General Description

The HSCX (SAB 82525) has been designed to implement high speed communication links using HDLC protocols and to reduce the hard and software overhead needed for serial synchronous communications.

Due to its 8-bit demultiplexed adaptive bus interface it fits perfectly into every INTEL or Motorola 8- and 16-bit microcomputer system.

The HSCX directly supports the X.25 LAPB, the ISDN LAPD- and SDLC protocols and is capable of handling a large set of layer-2 protocol functions independently from the host processor.

The time division capability of the SAB 82525 and other programmable telecom features make it suitable for time-slot oriented PCM systems designed for packet switching. Due to its high speed data transfer and high level protocol support it fits very well in industrial applications e.g. laser printers.

The HSCX1 (SAB 82526), the single channel version of the HSCX, opens another wide application area.

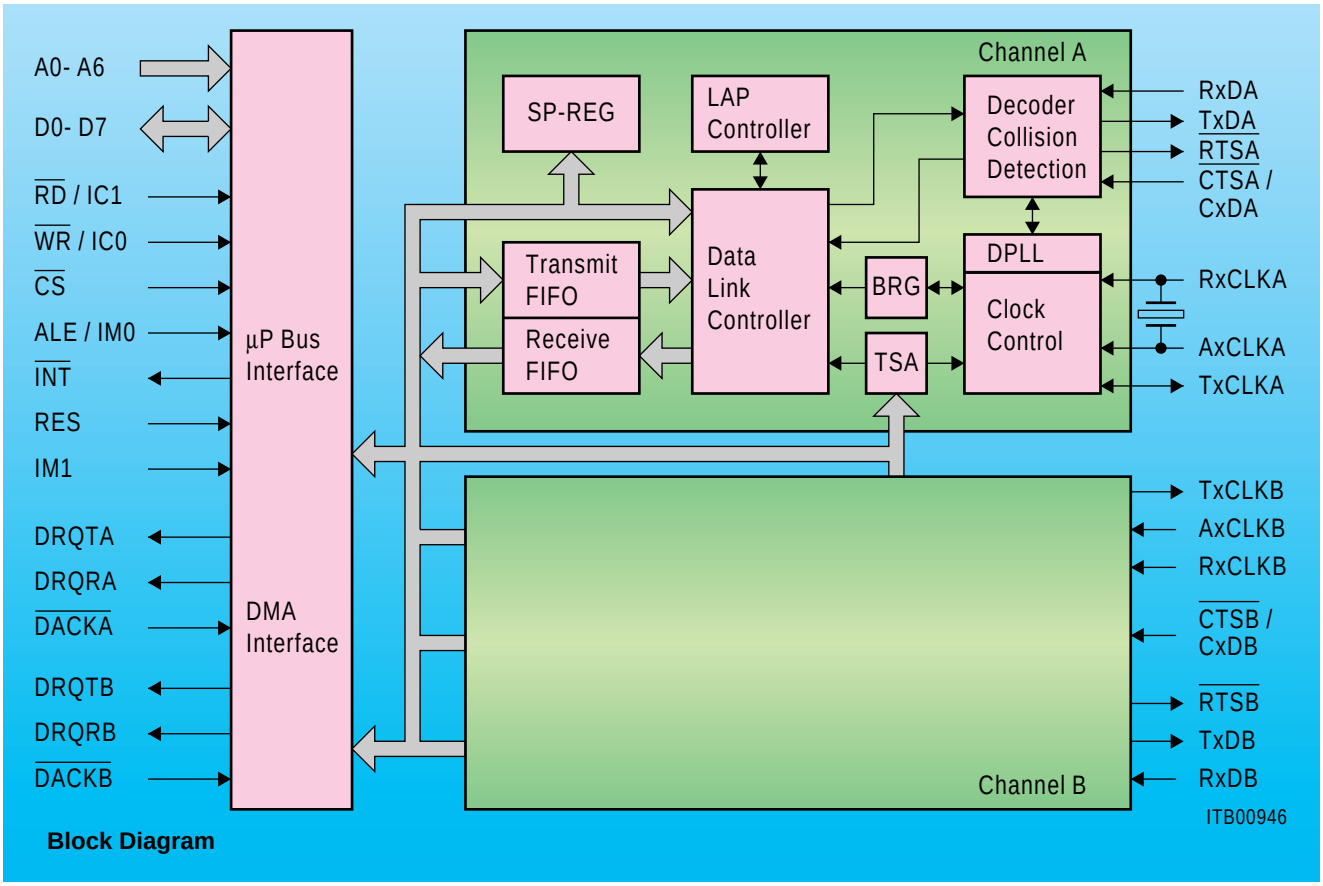
For an easy access to the wide variety and complexity of synchronous data transfer Siemens provides a PC based HSCX evaluation Kit.

The SAB 82525/82526 operates in the temperature range 0 to 70 °C, the SAF 82525/82526 in the range -40 to 85 °C.

Type	Package
SAB 82525-N	P-LCC-44-1 (SMD)
SAF 82525-N	P-LCC-44-1 (SMD)
SAB 82526-N	P-LCC-44-1 (SMD)
SAF 82526-N	P-LCC-44-1 (SMD)
SAB 82525-H	P-MQFP-44-1 (SMD)

Features SAB 82525 (82526)

- Two (one) independent HDLC/SDLC channels
- High level support of LAPB/LAPD protocols
- Oscillator DPLL and baud rate generator for each channel
- Collision detect and resolution logic
- Data rate up to 4 Mbit/s
- Clock recovery up to 1.2 Mbit/s
- 8 bit parallel multiplexed and demultiplexed system bus adaption
- 64-byte FIFO per channel and direction
- 4 (2) channel DMA interface
- CMOS technology



Block Diagram