

**EIA/ITU PABX SLIC with 40mA Loop Feed**

The Harris SLIC incorporates many of the BORSHT functions on a single IC chip. This includes DC battery feed, a ring relay driver, supervisory and hybrid functions. This device is designed to maintain transmission performance in the presence of externally induced longitudinal currents. Using the unique Harris dielectric isolation process, the SLIC can operate directly with a wide range of station battery voltages.

The SLIC also provides selective denial of power. If the PBX system becomes overloaded during an emergency, the SLIC will provide system protection by denying power to selected subscriber loops.

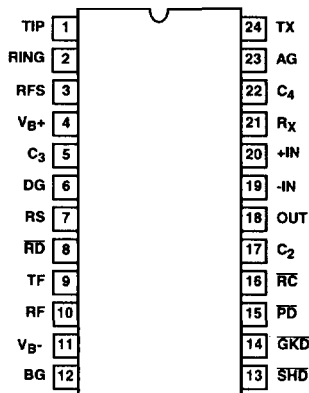
The Harris SLIC is ideally suited for the design of new digital PBX systems by eliminating bulky hybrid transformers.

**Ordering Information**

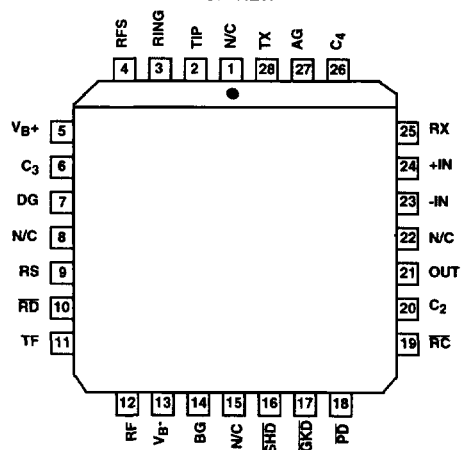
PART NUMBER	TEMP. RANGE (°C)	PACKAGE	PKG. NO.
HC1-5504B-5	0 to 75	24 Ld CERDIP	F24.6
HC1-5504B-9	-40 to 85	24 Ld CERDIP	F24.6
HC3-5504B-5	0 to 75	24 Ld PDIP	E24.6
HC3-5504B-9	-40 to 85	24 Ld PDIP	E24.6
HC4P5504B-5	0 to 75	28 Ld PLCC	N28.45
HC4P5504B-9	-40 to 85	28 Ld PLCC	N28.45
HC9P5504B-5	0 to 75	24 Ld SOIC	M24.3
HC9P5504B-9	-40 to 85	24 Ld SOIC	M24.3

**Pinouts**

**HC-5504B (PDIP, CERDIP, SOIC)**  
TOP VIEW



**HC-5504B (PLCC)**  
TOP VIEW



**Features**

- Pin for Pin Replacement for the HC-5504
- Capable of 5V or 12V (V<sub>B+</sub>) Operation
- Monolithic Integrated Device
- DI High Voltage Process
- Compatible With Worldwide PBX Performance Requirements
- Controlled Supply of Battery Feed Current for Short Loops (41mA)
- Internal Ring Relay Driver
- Allows Interfacing With Negative Superimposed Ringing Systems
- Low Power Consumption During Standby
- Switch Hook Ground Key and Ring Trip Detection Functions
- Selective Denial of Power to Subscriber Loops

**Applications**

- Solid State Line Interface Circuit for Analog and Digital PBX Systems
- Direct Inward Dial (DID) Trunks
- Voice Messaging PBXs
- Related Literature
  - AN549, The HC-5502S/4X Telephone Subscriber Line Interface Circuits (SLIC)
  - AN571, Using Ring Sync with HC-5502A and HC-5504 SLICs

4  
TELECOM  
SLICs