**Memory Decoding:**

ROM1(Even) - 00000H, 00002H, 00004H …., 01FFEH

ROM1(Odd) - 00001H, 00003H, 00005H, …., 01FFFH

RAM1(Even) - 02000H, 02002H, 02004H, …., 02FFEH

RAM1(Odd) - 02001H, 02003H, 02005H, …., 02FFFH

ROM2(Even) - 04000H, 04002H, 04004H, …., 5FFFEH

ROM2(Odd) - 04001H, 04003H, 04005H, …., 5FFFFH

**ROM1 - 00000H -> 01FFFH**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A19 | A18 | A17 | A16 | A15 | A14 | A13 | A12 | A11 | A10 | A9 | …. | A0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ... | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | ... | 1 |

**RAM1 - 02000H -> 02FFFH**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A19 | A18 | A17 | A16 | A15 | A14 | A13 | A12 | A11 | A10 | A9 | …. | A0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | ... | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | ... | 1 |

**ROM2 - 04000H -> 05FFFH**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A19 | A18 | A17 | A16 | A15 | A14 | A13 | A12 | A11 | A10 | A9 | …. | A0 |
| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | ... | 0 |
| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | …. | 1 |

Address lines required for decoding – A13, A14

2:4 DECODERS SUFFIECIENT FOR THE PURPOSE