

## ADVANCE INFORMATION

January 1997

## SLIC Subscriber Line Interface Circuit

### Features

- Complete A-Law Codec, Filter, and SLIC Functions with Serial Digital Control and Status Monitoring
- 30mA Current Limit on Normal or Reverse Loop Feed
- Constant Voltage (Resistance) Feed on Long Loops
- On-Hook Transmission
- Switch Hook Detection
- User Selectable 2-Wire Complex Impedance
- User Selectable Receive Gain
- User Selectable Transmit Gain
- Ringing, Test-In, and Test-Out Relay Drivers
- Zero Crossing Ring Trip Detection and Ring Relay Release
- Thermal Shutdown Protection
- Meets CCITT/China Transmission Requirements

### Applications

- CO/PABX Line Circuits

### Description

The HC5519 SLIC is designed to meet the technical requirements of the China Telecommunications network. It provides many of the BORSCHT functions associated with a Central Office line circuit.

The HC5519 consists of an A-Law Codec/Filter, a 2-wire interface circuit, an impedance control circuit, a ringing control circuit, a power management circuit, and a serial control interface circuit which is used to program and monitor the operation of the device.

The integration of the line interface and coder/decoder functions into a 80 pin MQFP surface mount package and standard value surface mount components avoids the need for costly hybrid packaging techniques and offers the superior reliability of an integrated solution for dense circuit board layouts.

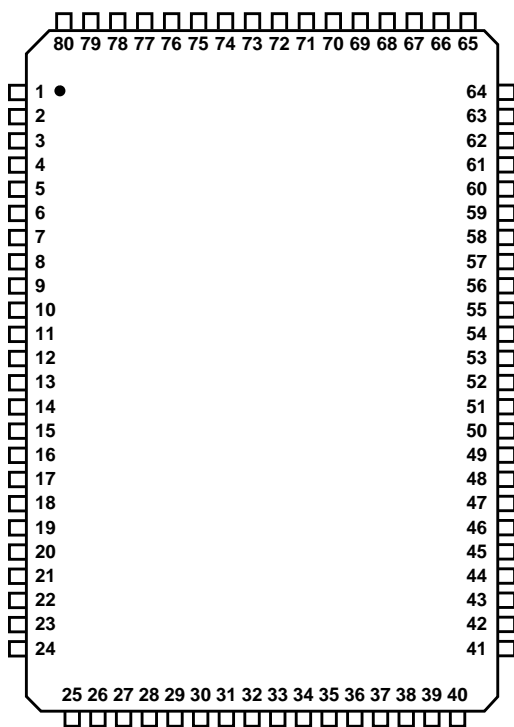
The SLIC combines Harris' patented Bonded Wafer Dielectrically Isolated fabrication techniques with a state of the art CMOS process to produce the world's most compact line circuit signal processing solution.

### Ordering Information

| PART NUMBER | TEMP. RANGE (°C) | PACKAGE    | PKG. NO.  |
|-------------|------------------|------------|-----------|
| HC5519CQ    | 0 to 70          | 80 Ld MQFP | Q80.14x20 |

### Pinout

HC5519 (MQFP)  
TOP VIEW



### Block Diagram

