupt(S2) |
| X | 0 | 1 | 0 | 1 | X | 0 | 0 | Interrupt(S3) |
| X | 0 | 0 | 0 | 0 | X | 1 | 1 | Interrupt(S4) |

State1 is not to be modified, state3 is to be totally removed.

EAH is high in state1 in case of LDD & STD only

From EA is high in state2 in case of LDD & STD only

LDM has no Load-Use case hazard.