

TP3410 "U" Interface Transceiver

General Description

The TP3410 is a microCMOS monolithic digital transceiver which provides voice or data communications capability over a twisted pair of wires in the Public Network. The device functions at either end of the subscriber loop, handling voice and data transmissions between the Network Termination (NT) to the Central Office (CO) line card.

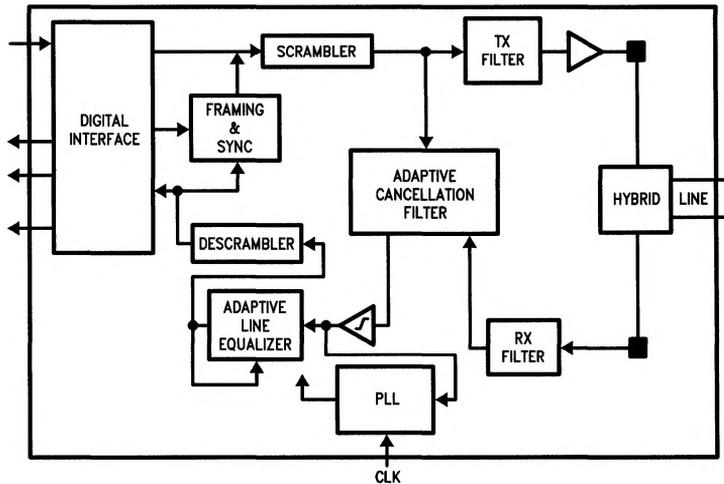
The TP3410 has facilities to transmit and receive using the standard ISDN 2B+D (2 64 kb/s and 1 16 kb/s channels) 144 kb/s full duplex channels plus extra channels (for loop maintenance and performance monitoring) for a total of 160 kb/s. These channels will operate over very long Central office subscriber loops of mixed gauges from #26 to #19 AWG (0.4–0.8 mm), which may include bridge taps.

At the time of this writing, the United States T1D1 committee for the Standardization of the U interface has not yet finalized the performance specification.

Preliminary Features

- 160 kb/s full duplex transmission for 2B+D
- Handles all layer 1 functions
- 2B1Q line coding
- Range at least 18 kft
- #26–#19 AWG (0.4–0.9 mm) mixed gauge wire compatibility
- 70 dB of Echo Cancellation
- Bridge Tap Equalization
- microCMOS, +5V only

Block Diagram



TL/H/9151-1