54AC16828, 54ACT16828 74AC16828, 74ACT16828

20-BIT BUFFERS AND LINE DRIVERS WITH 3-STATE OUTPUTS

SCAS404 - 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

description

The 'AC16828 and 'ACT16828 are inverting 20-bit buffers composed of two 10-bit sections with separate output-enable signals. For either 10-bit buffer section, the two output enable inputs ($1\overline{G}1$ and $1\overline{G}2$ or $2\overline{G}1$ and $2\overline{G}2$) must both be low for the corresponding Y outputs to be active. If either output-enable input is high, the outputs of that 10-bit buffer section are in the high-impedance state

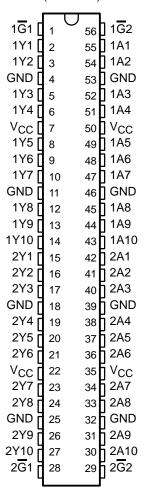
The 74AC16828 and 74ACT16828 are packaged in TI's shrink small-outline package (SSOP) with 25-mil center-to-center pin spacings. This package provides twice the I/O pin count and functionality of a standard small-outline package in the same printed-circuit-board area.

The 'AC16828 has CMOS-compatible input thresholds. The 'ACT16828 has TTL-compatible input thresholds.

The SN54AC16828 and SN54ACT16828 are characterized over the full military temperature range of –55°C to 125°C. The SN74AC16828 and SN74ACT16828 are characterized for operation from –40°C to 85°C.

16828, 74ACT16828 . . . DL PACKAGE 16828, 54ACT16828 . . . WD PACKAGE

(TOP VIEW)



EPIC and Widebus are trademarks of Texas Instruments Incorporated.



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.

Copyright © 1996, Texas Instruments Incorporated