

## Features

- Modular construction expandable from 0 to 30 Analog ports in steps of 6 ports
- Exceptionally low latency < 2ms
- Provides isolated 600 ohm genuine 4-wire interfaces without side-tone injection
- Individual gain control per port
- Dial-in or nailed-up operation
- Programmable u-Law/A-Law
- Fanless Design
- 1-U Construction
- Individual TX and RX Speech Detection LEDs on all channels

## Applications

- Dial-in access to Hoots
- Gain correction in Hoot'n'Holler Systems
- Analog drop-off for all-digital voice systems
- Interface to Legacy Voice Systems
- Economic port expansion for existing voice systems
- E1/T1-enabling Legacy Voice Systems
- Reducing latency on existing voice systems which use analog ports

## Description

The TB084-1002 incorporates a single programmable E1/T1 port and up to 5 additional TB084-2003 Line Card modules to provide up to 30 dry 4-wire analog ports (24 for T1). Complete isolation is achieved between Tx and Rx ports for each channel, removing a potential source of echo in Hoot'n'Holler systems.



## Ordering Information

TB084-1002	1-U Base with 0 x TB084-2003
TB084-1003	1-U Base with 1 x TB084-2003
TB084-1007	1-U Base with 5 x TB084-2003
TB084-2003	6 port 4-wire Line Card

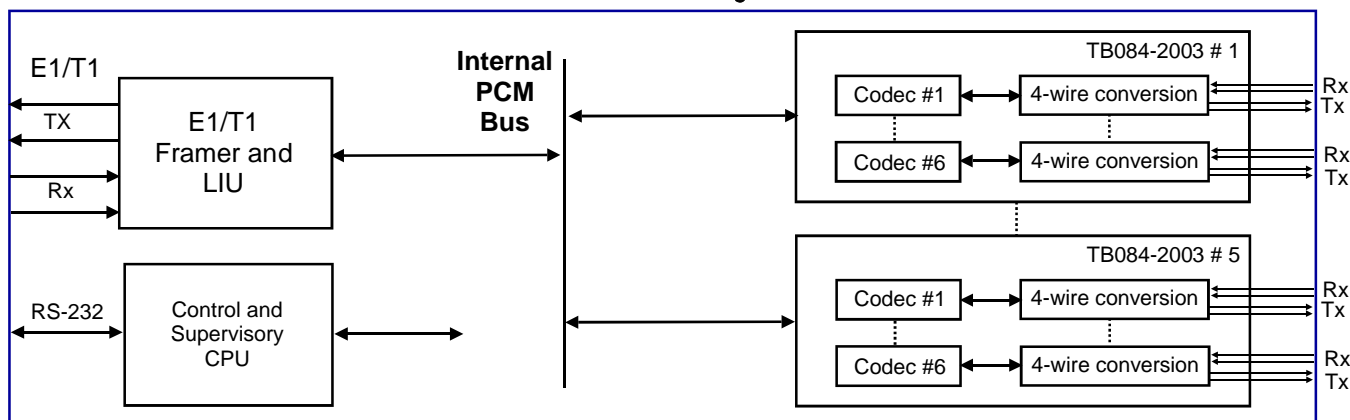
The TB084-1002 has been designed to minimise latency between voice channels on the E1/T1 port and analog ports – a feature which is essential in many hoot'n'holler applications.

Each 4-wire port has individual Tx and Rx gain controls which may be programmed either using programming software (supplied) or trimmer pots accessible through the top cover.

The E1/T1 port may be programmed to operate in either 'nailed-up' mode or 'auto-answer' mode. In both cases, channels on the E1/T1 interface are permanently mapped to fixed analog ports.

Programming the TB084 is easy using any modern PC equipped with an RS-232 port. Configuration data is managed as a single XML file on a host PC. Software (provided) allows off-line configuration of all parameters and saving as an XML file or downloading to the target TB084 using the serial cable (provided).

## TB084 Block Diagram



## Specifications

### E1/T1 Port

Resident software provides the following basic choices of function:

- AT&T 5E5, ...,5E10
- British Telecom ISDN-30
- Deutsche Telecom ISDN-30
- France Telecom 1TR6 and Euro-ISDN with German Delta
- France Telekom Euro-Numeris delta
- KDD ISDN (Japan)
- Northern Telecom (DMS)
- National ISDN-2 (USA)
- NTT INS-1500 (Japan)
- Q-SIG Basic Call
- Telecom Australia Austel
- All Euro-ISDN (NET5) carriers

### PLL Modes

- Network Synchronisation
- Local Synchronisation

### E1 Line Coding

- NRZ
- CMI
- AMI
- HDB3

### T1 Line Coding

- NRZ
- AMI (B7)
- B8ZS

### E1 Framing

- Double Framing
- CRC4
- Extended CRC4

### T1 Framing

- F4
- F12
- ESF
- ESF-CRC6
- F72

### E1 Signalling

- CAS/CCS/no signalling

### T1 Signalling

- CAS/CCS/RBS/no signalling

## 4-Wire Analog Ports

Impedance	600 ohm Nominal
Adjustment	+/- 12dB (Tx and Rx)
Connector	IEEE 488 (24-Way) per 6 ports

## Miscellaneous

Size	483x367x44mm
Weight	3 kg
Power	15W Max
Input Voltage	85-265VAC
Operating Temp	0-40 Deg C

## Standards

EN 60950:2001 plus Amendment A11:2004

## RoHS

The Annex of Directive 2002/95/EC exempts the use of lead in solders for telecommunication network infrastructure equipment. Tecbridge is committed to achieving full compliance without relying on this exemption. Tecbridge has already taken steps to avoid the use of hazardous substances wherever this is technically possible on current designs.

Accordingly, this product can only be sold for use in EU markets for use as telecommunication network infrastructure equipment.

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