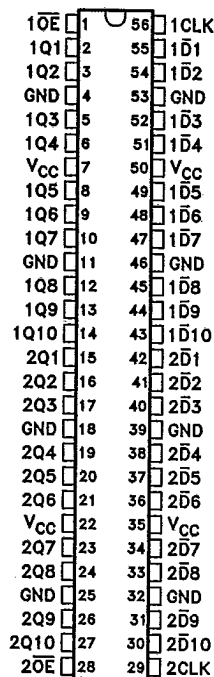


T-46-07-12 54AC16822, 54ACT16822
74AC16822, 74ACT16822
20-BIT D-TYPE FLIP-FLOPS WITH 3-STATE OUTPUTS

TI0253—D3576, JUNE 1990

- Members of Texas Instruments Widebus™ Family
- Packaged in Shrink Small-Outline 300-mil Packages (SSOP) and 380-mil Fine-Pitch Ceramic Flat Packages Using 25-mil Center-to-Center Pin Spacings
- Inputs are TTL- or CMOS-Voltage Compatible
- 3-State Outputs Drive Bus Lines Directly
- Flow-Through Architecture Optimizes PCB Layout
- Distributed V_{CC} and GND Pin Configuration Minimizes High-Speed Switching Noise
- EPIC™ (Enhanced-Performance Implanted CMOS) 1-μm Process
- 500-mA Typical Latch-Up Immunity at 125°C

54AC16822, 54ACT16822 ... WD PACKAGE
74AC16822, 74ACT16822 ... DL PACKAGE
(TOP VIEW)



description

The 'AC16822 and 'ACT16822 are inverting 20-bit D-type flip-flops composed of two 10-bit sections with separate control signals. For either 10-bit flip-flop section, the inverse of the data present at the corresponding D inputs is stored in the flip-flops on the rising edge of the clock input (1CLK or 2CLK) and appears on the appropriate Q outputs if the output enable 1OE (or 2OE) is low. If 1OE (or 2OE) is high, the outputs are in the high-impedance state. 1OE (or 2OE) does not affect the operation of the flip-flops. Previously stored data can be retained or new data can be entered while the outputs are in the high-impedance state.

FUNCTION TABLE, EACH SECTION

INPUTS		FLIP-FLOP DATA	Q OUTPUTS
CLK	OE		
↑	H	Current D Data	Z
L	H	Previous D Data	Z
↑	L	Current D Data	Inverse of Current D Data
L	L	Previous D Data	Inverse of Previous D Data

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PRODUCT PREVIEW

20-BIT D-TYPE FLIP-FLOPS WITH 3-STATE OUTPUTS

T-46-07-12

D3578, JUNE 1990—TI0253

The 54AC16822 and 54ACT16822 are characterized over the full military temperature range of -55°C to 125°C . The 74AC16822 and 74ACT16822 are characterized for operation from -40°C to 85°C .