



82530/82530-6 SERIAL COMMUNICATIONS CONTROLLER (SCC)

- **Two Independent Full Duplex Serial Channels**
- **On Chip Crystal Oscillator, Baud-Rate Generator and Digital Phase Locked Loop for Each Channel**
- **Programmable for NRZ, NRZI or FM Data Encoding/Decoding**
- **Diagnostic Local Loopback and Automatic Echo for Fault Detection and Isolation**
- **System Clock Rates:**
 - 4 MHz for 82530
 - 6 MHz for 82530-6
- **Max Bit Rate (6 MHz)**
 - Externally Clocked: 1.5 Mbps
 - Self-Clocked:
 - 375 Kbps FM CODING
 - 187 Kbps NRZI CODING
 - 93 Kbps Asynchronous
- **Interfaces with Any INTEL CPU, DMA or I/O Processor**
- **Available in 40 Pin DIP and 44 Lead PLCC**
- **Available in Express Version**
- **Asynchronous Modes**
 - 5–8 bit Character; Odd, Even or No Parity; 1, 1.5 or 2 Stop Bits
 - Independent Transmit and Receive Clocks. 1X, 16X, 32X or 64X Programmable Sampling Rate
 - Error Detection: Framing, Overrun and Parity
 - Break Detection and Generation
- **Bit Synchronous Modes**
 - SDLC Loop/Non-Loop Operation
 - CRC-16 or CCITT Generation Detection
 - Abort Generation and Detection
 - I-field Residue Handling
 - CCITT X.25 Compatible
- **Byte Synchronous Modes**
 - Internal or External Character Synchronization (1 or 2 Characters)
 - Automatic CRC Generation and Checking (CRC 16 or CCITT)
 - IBM Bisync Compatible

The INTEL 82530 Serial Communications Controller (SCC) is a dual-channel, multi-protocol data communications peripheral. It is designed to interface high speed communications lines using Asynchronous, Byte synchronous and Bit synchronous protocols to INTEL's microprocessors based systems. It can be interfaced with Intel's MCS51/96, iAPX86/88/186 and 188 in polled, interrupt driven or DMA driven modes of operation.

The SCC is a 40-pin device manufactured using INTEL's high-performance HMOS* II technology.

* HMOS is a patented process of Intel Corporation.

The complete document for this product is available on Intel's "Data-on-Demand" CD-ROM product. Contact your local Intel field sales office, Intel technical distributor, or call 1-800-548-4725.