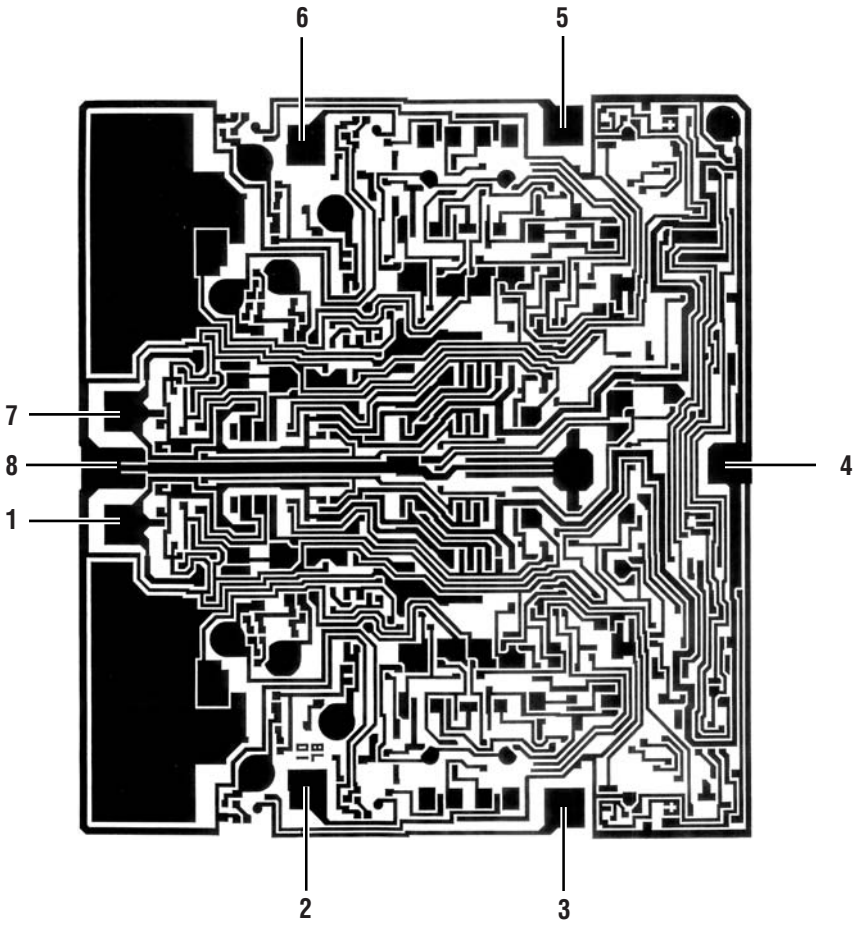
DICE SPECIFICATION

RH1078M
Micropower, Dual, Single Supply Precision Op Amp



90 × 97 mils

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^-.

DICE ELECTRICAL TEST LIMITS

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

SYMBOL	PARAMETER	CONDITIONS	T_A = 25°C MIN	MAX	UNITS
V_{OS}	Input Offset Voltage			120	µV
I_{OS}	Input Offset Current			0.8	nA
I_B	Input Bias Current			15	nA

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

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

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.

I.D.No. 66-13-1078

Linear Technology Corporation
1630 McCarthy Blvd., Milpitas, CA 95035-7417
(408) 432-1900 • FAX: (408) 434-0507 • www.linear.com

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