



FAST CMOS OCTAL TRANSCEIVER/ REGISTER (3-STATE)

IDT74FCT2646AT/CT

FEATURES:

- A and C grades
- Low input and output leakage $\leq 1\mu\text{A}$ (max.)
- CMOS power levels
- True TTL input and output compatibility:
 - $V_{OH} = 3.3V$ (typ.)
 - $V_{OL} = 0.3V$ (typ.)
- Resistor outputs (-15mA IOH, 12mA IOL)
- Meets or exceeds JEDEC standard 18 specifications
- Reduced system switching noise
- Power off disable outputs permit "live insertion"
- Available in SOIC, QSOP, and TSSOP packages

DESCRIPTION:

The FCT2646T consists of a bus transceiver with 3-state D-type flip-flops and control circuitry arranged for multiplexed transmission of data directly from the data bus or from the internal storage registers. The FCT2646T utilizes the enable control (\overline{G}) and direction (DIR) pins to control the transceiver functions.

SAB and SBA control pins are provided to select either real-time or stored data transfer. The circuitry used for select control will eliminate the typical decoding glitch that occurs in a multiplexer during the transition between stored and real-time data. A low input level selects real-time data and a high selects stored data.

Data on the A or B data bus, or both, can be stored in the internal D flip-flops by low-to-high transitions at the appropriate clock pins (CPAB or CPBA), regardless of the select or enable control pins.

The FCT2646T have balanced drive outputs with current limiting resistors. This offers low ground bounce, minimal undershoot and controlled output fall times-reducing the need for external series terminating resistors. FCT2646T parts are plug-in replacements for FCT646T parts.

FUNCTIONAL BLOCK DIAGRAM

