Yashal Saleem - NOR, XNOR, RIGHT ARBITER Documentation

NOR

1. Name - NOR
2. Inputs A and B; both are 16 bits
3. Output out; size of 16 bits
4. No interfaces used for NOR gate
5. No controls used for NOR gate
6. This gate will take 2 inputs and “nor” them together, meaning that the output will be 1 only if all inputs are 0.

XNOR

1. Name - XNOR
2. Inputs A and B; both are 16 bits
3. Output out; size of 16 bits
4. No interfaces used for XNOR gate
5. No controls used for XNOR gate
6. This gate will output a 1 if both inputs are the same, such as if both of them are 0 or both of them are 1.

RIGHT ARBITER

1. Name - Right Arbiter
2. Input A; size 16 bits
3. Output out; size 16 bits
4. Wire interface called cas is used; size 16 bits
5. No controls used for Right Arbiter
6. This component will take in one input and return a one hot binary number which will have the least significant bit that has a 1.