

**Features**

- CCITT I.430 and ANSI T1.605 S/T interface
- Full-duplex 2B+D, 192 kbit/s transmission
- Link activation/deactivation
- D-channel access contention resolution
- Point-to-point, point-to-multipoint and star configurations
- Master (NT)/Slave (TE) modes of operation
- Exceeds loop length requirements
- Complete loopback testing capabilities
- On chip HDLC D-channel protocoller
- 8 bit Motorola/Intel microprocessor interface
- Microprocessor-controlled operation
- Mitel ST-BUS interface
- Low power CMOS technology
- Single 5 volt power supply

ISSUE 2

August 1993

**Ordering Information**

MT8931BC	28 Pin Ceramic DIP
MT8931BE	28 Pin Plastic DIP
MT8931BP	44 Pin PLCC
<b>-40°C to +85°C</b>	

**Description**

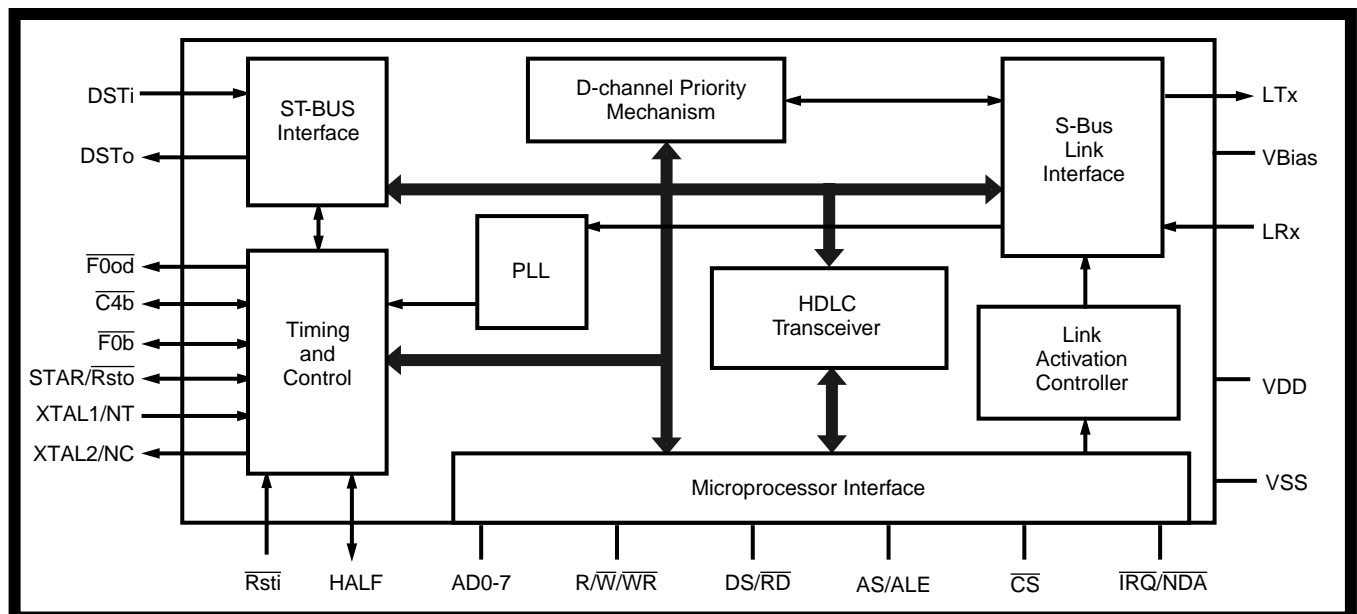
The MT8931B Subscriber Network Interface Circuit (SNIC) implements the CCITT I.430 and ANSI T1.605 Recommendations for the ISDN S and T reference points. Providing point-to-point and point-to-multipoint digital transmission, the SNIC may be used at either end of the subscriber line (NT or TE).

An HDLC D-channel protocoller is included and controlled through a Motorola/Intel microprocessor port.

**Applications**

- ISDN NT1
- ISDN S or T interface
- ISDN Terminal Adaptor (TA)
- Digital sets (TE1) - 4 wire ISDN interface
- Digital PABXs, Digital Line Cards (NT2)

The MT8931B is fabricated in Mitel's CMOS process.


**Figure 1 - Functional Block Diagram**

Notes:



<http://www.zarlink.com>

**World Headquarters - Canada**

Tel: +1 (613) 592 0200

Fax: +1 (613) 592 1010

**North America - West Coast**

Tel: (858) 675-3400

Fax: (858) 675-3450

**North America - East Coast**

Tel: (978) 322-4800

Fax: (978) 322-4888

**Asia/Pacific**

Tel: +65 333 6193

Fax: +65 333 6192

**Europe, Middle East,  
and Africa (EMEA)**

Tel: +44 (0) 1793 518528

Fax: +44 (0) 1793 518581

Information relating to products and services furnished herein by Zarlink Semiconductor Inc. trading as Zarlink Semiconductor or its subsidiaries (collectively "Zarlink") is believed to be reliable. However, Zarlink assumes no liability for errors that may appear in this publication, or for liability otherwise arising from the application or use of any such information, product or service or for any infringement of patents or other intellectual property rights owned by third parties which may result from such application or use. Neither the supply of such information or purchase of product or service conveys any license, either express or implied, under patents or other intellectual property rights owned by Zarlink or licensed from third parties by Zarlink, whatsoever. Purchasers of products are also hereby notified that the use of product in certain ways or in combination with Zarlink, or non-Zarlink furnished goods or services may infringe patents or other intellectual property rights owned by Zarlink.

This publication is issued to provide information only and (unless agreed by Zarlink in writing) may not be used, applied or reproduced for any purpose nor form part of any order or contract nor to be regarded as a representation relating to the products or services concerned. The products, their specifications, services and other information appearing in this publication are subject to change by Zarlink without notice. No warranty or guarantee express or implied is made regarding the capability, performance or suitability of any product or service. Information concerning possible methods of use is provided as a guide only and does not constitute any guarantee that such methods of use will be satisfactory in a specific piece of equipment. It is the user's responsibility to fully determine the performance and suitability of any equipment using such information and to ensure that any publication or data used is up to date and has not been superseded. Manufacturing does not necessarily include testing of all functions or parameters. These products are not suitable for use in any medical products whose failure to perform may result in significant injury or death to the user. All products and materials are sold and services provided subject to Zarlink Semiconductor's conditions of sale which are available on request.

Purchase of Zarlink's I<sup>2</sup>C components conveys a licence under the Philips I<sup>2</sup>C Patent rights to use these components in an I<sup>2</sup>C System, provided that the system conforms to the I<sup>2</sup>C Standard Specification as defined by Philips

Zarlink and the Zarlink Semiconductor logo are trademarks of Zarlink Semiconductor Inc.  
Copyright 2001, Zarlink Semiconductor Inc. All rights reserved.

TECHNICAL DOCUMENTATION - NOT FOR RESALE