

$A = 15 \ 14 \ 13 \ 12 \ 11 \ 10 \ 9 \ 8 \ 7 \ 6 \ 5 \ 4 \ 3 \ 2 \ 1 \ 0$   
 $D000 \quad 1101 \quad 0000 \quad 00XX \quad XXXX$

NAND

|    |   |
|----|---|
| 00 | 1 |
| 01 | 1 |
| 10 | 1 |
| 11 | 0 |

AND

|    |   |
|----|---|
| 00 | 0 |
| 01 | 0 |
| 10 | 0 |
| 11 | 1 |

OR

|    |   |
|----|---|
| 00 | 0 |
| 01 | 1 |
| 10 | 1 |
| 11 | 1 |

NOR

|    |   |
|----|---|
| 00 | 1 |
| 01 | 0 |
| 10 | 0 |
| 11 | 0 |

