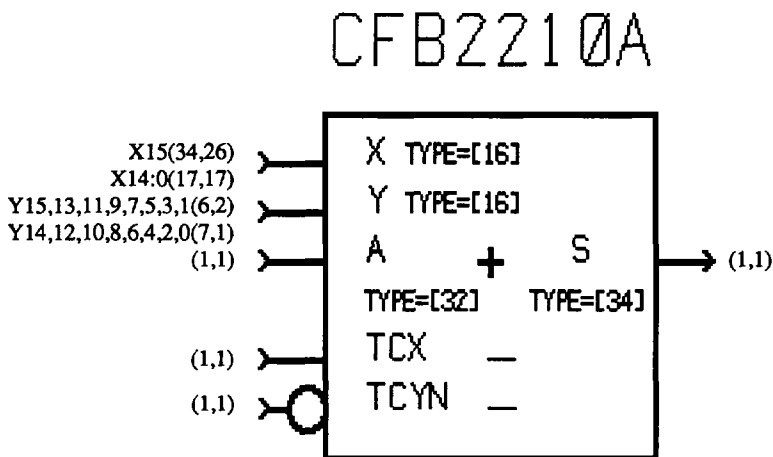


GENERAL DESCRIPTION: 16 X 16 MIXED-MODE MAC, 32-BIT ADDEND

CFB2210A is a 16 x 16 mixed-mode complement multiplier. It has a 32-bit addend, which is in two's complement and left-shifted by 0 positions. Sign interpretation of the multiplier and multiplicand is controlled by TCX and TCYN: the multiplicand is unsigned if TCX is HIGH, and two's complement if it is LOW. TCYN controls the multiplier in the opposite manner. The architecture of the multiplier can be broken down into the following modules: Booth Recoder, Wallace Tree, and Final Adder.

PIN CONNECTION DIAGRAM:**FEATURES:**

- 16-bit mixed-mode multiplicand
- 16-bit mixed-mode multiplier
- 32-bit addend
- 34-bit mixed-mode result

EQUIVALENT USED GATES: 2446 GATES
(for rough area estimates)

THIS MEGAFUNCTION CONSISTS OF :
2446 soft-coded gates.

POWER: NOT AVAILABLE.

FAULT COVERAGE(%): 74%

PIN DESCRIPTION:

INPUT

=====

X15:0 MULTIPLICAND MSB TO LSB.
 TCX MULTIPLICAND MODE CONTROL.
 Y15:0 MULTIPLIER MSB TO LSB.
 TCYN MULTIPLIER MODE CONTROL.
 A31:0 ADDEND MSB TO LSB.

OUTPUT

=====

S33:0 MAC RESULT MSB TO LSB.

AC CHARACTERISTICS: (DELAY PREDICTED BY LPACE)

FROM	TO	10K TYPICAL DELAY (ns)
ANY X	ANY S	31.0
ANY Y	ANY S	32.9

ASSUMING OUTPUT LOADING OF 2