

It is possible to configure the CC320 trigger timing controller to conduct simple logic operations based on two inputs. The operators that can be achieved are NOT, AND, NAND, OR and NOR. The output must be set to buffer mode, which makes the output the same signal as the input.

The gate feature of the CC320 gives an AND operation. This operation can be used to provide the other functions, using the following configurations (these examples use IP1, IP2 and OP1):

| Operation | Configuration | Ethernet Command | Result |
|-----------|---|------------------|--|
| NOT | OP1 = buffer mode IP1 = Trigger for OP1 Flag O (inverted output) | RS1,10,1,0,2 | If IP1=0 then OP1=1 If IP1=1 then OP1=0 |
| AND | OP1 = buffer mode IP1 = Trigger for OP1 IP2 = Gate for OP1 | RS1,10,1,2,0 | If IP1=0, IP2=0 then OP1=0 If IP1=0, IP2=1 then OP1=0 If IP1=1, IP2=0 then OP1=0 If IP1=1, IP2=1 then OP1=1 |
| NAND | OP1 = buffer mode IP1 = Trigger for OP1 IP2 = Gate for OP1 Flag O (inverted output) | RS1,10,1,2,2 | If IP1=0, IP2=0 then OP1= 1 If IP1=0, IP2=1 then OP1= 1 If IP1=1, IP2=0 then OP1= 1 If IP1=1, IP2=1 then OP1= 0 |
| OR | OP1 = buffer mode IP1 = Trigger for OP1 IP2 = Gate for OP1 Flag O (inverted output) Flag I (inverted input) Flag G (inverted gate) | RS1,10,1,2,7 | If IP1=0, IP2=0 then OP1=0 If IP1=0, IP2=1 then OP1=1 If IP1=1, IP2=0 then OP1=1 If IP1=1, IP2=1 then OP1=1 |
| NOR | OP1 = buffer mode IP1 = Trigger for OP1 IP2 = Gate for OP1 Flag I (inverted output) Flag G (inverted Gate) | RS1,10,1,2,5 | If IP1=0, IP2=0 then OP1=1 If IP1=0, IP2=1 then OP1=0 If IP1=1, IP2=0 then OP1=0 If IP1=1, IP2=1 then OP1=0 |