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Renesas Electronics website: <http://www.renesas.com>

April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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HD74LS126A

Quadruple Bus Buffer Gates (with three-state outputs)

REJ03D0431-0300

Rev.3.00

Jul.13.2005

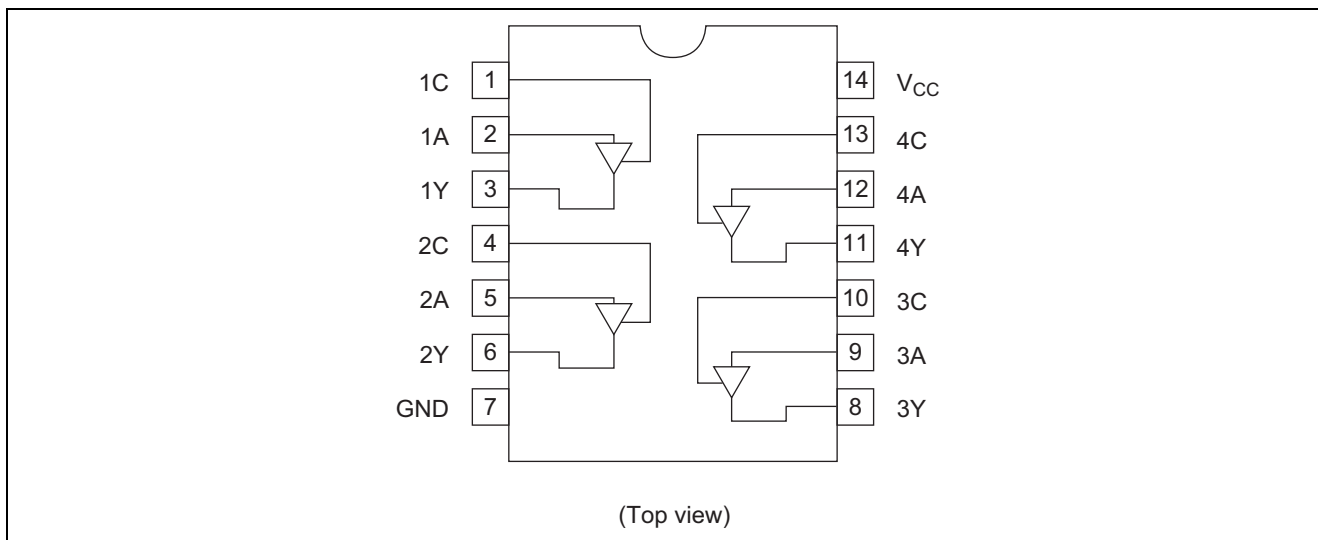
Features

- Ordering Information

Part Name	Package Type	Package Code (Previous Code)	Package Abbreviation	Taping Abbreviation (Quantity)
HD74LS126AFPEL	SOP-14 pin(JEITA)	PRSP0014DF-B (FP-14DAV)	FP	EL (2,000 pcs/reel)
HD74LS126ARPEL	SOP-14 pin(JEDEC)	PRSP0014DE-A (FP-14DNV)	RP	EL (2,500 pcs/reel)

Note: Please consult the sales office for the above package availability.

Pin Arrangement



Function Table

Inputs		Output
C	A	Y
L	X	Z
H	H	H
H	L	L

Note: H ; high level,
 L ; low level,
 X ; irrelevant,
 Z ; off (high-impedance) state of a 3-state output

Absolute Maximum Ratings

Item	Symbol	Ratings	Unit
Supply voltage	V _{CC}	7	V
Input voltage	V _{IN}	7	V
Power dissipation	P _T	400	mW
Storage temperature	T _{stg}	-65 to +150	°C

Note: Voltage value, unless otherwise noted, are with respect to network ground terminal.

Recommended Operating Conditions

Item	Symbol	Min	Typ	Max	Unit
Supply voltage	V _{CC}	4.75	5.00	5.25	V
High level output current	I _{OH}	—	—	-2.6	mA
Low level output current	I _{OL}	—	—	24	mA
Operating temperature	T _{opr}	-20	25	75	°C

Electrical Characteristics

(T_a = -20 to +75 °C)

Item	Symbol	min.	typ.*	max.	Unit	Condition
Input voltage	V _{IH}	2.0	—	—	V	
	V _{IL}	—	—	0.8	V	
Output voltage	V _{OH}	2.4	—	—	V	V _{CC} = 4.75 V, V _{IH} = 2 V, I _{OH} = -2.6 mA
	V _{OL}	—	—	0.5	V	I _{OL} = 24 mA, V _{CC} = 4.75 V, V _{IH} = 2 V,
—		—	0.4	I _{OL} = 12 mA, V _{IL} = 0.8 V		
Off-state output current	I _{OZH}	—	—	20	μA	V _O = 2.4 V, V _{CC} = 5.25 V, V _{IH} = 2 V,
	I _{OZL}	—	—	-20		V _O = 0.4 V, V _{IL} = 0.8 V
Input current	I _{IH}	—	—	20	μA	V _{CC} = 5.25 V, V _I = 2.7 V
	I _{IL}	—	—	-0.4		mA
		—	—	-0.4	C input	
I _I	—	—	0.1	mA	V _{CC} = 5.25 V, V _I = 7 V	
Short-circuit output current	I _{OS}	-40	—	-225	mA	V _{CC} = 5.25 V
Supply current	I _{CC} **	—	12	22	mA	V _{CC} = 5.25 V
Input clamp voltage	V _{IK}	—	—	-1.5	V	V _{CC} = 4.75 V, I _{IN} = -18 mA

Notes: * V_{CC} = 5 V, T_a = 25°C

** I_{CC} is measured with the A and C input grounded.

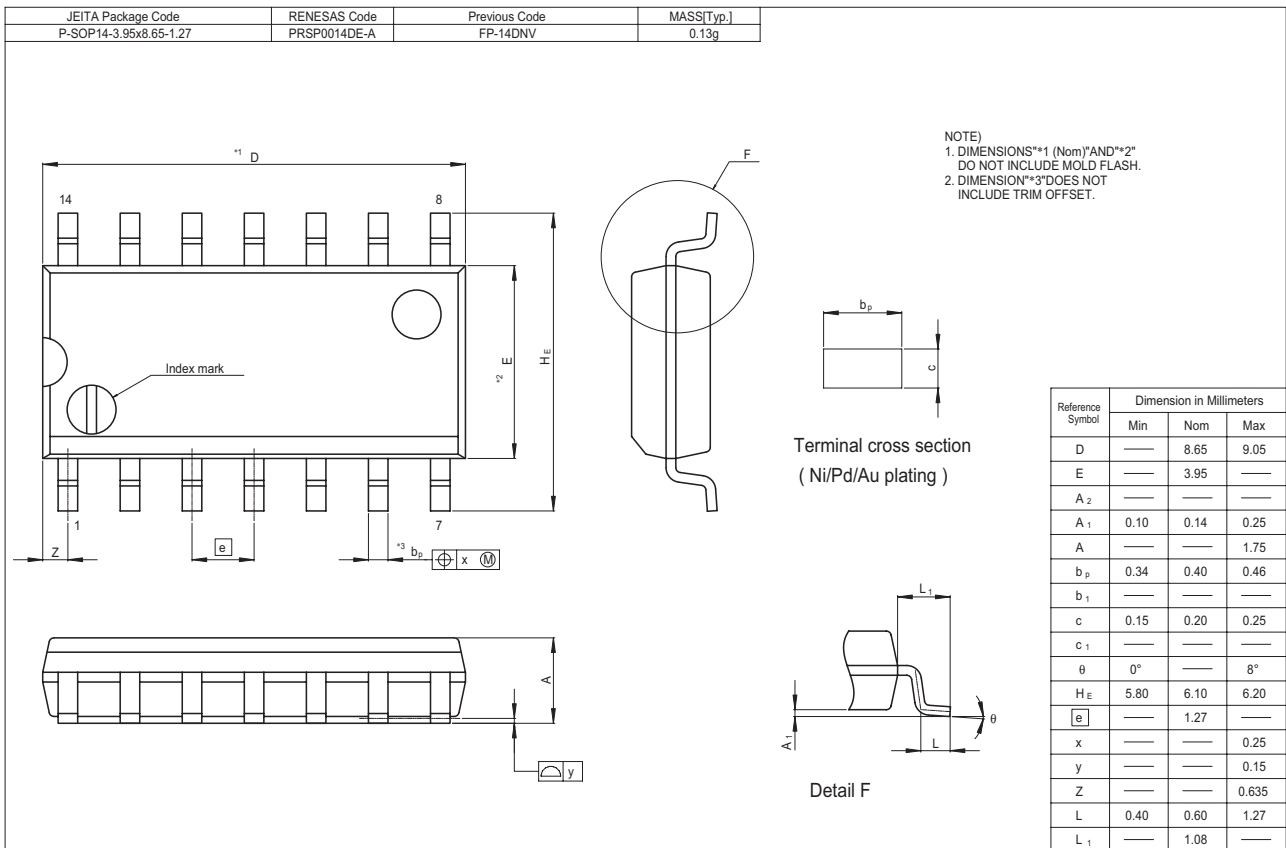
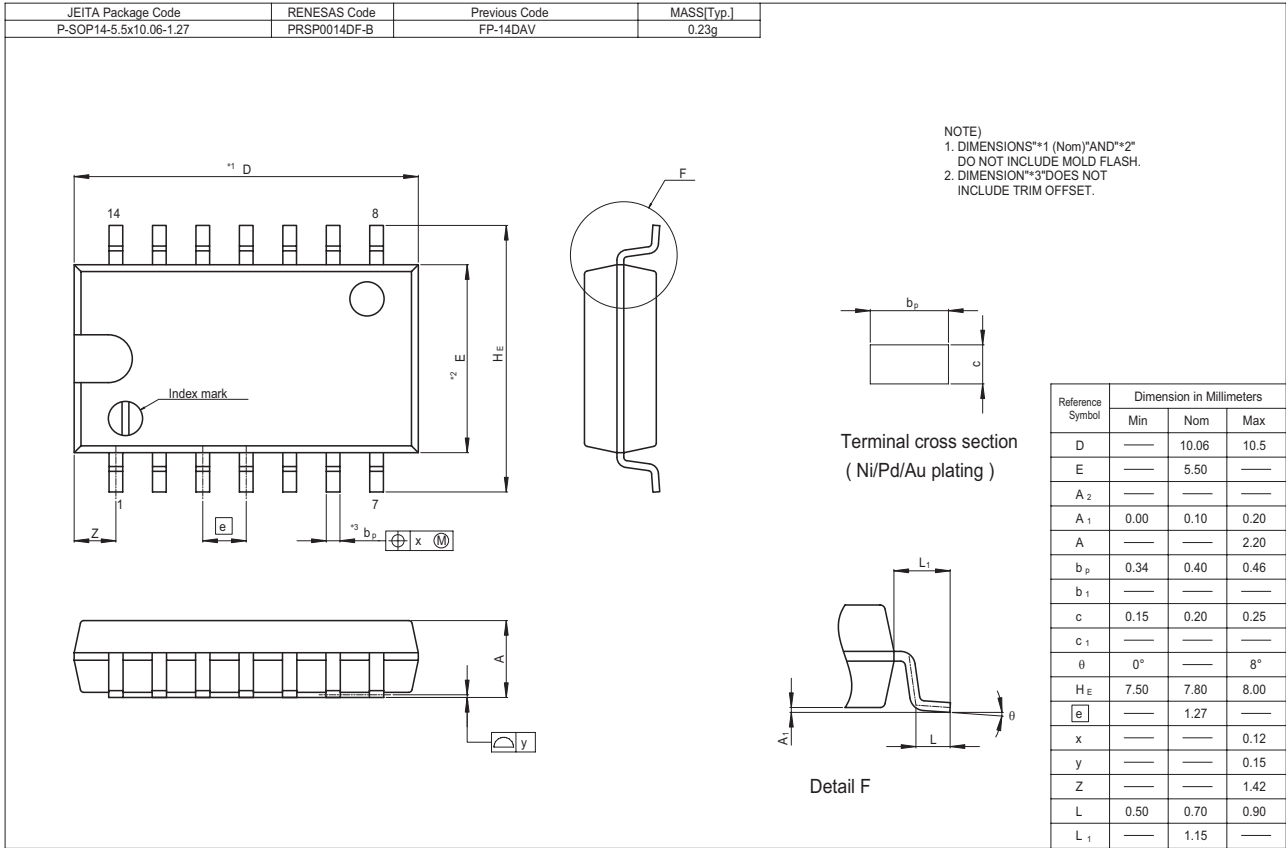
Switching Characteristics

(V_{CC} = 5 V, T_a = 25°C)

Item	Symbol	min.	typ.	max.	Unit	Condition
Propagation delay time	t _{PLH}	—	9	15	ns	C _L = 45 pF, R _L = 667 Ω
	t _{PHL}	—	8	18		
Output enable time	t _{ZH}	—	16	25	ns	
	t _{ZL}	—	21	35		
Output disable time	t _{HZ}	—	—	25	ns	C _L = 5 pF, R _L = 667 Ω
	t _{LZ}	—	—	25		

Note: Refer to Test Circuit and Waveform of the Common Item "TTL Common Matter (Document No.: REJ27D0005-0100)".

Package Dimensions



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