



CY54/74FCT480T

Dual 8-Bit Parity Generator/Checker

Features

- Function, pinout and drive compatible with FCT and F logic
- FCT-A speed at 7.5 ns max. (Com'l)
FCT-B speed at 5.6 ns max. (Com'l)
- Reduced V_{OH} (typically = 3.3V) versions of equivalent FCT functions
- Edge-rate control circuitry for significantly improved noise characteristics
- Power-off disable feature
- Matched rise and fall times
- ESD > 2000V

- Fully compatible with TTL input and output logic levels
- Sink Current 64 mA (Com'l), 32 mA (Mil)
- Source Current 32 mA (Com'l), 12 mA (Mil)
- Two 8 bit parity generator/checkers
- Open drain Active LOW parity error output
- Expandable for larger word widths

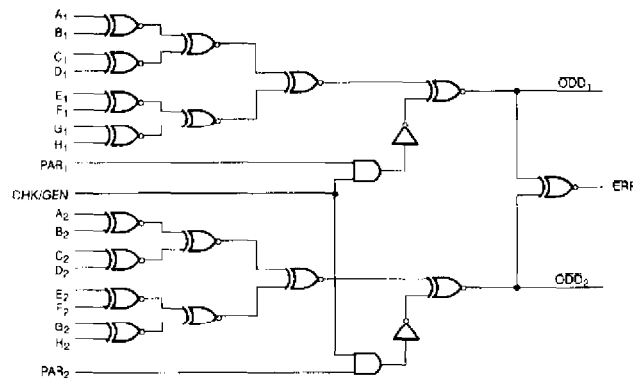
Functional Description

The FCT480T is a high-speed dual 8-bit parity generator/checker. Each parity generator/checker accepts eight data bits

and one parity bit as inputs, and generates a sum and parity error output. The FCT480T can be used in ODD parity systems. The parity error output is open-drain, designed for easy expansion of the word width by a wired-OR connection of several FCT480T type devices. Since additional logic is not needed, the parity generation or checking times remain the same as for an individual FCT480T device.

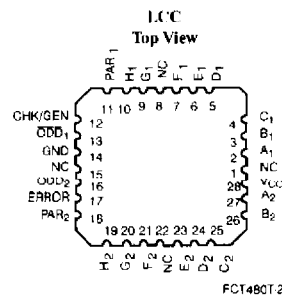
The outputs are designed with a power-off disable feature to allow for live insertion of boards.

Logic Block Diagram

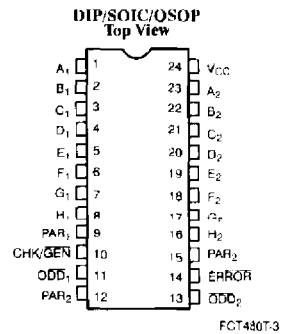


FCT480T-1

Pin Configurations



FC1480T-2



FCT480T-3



Ordering Information

| Speed (ns) | Ordering Code | Package Name | Package Type | Operating Range |
|------------|-----------------|--------------|---------------------------------|-----------------|
| 5.0 | CY74FCT480BTPC | P13/13A | 24-Lead (300-Mil) Molded DIP | Commercial |
| | CY74FCT480BTOC | Q13 | 24-Lead (150-Mil) QSOP | |
| | CY74FCT480BTSOC | S13 | 24-Lead (300-Mil) Molded SOIC | |
| 7.0 | CY54FCT480RTDMB | D14 | 24-Lead (300-Mil) CerDIP | Military |
| | CY54FCT480BTLMB | L64 | 28-Square Leadless Chip Carrier | |
| 7.5 | CY74FCT480ATPC | P13/13A | 24-Lead (300-Mil) Molded DIP | Commercial |
| | CY74FCT480ATOC | Q13 | 24-Lead (150-Mil) QSOP | |
| | CY74FCT480ATSOC | S13 | 24-Lead (300-Mil) Molded SOIC | |
| 9.5 | CY54FCT480ATDMB | D14 | 24-Lead (300-Mil) CerDIP | Military |
| | CY54FCT480ATLMB | L64 | 28-Square Leadless Chip Carrier | |
| 13.0 | CY74FCT480TPC | P13/13A | 24-Lead (300-Mil) Molded DIP | Commercial |
| | CY74FCT480TOC | Q13 | 24-Lead (150-Mil) QSOP | |
| | CY74FCT480TSOC | S13 | 24-Lead (300-Mil) Molded SOIC | |
| 17.0 | CY54FCT480TDMB | D14 | 24-Lead (300-Mil) CerDIP | Military |
| | CY54FCT480TLMB | L64 | 28-Square Leadless Chip Carrier | |

DOCUMENT # 38-00281-A