Product Details:

- Mask programmable, monolithic integrated speech circuits for use in electronic telephones.
- Mute function for operation with DTMG generator
- Transmit and receive gain regulation for automatic loop loss compensation.
- Differential microphone input for good balance to ground.

Project Details:

- The product test includes testing of all DC parameters such as output reference voltage, Input leakage current, supply current, output voltage -voh
- The functional test is for checking the gain at 4 different input currents and also includes checking the output offset voltage, mute gain, transmitter positive amplitude peak, transmitter negative amplitude peak and the receiver positive and negative amplitude peak in each range.

Key Highlights:

- The differential AC signal to be applied to the input has to be in order of few milli volts and hence an external hardware circuit was designed to generate the required input signal.
- An external hardware was used to couple a DC & AC signals, in order to check the receiver section characteristics.
- The input current ratings were higher than the tester capability and hence an external V/I meter was used to generate the required current by using resistor network combinations.
- The output positive negative peaks were calculated by feeding the output to the external circuitry which has the capability to detect the positive and negative peak signals.

Equipments Used:

Tester : Credence ASL 1000, LTX 77
Handler : MCT 3608