



# CY54/74FCT2373T CY54/74FCT2573T

## 8-Bit Latches

### Features

- Function and pinout compatible with the fastest bipolar logic
- 25Ω output series resistors to reduce transmission line reflection noise
- FCT-C speed at 4.7 ns max. (Com'l)  
FCT-A speed at 5.2 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 12 mA (Com'l), 12 mA (Mil)
- Source current 15 mA (Com'l), 12 mA (Mil)

### Functional Description

The FCT2373T and FCT2573T are 8-bit, high-speed CMOS TTL-compatible buffered latches with three-state outputs that are ideal for driving high-capacitance loads, such as memory and address buffers. On-chip 25Ω termination resistors have been added to the outputs to reduce system noise caused by reflections. FCT2373T can be used to replace

FCT373T, and FCT2573T to replace FCT573T to reduce noise in an existing design.

When latch enable (LE) is HIGH, the flip-flops appear transparent to the data. Data that meets the required set-up times are latched when LE transitions from HIGH to LOW. Data appears on the bus when the output enable ( $\overline{OE}$ ) is LOW. When output enable is HIGH, the bus output is in the high impedance state. In this mode, data can still be entered into the latches.

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

