

# AS2531/2

## Single Chip Telephone

### Applications

Analogue Telephones, CT Base Stations, CITs, Intercom.

### Standards

NET 4, 1TR2, CEPT, CCITT

### Key Features

- ☐ Contains speech circuit, LD/MF repertory dialler and tone ringer, all on one 28 pin CMOS chip
- ☐ Soft clipping in both transmit and receive to prevent harsh distortion
- ☐ Volume control of receive signal with +/– keys or a VOL key (not AS2532)
- ☐ 31 digit last number redial
- ☐ 14 memories, 4 direct/10 indirect or 10 direct (not AS2532)
- ☐ Sliding cursor protocol and auto pause/wait for access codes and in-dialling
- ☐ 3-tone melody generator for tone ringing
- ☐ Very few external components

### Key Specifications

- ☐ Typical Operating Current: 3 mA
- ☐ Retention Current: < 0.1  $\mu$ A
- ☐ Low noise:  $\leq$  -72 dBmp

### Miscellaneous Information

The AS2531 is a *true* single chip telephone. It incorporates a very high quality speech transmission and reception circuit. The wide range of versions allows adaptations to a variety of PTT requirements.

### Functional Equivalents

Sames: SA2531

### Documentation and Support

Data Sheets: AS2531 and AS2532

Brochure: 'Single Chip Telephone'

Application Notes: AN2010, AN3010

Demo board on request

### Ordering Information

AS2531X Y                with 14 memories and volume control

AS2532X Y                LNR only

(X = version; Y = package, see next page)

# AS2531/2

## Ordering Information

Versions (X)	A	B	C	D	E	F	G	J	U
AS2531X P (28 pin DIP)	1	1	1	0	1	1	1	1	1
AS2531X N (28 pin PLCC)	1	1	1	1	1	1	1	1	1
AS2531X T (28 pin SOIC)	1	1	1	0	1	1	1	1	1
AS2532X P (28 pin DIP)	1	0	1	0	0	0	0	0	1
AS2532X T (28 pin SOIC)	1	0	1	0	0	0	0	0	1
$Z_{RL} = 600 \Omega$	1	1	0	0	1	1	0	1	0
$Z_{RL} = 1000 \Omega$	0	0	1	1	0	0	1	0	1
DTMF Level: -6/-8 dBm	1	0	1	0	1	1	0	1	0
DTMF Level: -9/-11 dBm	0	1	0	1	0	0	1	0	1
Minimum Ring Frequency (FCI): 13 Hz	1	1	1	0	1	1	0	1	1
Minimum Ring Frequency (FCI): 20 Hz	0	0	0	1	0	0	1	0	0
Inter Tone Pause (ITP): 82 ms	1	1	1	1	0	1	1	1	1
Inter Tone Pause (ITP): 165 ms	0	0	0	0	1	0	0	0	0
Alternative Flash (R2 key): 280 ms	0	1	1	1	1	1	1	0	0
Alternative Flash (R2 key): 600 ms	1	0	0	0	0	0	0	1	1
Flash also executed in LD mode	1	1	0	0	0	1	0	1	1
Automatic Pause (AP): 2 sec.	0	0	0	0	0	1	0	0	0
Automatic Pause (AP): 3 sec.	1	1	0	1	1	0	1	1	1
Automatic Pause (AP): 6 sec.	0	0	1	0	0	0	0	0	0
Flash Pause: 3 sec.	0	0	1	1	1	0	1	1	1
Flash Pause: 274 ms	1	1	0	0	0	1	0	0	0
Temporary MF with * key	1	1	1	1	1	1	1	1	1
- including tone	0	0	0	0	0	1	0	0	0
Mode Pin: 33/66 or 40/60	1	1	1	1	1	1	1	0	1
Mode Pin: Dial Rate 10 or 20 pps	0	0	0	0	0	0	0	1	0
Default full receive volume (+8 dB)	0	0	0	1	0	0	0	0	0