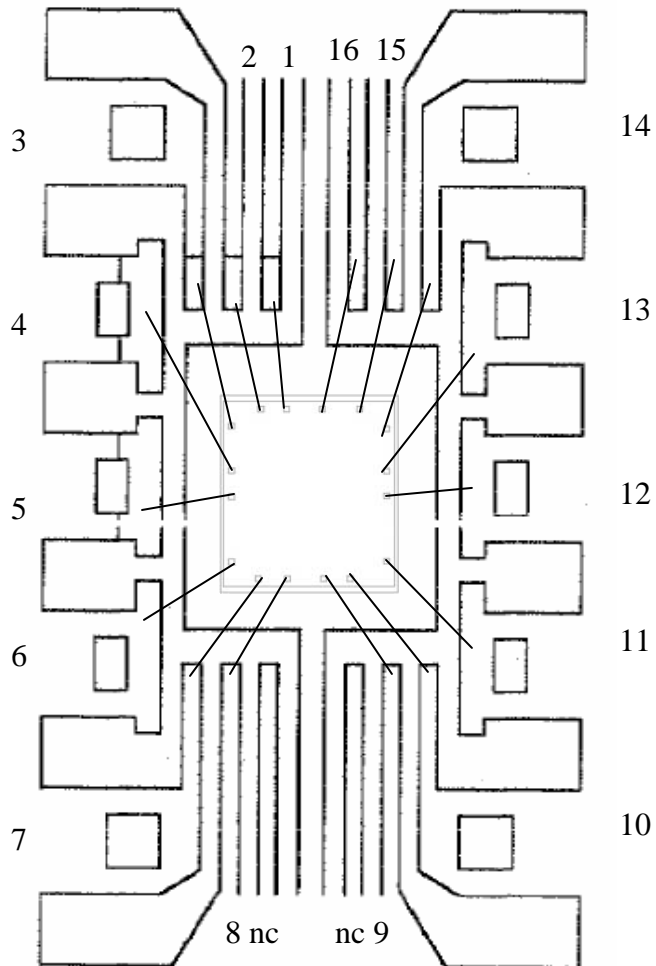


Package Type: <b>18L PDIP</b>	No. of Bonds :
<b>MATERIAL INFORMATION</b>	
Leadframe: <b>Cu Ag</b>	Pad Size: <b>140 x 160</b>

1

16



**Instructions:**

- A. Standard process flow for die-attach and wire bond.
- B. Standard adhesive for die attach.
- C. Curing: Standard Cure
- D. Product is finished as 16 pin DIP; reference SM8223AP datasheet
- E. Final packages packed for transportation in tubes.

**Notes:**

Item ID	Description	Qty per Assem
CF8223-1	NPC IC chip	1
DIP	16 pin 300 mil DIP package	1

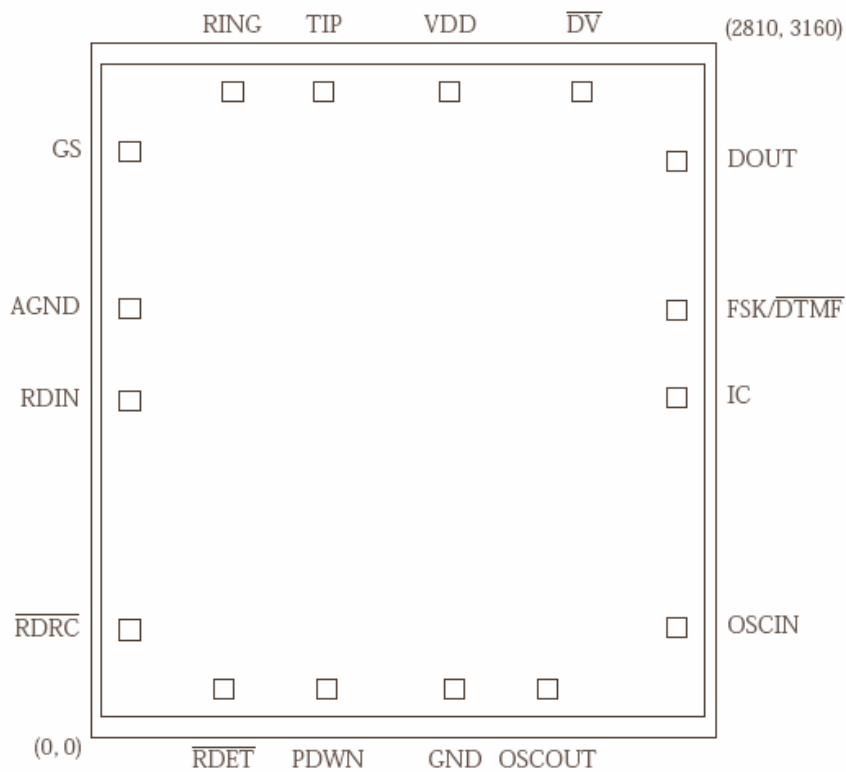
This product is finished as 16 pin DIP

Revision	Date	Reason
A	2005/12/28	Update format for general publication
-	2005/11/23	Original Issue



9101 W. Sahara Ave., Suite 105-E10, Las Vegas, NV. 89117  
 Phone: 702-597-2405 Fax: 702-920-8405  
 sales@vcamerica.com

SM8223AP assembly  
 Revision: - A



Pad size : 90 $\mu$ m  $\times$  90 $\mu$ m

## PIN DESCRIPTION

Number	Name	IO	Function	Pad dimensions ( $\mu$ m)	
				X	Y
1	TIP	I	Tip Input. Connected to the telephone line through a protection circuit.	1046	2934
2	RING	I	Ring Input. Connected to the telephone line through a protection circuit.	638	2934
3	GS	O	Input-stage amplifier gain-select output. Used to adjust the gain of the input-stage amplifier.	176	2665
4	AGND	O	Analog ground output. Internal reference voltage ( $V_{DD}/2$ ) output level.	176	1954
5	RDIN	I	Ring detector input. Used for line reversal and ring signal detection. Connected for ring detection of attenuated ring signals.	176	1534
6	$\overline{RDRC}$	IO	Ring detector RC terminal. Connected to an RC network which sets the ring detect or delay time.	176	492
7	RDDET	O	Ring detector output. $\overline{RDRC}$ -input Schmitt-trigger buffer output. LOW-level output when ring signal is detected.	596	226
8	PDWN	I	Power-down control input. LOW-level for normal operation. HIGH-level for power-down state. In the power-down state, pins AGND, OSCOUT, DOUT, and $\overline{DV}$ are HIGH.	1063	226
9	GND	-	Ground. Connected to the system ground potential.	1634	226
10	OSCOUT	O	Crystal oscillator output. The crystal oscillator element is connected between this pin and OSCIN.	2053	226
11	OSCIN	I	Crystal oscillator input. The crystal oscillator element is connected between this pin and OSCOUT.	2634	506
12	IC	I	Test Input. Tied LOW for normal operation.	2634	1550
13	FSK/DTMF	O	FSK/DTMF discriminator output. HIGH-level output when receiving FSK signal, and LOW-level output when receiving DTMF signal.	2634	1942
14	DOUT	O	Demodulator output. Demodulated FSK or DTMF signal output. HIGH-level output in power-down state.	2634	2623
15	$\overline{DV}$	O	Data trigger output. Data is output on DOUT when this pin goes LOW.	2211	2934
16	VDD	-	Supply	1612	2934