**General Description**

The PEB 2081 S/T-Bus Interface Circuit Extended (SBCX) implements the four-wire S/T interface used to link voice/data ISDN terminals, network terminators (NT) and PBX-trunk lines to a Central Office exchange. The components switches B- and D-channels between the S/T and the ISDN Oriented Modular (IOM-2) interfaces, the latter being a standard backplane interface for the ISDN-basic access. The SBCX exceeds both the electrical and functional requirements of the S/T interface in order to provide high flexibility to the user.

**Applications**

- Network terminators (NT and NT2)
- S₀ multiplexer cards
- S₀ line cards for ISDN-trunk lines
- Voice/Data Terminals, ISDN-PC Cards

**Features**

- 1-channel S/T transceiver
- Full duplex 2+D S/T transceiver according to CCITT I.430
- Extended loop length up to 2 km
- Activation and deactivation procedures according to CCITT I.430
- Fully compliant NT2 trunk mode including multipoint operation
- Frame alignment with absorption of phase wander in NT2 network side applications
- Receive timing recovery for point-to-point, passive bus and extended passive bus configuration
- Access to S- and Q-bits of S/T interface (S1-, S2- and Q-channel)
- D-channel access control also in trunk applications
- Execution of test loops
- Conversion of frame structure between S/T interface and IOM-2
- Advanced CMOS technology with low power consumption (standby < 6 mW, active 80 mW)