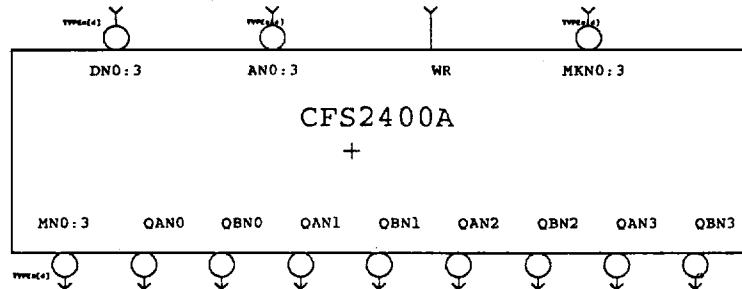


CFS2400A 4x4 CAM Module with Mask

DESCRIPTION: In addition to the functions of CFS2000A, CFS2400A has four active-low mask inputs, MKN0:3. MKN blocks data input to that bit and forces a match of the bit of all words.

LOGIC SYMBOL:



INPUTS (LOADING IN TRANSISTOR PAIRS):

DN0:3(3), AN0:3(2), WR(4), MKN0:3(8)

OUTPUTS (DRIVE IN (#P,#N)):

MNO:3(1,0.25), QAN0(0.5,0.5), QBN0(0.5,0.5), QAN1(0.5,0.5),
QBN1(0.5,0.5), QAN2(0.5,0.5), QBN2(0.5,0.5), QAN3(0.5,0.5),
QBN3(0.5,0.5)

GATE COUNT:

GATES USED = 215

AREA USED = 271

PROPAGATION DELAY*:

SET-UP AND HOLD TIMES (RELATIVE TO WR)*:

| OUTPUT INPUT | MNO:3 | QAN0:3 QBN0:3 |
|-----------------|-------|------------------|
| DN0:3 | 6.1 | 6.4 |
| AN0:3 | 10.9 | 2.7 |
| WR | 9.6 | 7.9 |
| MKN0:3 | 2.5 | 6 |

| FROM INPUT | SET-UP TIME NS | HOLD TIME NS |
|---------------|-------------------|-----------------|
| DN0:3 | 0.8 | 2.5 |
| AN0:3 | 1.3 | 2.5 |
| MKN0:3 | 0 | 4.9 |

* MINIMUM WR WIDTH: 3.2 NS

* 10K, NOMINAL CONDITIONS (IN NS)