

General Description

The PSB 2196, ISDN Subscriber Access Controller for U_{PN} interface ISAC-P TE, implements the subscriber access functions for a digital terminal to be connected to a two-wire U_{PN} interface.

The PSB 2196 ISAC-P TE is an optimized device for TE-applications, covering the complete layer-1 and -2 functions.

The PSB 2196 ISAC-P TE combines the functions of the U_{PN} transceiver with reduced loop length (one channel of the OCTAT-P PEB 2096) and the ISDN-Communications Controller (ICC, PEB 2070) onto one chip.

The microcontroller interface of the ISAC-P TE is compatible to standard multiplexed microcontrollers. In addition it provides the microcontroller clock signal as well as a supply voltage control and reset generation.

The terminal repeater function of the ISAC-P TE allows to cascade two telephones which are controlled by one U_{PN} interface from the line card.

The PSB 2196 ISAC-P TE interfaces to voice/data devices via the IOM-2 interface.

The PSB 2196 ISAC-P TE is a 1 micron CMOS device offered in a P-LCC-44 and P-MQFP-44 pin package. It operates from a single 5-V supply.

Note: U_{PN} in the document refers to a version of the U_{P0} standard with a reduced loop length.

Type	Package
PSB 2196-H	P-MQFP-44-2 (SMD)
PSB 2196-N	P-LCC-44-1 (SMD)

Features

- Cost/performance-optimized U_{PN}-interface transceiver, compatible to PEB 2096 OCTAT-P
- HDLC controller with 2 × 32-byte FIFO per direction
- HDLC-address recognition and control field handling compatible to PEB 2070
- IOM-2 interface for terminal application compatible to PEB 2070 ICC
- 8-bit multiplexed microprocessor interface
- 4-wire serial programming interface
- CPU clock and reset outputs
- Test loops
- Advanced CMOS technology

