PIN DESCRIPTION

Name	SOP-8L	TSSOP-8L	QFN-16L	Type	Description
GND	1,3,6	3	1,2,4,5, 9,14,15	P	Ground.
VDD	4,7	1,7	7,10,11,12	P	Power supply.
DRV_SEL	8	2	13	I	Drive Select input: '1' for standard drive, '0' for hi-drive output. Internal pull-up (default is '1').
REF_IN	2	5	3	I	Reference input signal. The frequency of this signal will be reproduced at the output (after translation to CMOS level).
CLK_OUT	5	8	8	O	CMOS clock output.
OE	N/A	4	16	I	Output Enable. See OE LOGIC TABLE below

OE LOGIC TABLE

Part Number	OE State	Output Buffer State
PL130-07	0	Tri-State
	1 (Default)	Active
PL130-07A	0 (Default)	Active
	1	Tri-State

ELECTRICAL SPECIFICATIONS

1. Absolute Maximum Ratings

PARAMETERS	SYMBOL	MIN.	MAX.	UNITS
Supply Voltage	V_{DD}		4.6	V
Input Voltage, dc	V_I	-0.5	V_{DD}+0.5	V
Output Voltage, dc	V_O	-0.5	V_{DD}+0.5	V
Storage Temperature	T_S	-65	150	°C
Ambient Operating Temperature*	T_A	-40	85	°C
Junction Temperature	T_J		125	°C
Lead Temperature (soldering, 10s)			260	°C
ESD Protection, Human Body Model			2	kV

Exposure of the device under conditions beyond the limits specified by Maximum Ratings for extended periods may cause permanent damage to the device and affect product reliability. These conditions represent a stress rating only, and functional operations of the device at these or any other conditions above the operational limits noted in this specification is not implied.

* Note: Operating Temperature is guaranteed by design for all parts (COMMERCIAL and INDUSTRIAL), but tested for COMMERCIAL grade only.

2. AC Specifications

PARAMETERS	CONDITIONS	MIN.	TYP.	MAX.	UNITS
Input Frequency		0		200	MHz
Input Signal Swing	REF_IN input	100			mV
Output Frequency		0		200	MHz

3. CMOS Output Electrical Specifications

PARAMETERS	SYMBOL	CONDITIONS	MIN.	TYP.	MAX.	UNITS
Output High Voltage	V_{OH}	I_{OH} = -12mA	2.4			V
Output Low Voltage	V_{OL}	I_{LO} = 12mA			0.4	V
Output High Voltage at CMOS level	V_{OHC}	I_{OH} = -4mA	V_{DD}– 0.4			V
Output Drive Current		At TTL level (High Drive*)	36	51		mA
		At TTL level (Standard Drive)	12	17		mA

* Note: High Drive CMOS is selectable through DRIV_SEL selector input on pin 8(SOP) or 13(QFN).

4. CMOS Switching Characteristics

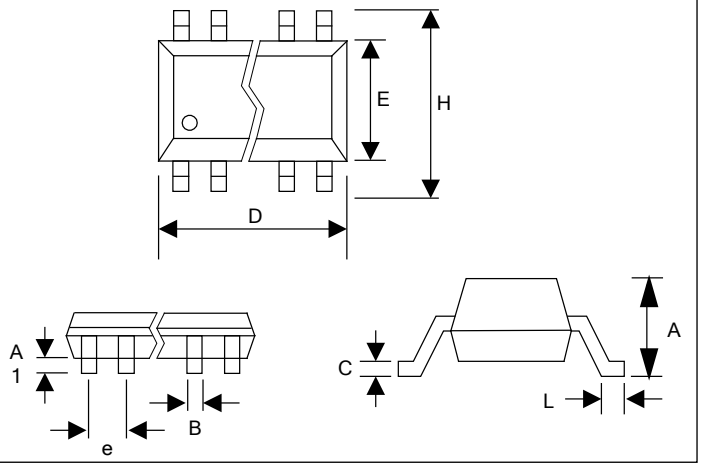
PARAMETERS	SYMBOL	CONDITIONS	MIN.	TYP.	MAX.	UNITS
Output Clock Rise/Fall Time	t_r / t_f	0.8V ~ 2.0V with 10 pF load		1.15		ns
	t_r / t_f	0.3V ~ 3.0V with 15 pF load		3.7		
Output Clock Rise/Fall Time (High Drive*)	t_r / t_f	0.8V ~ 2.0V with 10 pF load		0.5		
	t_r / t_f	0.3V ~ 3.0V with 15 pF load		1.5		

* Note: High Drive CMOS is selectable through DRIV_SEL selector input on pin 8(SOIC) or 13(QFN).

PACKAGE DRAWINGS (GREEN PACKAGE COMPLIANT)

8 PIN (dimensions in mm)

	SOP		TSSOP	
Symbol	Min.	Max.	Min.	Max.
A	1.47	1.73	-	1.20
A1	0.10	0.25	0.05	0.15
B	0.33	0.51	0.19	0.30
C	0.19	0.25	0.09	0.20
D	4.80	4.95	2.90	3.10
E	3.80	4.00	4.30	4.50
H	5.80	6.20	6.20	6.60
L	0.38	1.27	0.45	0.75
e	1.27 BSC		0.65 BSC	

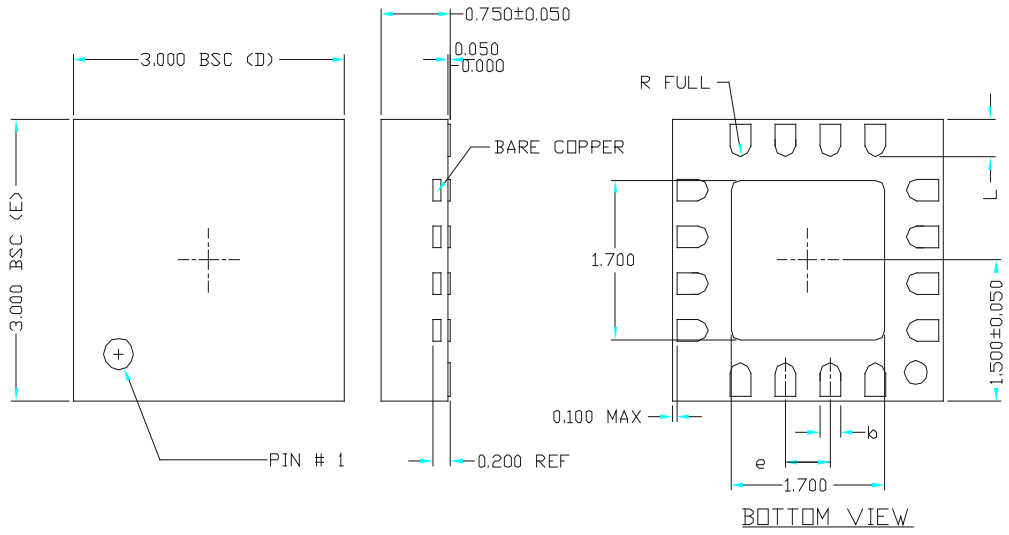


QFN-16L

Dimensions in MM

VARIATIONS:

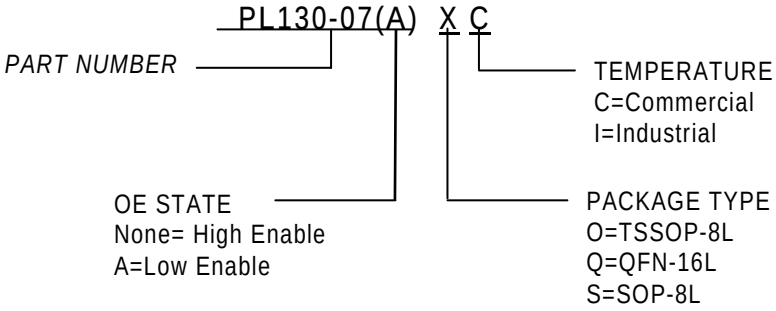
SYMBOL	16 LD		
	MIN	NOM	MAX
e	0.50 BSC		
b	0.18	0.23	0.30
L	0.30	0.40	0.50
ND	4		
NE	4		



ORDERING INFORMATION (GREEN PACKAGE COMPLIANT)

For part ordering, please contact our Sales Department:
2180 Fortune Drive, San Jose, CA 95131, USA
Tel: (408) 944-0800 Fax: (408) 474-1000

PART NUMBER
The order number for this device is a combination of the following:
Device number, Package type and Operating temperature range



Part/Order Number	Marking	Package Option
PL130-07OC	P130-07 OC LLLLL	16-Pin TSSOP Tube
PL130-07OC-R		16-Pin TSSOP (Tape and Reel)
PL130-07AOC	P130-07A OC LLLLL	16-Pin TSSOP Tube
PL130-07AOC-R		16-Pin TSSOP (Tape and Reel)
PL130-07QC-R	P130 07 LLL	16-Pin QFN (Tape and Reel)
PL130-07AQC-R	P130 07A LLL	16-Pin QFN (Tape and Reel)
PL130-07SC	P130-07 SC LLLLL	8-Pin SOP Tube
PL130-07SC-R		8-Pin SOP (Tape and Reel)

*Note: "LLL" and "LLLLL" designates lot number