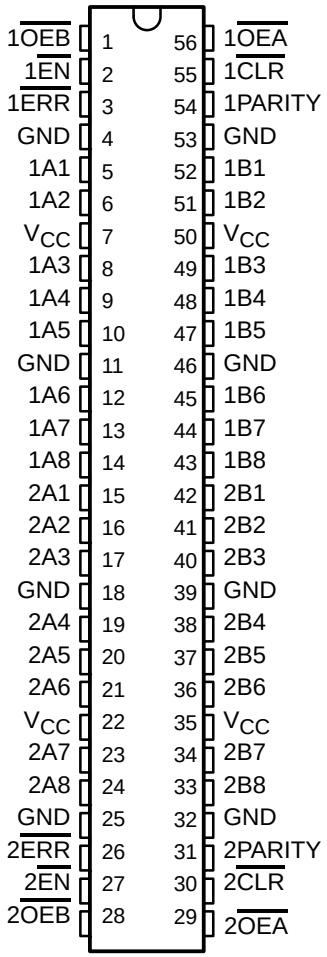
- **Members of Texas Instruments Widebus™ Family**
- **Packaged in Shrink Small-Outline 300-mil Packages (SSOP) and 380-mil Fine-Pitch Ceramic Flat Packages Using 25-mil Center-to-Center Pin Spacings**
- **Inputs are TTL- or CMOS-Voltage Compatible**
- **3-State Outputs Drive Bus Lines Directly**
- **Flow-Through 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**

l6854, 74ACT16854 . . . DL PACKAGE
l6854, 54ACT16854 . . . WD PACKAGE

(T0P VIEW)



description

The ’AC16854 and ’ACT16854 contain two inverting 8-bit-to-9-bit parity bus transceivers. For either transceiver, when data is transmitted from the A bus to the B bus, an odd-parity bit is generated and output on the parity I/O pin (1PARITY or 2PARITY). When data is transmitted from the B bus to the A bus, 1PARITY (or 2PARITY) is configured as an input and combined with the B input data to generate an active-low error flag if odd parity is not detected.

The error output (1$\overline{\text{ERR}}$ or 2$\overline{\text{ERR}}$) is an open-collector output. 1$\overline{\text{ERR}}$ (or 2$\overline{\text{ERR}}$) can be passed, sampled, stored, and cleared from the latch using the latch enable (1$\overline{\text{EN}}$ and 2$\overline{\text{EN}}$) and clear (1$\overline{\text{CLR}}$ and $\overline{\text{2CLR}}$) inputs.

The 74AC16854 and 74ACT16854 are packaged in TI’s shrink small-outline package (SSOP) with 25-mil center-to-center pin spacings. This package provides twice the I/O pin count and functionality of a standard small-outline package in the same printed-circuit-board area.

The ’AC16854 has CMOS-compatible input thresholds. The ’ACT16854 has TTL-compatible input thresholds.

The 54AC16854 and 54ACT16854 are characterized over the full military temperature range of –55°C to 125°C. The 74AC16854 and 74ACT16854 are characterized for operation from –40°C to 85°C.

PRODUCT PREVIEW

EPIC and Widebus are trademarks of Texas Instruments Incorporated.

TEXAS INSTRUMENTS
POST OFFICE BOX 655303 • DALLAS, TEXAS 75265

IMPORTANT NOTICE

Texas Instruments (TI) reserves the right to make changes to its products or to discontinue any semiconductor product or service without notice, and advises its customers to obtain the latest version of relevant information to verify, before placing orders, that the information being relied on is current.

TI warrants performance of its semiconductor products and related software to the specifications applicable at the time of sale in accordance with TI's standard warranty. Testing and other quality control techniques are utilized to the extent TI deems necessary to support this warranty. Specific testing of all parameters of each device is not necessarily performed, except those mandated by government requirements.

Certain applications using semiconductor products may involve potential risks of death, personal injury, or severe property or environmental damage ("Critical Applications").

TI SEMICONDUCTOR PRODUCTS ARE NOT DESIGNED, INTENDED, AUTHORIZED, OR WARRANTED TO BE SUITABLE FOR USE IN LIFE-SUPPORT APPLICATIONS, DEVICES OR SYSTEMS OR OTHER CRITICAL APPLICATIONS.

Inclusion of TI products in such applications is understood to be fully at the risk of the customer. Use of TI products in such applications requires the written approval of an appropriate TI officer. Questions concerning potential risk applications should be directed to TI through a local SC sales office.

In order to minimize risks associated with the customer's applications, adequate design and operating safeguards should be provided by the customer to minimize inherent or procedural hazards.

TI assumes no liability for applications assistance, customer product design, software performance, or infringement of patents or services described herein. Nor does TI warrant or represent that any license, either express or implied, is granted under any patent right, copyright, mask work right, or other intellectual property right of TI covering or relating to any combination, machine, or process in which such semiconductor products or services might be or are used.