

DESCRIPTION

The East Coast Datacom, Inc. TCB-V24 provides bidirectional buffering in back-to-back RS-232 modem cross-connection applications such as a Tail Circuit. The 64-bit circular buffers compensate for differences between modem clock rates and limit errors to occasional data losses when the buffer overruns. Synchronous operation in both full and half Duplex is supported.

STRAPS J1 & J2

Strapping options **J1** and **J2** include the ability to utilize the modem's DCD control signal to re-center the buffer. With this option enabled (short position 2-3), the outgoing buffer will be centered when **DCD turns on**, and RTS to the other will follow the state of DCD. Otherwise (short position 1-2), the buffer will continue to recirculate without interruption.

DIP SWITCH SW1 SETTINGS

Setting the Buffer Depth via 8 Position Dip Switch located on the Printed Wiring Board(PCB) SW1:

S-1	S-2
off	off = 64 bit (<i>factory default</i>)
off	on = 32 bit
on	off = 16 bit
on	on = 8 bit

DATA INTERFACE

The unit has two RS-232 compliant data interfaces on DB-25 Female Connectors. The data interfaces are designed as a DTE (Data Terminal Equipment). As such the unit is designed to connect to a DCE such as a Modem or Multiplexer port.

CABLING

All RS-232 cabling crossover is accomplished within the TCB-V24 allowing **straight thru cables**.

THINGS TO KEEP IN MIND

Data rates up to 128Kbps are supported by the TCB-V24. However, due to cable and driver/receiver delays, the user should be aware that incoming TD at the modem can experience significant clock phase skew relative to the outgoing TXC at higher clock rates. In such cases, to avoid errors the user may need to modify the modem configuration to clock the TD signal on the opposite clock edge.

POWER SOURCE

The TCB-V24 is fully line powered by the RS-232 data interface and draws less than 10ma. The unit can operate on as little as one RS-232 Control Signal. In the event the user cannot provide enough power through the RS-232 data interface, **Pin 9** on the RS-232 interface allows optional DC voltage at 5-9vdc input at 300ma.

REMOTE LOOKBACK SUPPORT

The TCB-V24 supports Remote Loopback on Pin 21 of the RS-232 interface.

TECHNICAL SUPPORT

Call East Coast Datacom, Inc at (321) 637-9922 located in the USA.

Email: support@ecdata.com

East Coast Datacom, Inc.
245 Gus Hipp Blvd., STE 3
Rockledge, FL 32955
Web: www.ecdata.com

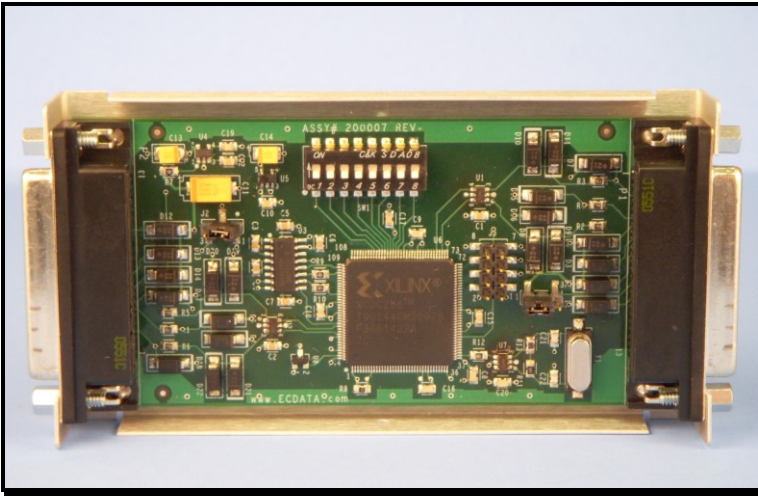


Figure 1 - TCB-V.24 Printed Wiring Board (PCB)

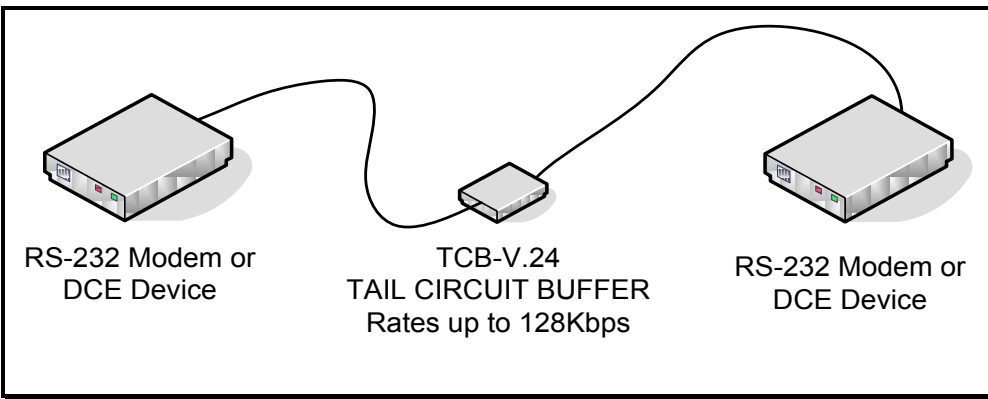


Figure 2 - Typical Application

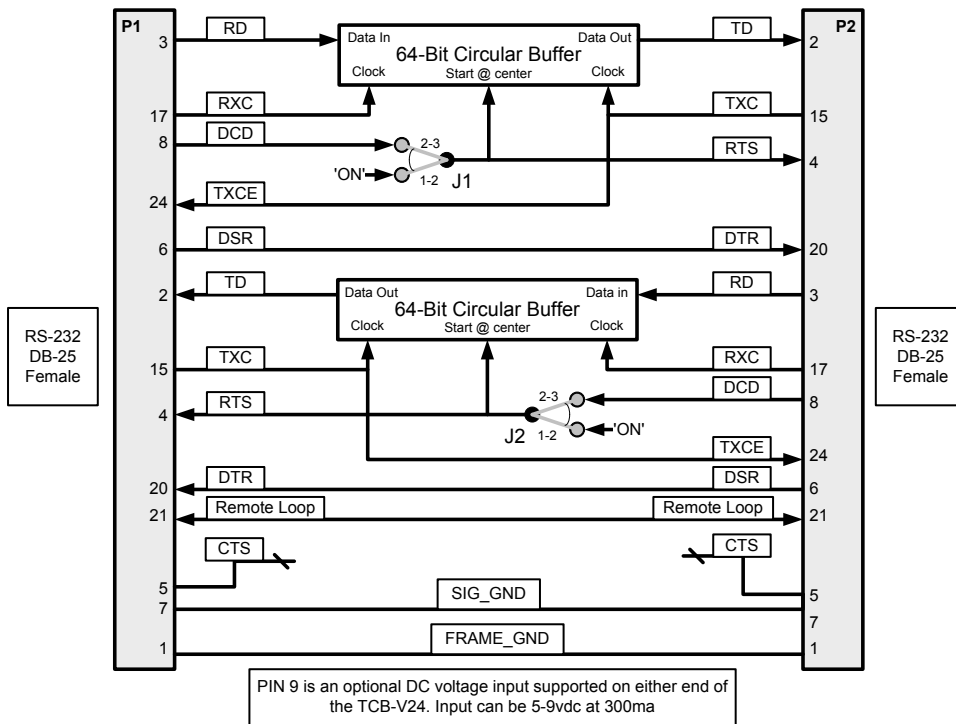


Figure 3 - Hardware Overview