TEXAS INSTRUMENTS

Interface Circuits

Data Transmission and Control Circuits, Peripheral Drivers/Power Actuators, Display Drivers

Data Book

1991   *Linear Products*

Linear Products Quick Reference Guide

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● Linear Circuits Vol 1 Amplifiers, Comparators, and Special Functions	Operational Amplifiers Voltage Comparators Video Amplifiers Hall-Effect Devices Timers and Current Mirrors Magnetic-Memory Interface Frequency-to-Voltage Converters Sonar Ranging Circuits/Modules Sound Generators	SLYD003, 1989
● Linear Circuits Vol 2 Data Acquisition and Conversion	A/D and D/A Converters DSP Analog Interface Analog Switches and Multiplexers Switched-Capacitor Filters	SLYD004, 1989
● Linear Circuits Vol 3 Voltage Regulators and Supervisors	Supervisor Functions Series-Pass Voltage Regulators Shunt Regulators Voltage References DC-to-DC Converters PWM Controllers	SLYD005, 1989
● Linear Circuits	Operational Amplifier Macromodels	SLOS047, 1990
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● Telecommunications Circuits	Equipment Line Interfaces Subscriber Line Interfaces Modems and Receivers/Transmitters Ringers, Detectors, Tone Encoders PCM Interface Transient Suppressors	SCTD001A, 1988/89
● Optoelectronics and Image Sensors	Optocouplers CCD Image Sensors and Support Phototransistors IR-Emitting Diodes Hybrid Displays	SOYD002A, 1990
● Speech System Manuals	TSP50C4X Family TSP50C10/11 Synthesizer	SPSS010, 1990 SPSS011, 1990

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INTRODUCTION

In the 1990 *Interface Circuits Data Book*, the Linear Products Division of Texas Instruments presents technical information on various products for electronic media and electronic devices.

TI's Interface circuits represent technologies from classic bipolar through BIDFET, Advanced Low-Power Schottky (ALS), IMPACT™, LinBiCMOS™, and Advanced LinCMOS™ processes. The ALS and IMPACT™ oxide-isolated technologies provide the Interface family with improved speed-power characteristics. LinBiCMOS™ and Advanced LinCMOS™ technologies feature a step-function improvement in impedance, speed, power dissipation, and threshold stability.

This data book provides information on the following types of products:

- Data-Transmission Circuits
- High-Current Actuators and Peripheral Drivers
- High-Voltage Display Drivers
- Asynchronous Communication Elements
- Intelligent-Power Devices

The data-transmission line drivers, receivers, and transceivers, which support many popular data transmission standards, connect electronic devices and systems at high data rates over significant cable lengths. The high-current actuators and peripheral drivers combine both logic control and high-current drive capability in a single package. For flat-panel, AC-plasma, vacuum fluorescent, and electroluminescent display applications, the high-voltage display drivers provide cost-effective and reliable service.

Among TI's new products in the 1990 *Interface Data Book* are Asynchronous Communication Elements (ACEs) and Intelligent-Power devices. The ACEs provide complete universal interface capabilities between electronic systems, which minimize device components and power dissipation while increasing data rates. The Intelligent-Power devices are useful for applications that require high energy loads and load protection circuits operating in harsh electrical environments.

These Interface products range from the classic line driver to the Asynchronous Communication Element. New surface-mounted packages (8 to 68 leads) include both ceramic and plastic chip carriers, and the small-outline (D) plastic packages that optimize board density with minimum impact on power dissipation capability.

The alphanumeric index provides a quick method of locating the correct device type, with new products as indicated. The selection guide includes a functional description of each product with information on key parameters and packaging types. A cross-reference table listing other manufacturers with the TI direct or nearest replacement devices is also available. Ordering information and mechanical data are in the last section of this data book.

While this volume offers design and specification data only for Interface components, complete technical data for any TI semiconductor product is available from your nearest TI Field Sales Office, local authorized TI distributor, or by writing directly to:

> Texas Instruments Incorporated
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> DALLAS, TEXAS 75380-9066

We sincerely feel that you will discover the new 1990 *Interface Circuits Data Book* to be a significant addition to your collection of technical literature.

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