

## **Z8030/Z8530** Z-BUS<sup>®</sup> SCC/SCC SERIAL COMMUNICATIONS CONTROLLERS

## **FEATURES**

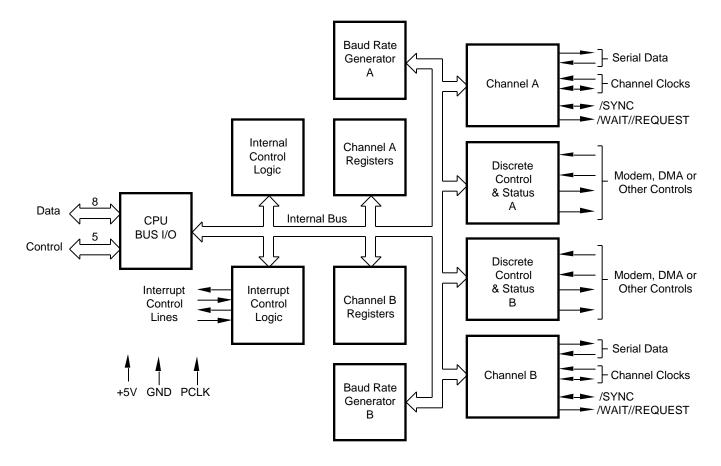
- Two Independent, 0 to 2M Bit/Second, Full Duplex Channels, each with a Separate Crystal Oscillator, Baud Rate Generator, and Digital Phase-Locked Loop for Clock Recovery.
- Multi-Protocol Operation under Program Control; Programmable for NRZ, NRZI, or FM Data Encoding.
- Asynchronous Mode with Five to Eight Bits and One, One and One-Half, or Two Stop Bits per Character; Programmable Clock Factor; Break Detection and Generation; Parity, Overrun, and Framing Error Detection.
- Supports T1 Digital Trunk.
- Clock Speeds: 4, 6 and 8 MHz.

- Local Loopback and Auto Echo Modes.
- Synchronous Mode with Internal or External Character Synchronization on One or Two Synchronous Characters and CRC Generation and Checking with CRC-16 or CRC-CCITT Preset to Either 1s or 0s.
- SDLC/HDLC Mode with Comprehensive Frame-Level Control, Automatic Zero Insertion and Deletion, I-Field Residue Handling, Abort Generation and Detection, CRC Generation and Checking, and SDLC Loop Mode Operation.
- Available in 40-Pin DIP and 44-Pin PLCC Package Types.

## **GENERAL DESCRIPTION**

The SCC Serial Communications Controller is a dualchannel, multi-protocol data communications peripheral designed for use with conventional non-multiplexed buses and the Zilog Z-Bus<sup>®</sup>. The SCC functions as a serial-toparallel, parallel-to-serial converter/controller. The SCC can be software-configured to satisfy a wide variety of serial communications applications. The device contains a variety of sophisticated internal functions including onchip baud rate generators, digital phase-locked loops, and crystal oscillators that dramatically reduce the need for external logic.

## **GENERAL DESCRIPTION** (Continued)



Z8030/Z8530 FunctionalBlock Diagram

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