Advanced Information

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<tr>
<th>Type</th>
<th>Ordering Code</th>
<th>Package</th>
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<td>PSB 2110-N</td>
<td>Q67100–H8644</td>
<td>PL-CC-44 (SMD)</td>
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<td>PSB 2110-P</td>
<td>Q67100–H8643</td>
<td>P-DIP-40</td>
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General Device Overview

The ISDN Terminal Adaptor Circuit (ITAC™) is a circuit designed to interface existing standard Data Terminal Equipment (DTE) to an ISDN via the R reference point (CCITT I.411).

The circuit autonomously adapts asynchronous or synchronous data according to CCITT V.110, X.30 and I.460.

It also supports rate adaption according to V.120 or DMI as well as in-band signaling.

System Implementation

A typical implementation of an ISDN S-interface access for a conventional X-or V-series terminal using the ITAC is shown in the block diagram (terminal adaptor according to V.110, X.30, ECMA.102).

The ITAC can be connected via a serial synchronous interface to an S-bus transceiver/LAPD controller (in this case, the ISDN Subscriber Access Controller ISACTM-S). These two devices, together with the terminal controller, convert V- and X-series interface characteristics to the functional and procedural interface characteristics required by an ISDN at the S interface.

Features

- Terminal adaptor for ISDN (R interface), PCSN and CSPDN
- Programmable speeds from 300 bit/s to 64 kbit/s
- Bit stuffing rate adaption according to latest standards (X.30, V.110, ECMA.102)
- Programmable subchannels for intermediate rates
- IOM® SSI compatible interface to network (up to 4 Mbit/s)
- Parallel 8-bit microcontroller interface
- DMA interface
- Programmable test options
- Higher protocol support
- In-band signaling
- V.120, DMI (bit transparent)
- Single +5 V supply, low power CMOS technology
Block Diagram

V.24  
X.21

DCE Interface

Asynchron
Synchron

IRC

BRC

SNI

20 Bit Counter

USAR

USAT

HDLCT

HDLCT

Clock Generator

μC DMA

10MΩ, SSI

10.752 MHz