side is connected to the integrator 74HC86 which also happens to be the charge pump. The output of the charge pump goes to the LPF RC lead/lag circuit chosen for fast lock. Varactor diode D30 tunes the output to variations of the recovered information. The 4MHz corrected clock is then divided by 16 by U7 74HC4040, so the resulting clock is 250KHz, this 250KHz is further trimmed by U8 74HC74 with it's 4th divider thus 62.5KHz is obtained and will be used as an input to the encoder/decoder clock input of U6 CMX639 CVSD encoder/decoder. The 62.5 clock is then used to by CMX639 to decode the audio encoded in CVSD format from the voice origin.

6. TELEPHONE LINE INTERFACE

The telephone line interface circuit is established by below sections:

a. Audio power amplifier

Operational Amplifier, LM324 are built as a power amplifier, according to high current output requirement of line interface.

b. Telephone line relay and isolation transformer

T1 is the line isolation transformer, both audio input and output are passing through this transformer. RL1, Relay is for line-seize, which controlled by Q1.

c. Ring-detect circuit

IC3-A and IC3-B are used as differential amplifier for picking up the ring signal, which input from two 20MΩ resistors (R37 and R38) as an isolation from the telephone line.

7. 27673A DIGITAL SECURITY CODE SYSTEM:

The handset and base of 27673A will exchange a random generated 16-bit digital security code when every time the handset put back on the charging cradle of the base unit. This is to fulfill FCC Part 15.214(d) requirement regarding there must be at least 256 possible discrete digital codes.

***** End *****