|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **State** | **000** | **001** | **010** | **011** | **100** | **101** | **110** | **111** |
| **GoN** |  |  |  |  |  |  |  |  |
| **WaitN** |  |  |  |  |  |  |  |  |
| **GoE** |  |  |  |  |  |  |  |  |
| **WaitE** |  |  |  |  |  |  |  |  |
| **GoP** |  |  |  |  |  |  |  |  |
| **WaitPOn1** |  |  |  |  |  |  |  |  |
| **WaitPOff1** |  |  |  |  |  |  |  |  |
| **WaitPOn2** |  |  |  |  |  |  |  |  |
| **WaitPOff2** |  |  |  |  |  |  |  |  |

**Input: N, E, P**