

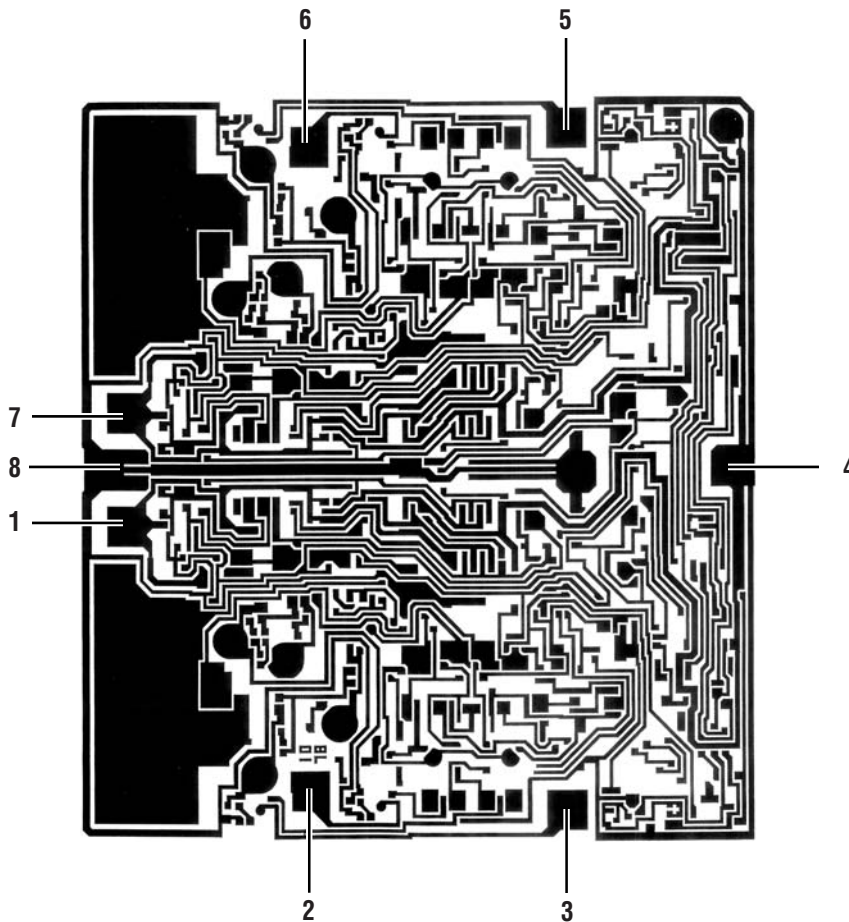
**DIE CROSS REFERENCE**

LTC Finished Part Number	Order DICE CANDIDATE Part Number Below
RH1078M	RH1078M DICE

**PAD FUNCTION**

1. OUTA
2. -INA
3. +INA
4. -V
5. +INB
6. -INB
7. OUTB
8. +V

12mils thick,  
 backside (substrate) is an alloyed  
 gold layer. Connect backside to  $V^-$ .



90 × 97 mils

**DICE ELECTRICAL TEST LIMITS**

$V_S = 5V$ ,  $V_{CM} = 0.1V$ ,  $V_{OUT} = 1.4V$  unless otherwise specified.

SYMBOL	PARAMETER	CONDITIONS	$T_A = 25^\circ C$		UNITS
			MIN	MAX	
$V_{OS}$	Input Offset Voltage			120	$\mu V$
$I_{OS}$	Input Offset Current			0.8	nA
$I_B$	Input Bias Current			15	nA

# DICE SPECIFICATION

## RH1078M

### DICE ELECTRICAL TEST LIMITS $V_S = 5V, V_{CM} = 0.1V, V_{OUT} = 1.4V$ unless otherwise specified.

SYMBOL	PARAMETER	CONDITIONS	$T_A = 25^\circ\text{C}$		UNITS
			MIN	MAX	
CMRR	Common Mode Rejection Ratio	$V_{CM} = 0V$ to 3.5V	94		dB
		$V_{CM} = 0.05V$ to 3.2V			dB
PSRR	Power Supply Rejection Ratio	$V_S = 2.3V$ to 12V	100		dB
		$V_S = 3.1V$ to 12V			dB
$A_{VOL}$	Large-Signal Voltage Gain	$V_O = 0.03V$ to 4V, No Load	150		V/mV
		$V_O = 0.03V$ to 3.5V, $R_L = 50k$	120		V/mV
		$V_O = 0.05V$ to 4V, No Load			V/mV
		$V_O = 0.05V$ to 3.5V, $R_L = 50k$			V/mV
$V_{OUT}$	Output Voltage Swing	Output Low, No Load		6	mV
		Output Low, 2k to GND		2	mV
		Output Low, $I_{SINK} = 100\mu A$		130	mV
		Output High, No Load	4.2		V
		Output High, 2k to GND	3.5		V
SR	Slew Rate	$A_V = 1, V_S = \pm 2.5V$	0.04		V/ $\mu s$
$I_S$	Supply Current	Per Amplifier		75	$\mu A$
	Minimum Supply Voltage	Note 1		2.3	V
$V_{OS}$	Input Offset Voltage			350	$\mu V$
$I_{OS}$	Input Offset Current			0.8	nA
$I_B$	Input Bias Current			15	nA
	Input Voltage Range		13.5 -15.0		V V
CMRR	Common Mode Rejection Ratio	$V_{CM} = 13.5V, -15V$	97		dB
		$V_{CM} = 13V, -14.9V$			dB
PSRR	Power Supply Rejection Ratio	$V_S = 5V, 0V$ to $\pm 18V$	100		dB
$A_{VOL}$	Large-Signal Voltage Gain	$V_O = \pm 10V, R_L = 50k$	1000		V/mV
		$V_O = \pm 10V, R_L = 2k$	300		V/mV
		$V_O = \pm 10V, R_L = 5k$			V/mV
$V_{OUT}$	Output Voltage Swing	$R_L = 50k$	$\pm 13$		V
		$R_L = 2k$	$\pm 11$		V
		$R_L = 5k$			V
SR	Slew Rate		0.06		V/ $\mu s$
$I_S$	Supply Current	Per Amplifier		100	$\mu A$

**Note 1:** Power supply rejection ratio is measured at the minimum supply voltage.

Wafer level testing is performed per the indicated specifications for dice. Considerable differences in performance can often be observed for dice versus packaged units due to the influences of packaging and assembly on certain devices and/or parameters. Please consult factory for more information on dice performance and lot qualifications via lot sampling test procedures.

Dice data sheet subject to change. Please consult factory for current revision in production.

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