

# HD74LS367A

## Hex Bus Drivers

(non-inverted data outputs with three-state outputs)

REJ03D0480-0200

Rev.2.00

Feb.18.2005

### Features

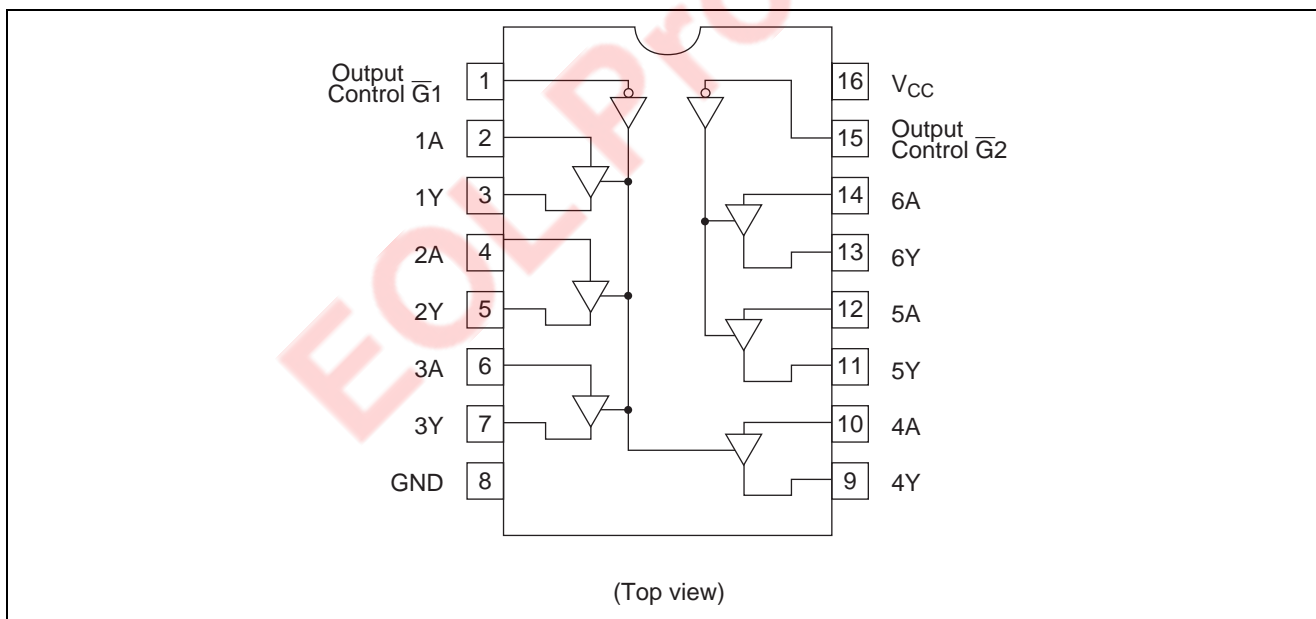
- Ordering Information

Part Name	Package Type	Package Code (Previous Code)	Package Abbreviation	Taping Abbreviation (Quantity)
HD74LS367AP	DILP-16 pin	PRDP0016AE-B (DP-16FV)	P	—
HD74LS367AFPEL	SOP-16 pin (JEITA)	PRSP0016DH-B (FP-16DAV)	FP	EL (2,000 pcs/reel)
HD74LS367ARPEL	SOP-16 pin (JEDEC)	PRSP0016DG-A (FP-16DNV)	RP	EL (2,500 pcs/reel)

Notes: 1. Please consult the sales office for the above package availability.

2. The packages with lead-free pins are distinguished from the conventional products by adding V at the end of the package code.

### Pin Arrangement



### Function Table

$\bar{G}$	A	Y
H	X	Z
L	L	L
L	H	H

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
Output voltage (off-state)	$V_{O(off)}$	5.5	V
Power dissipation	$P_T$	400	mW
Operating temperature	$T_{opr}$	-20 to +75	°C
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
Output current	$I_{OH}$	—	—	-2.6	mA
	$I_{OL}$	—	—	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, $V_{IL} = 0.8$ V, $I_{OH} = -2.6$ mA	
	$V_{OL}$	—	—	0.5	V		$I_{OL} = 24$ mA
—		—	0.4	$I_{OL} = 12$ mA			
Output current	$I_{OZ}$	—	—	20	$\mu$ A	$V_O = 2.4$ V	$V_{CC} = 5.25$ V, $V_{IH} = 2$ V, $V_{IL} = 0.8$ V
		—	—	-20			
Input current	$I_{IH}$	—	—	20	$\mu$ A	$V_{CC} = 5.25$ V, $V_I = 2.7$ V	
	$I_{IL}$	—	—	-20	$\mu$ A	$V_I = 0.5$ V, $\overline{G}$ inputs 2 V	A inputs $V_{CC} = 5.25$ V
		—	—	-0.4	mA	$V_I = 0.4$ V, $\overline{G}$ inputs 0.4 V	
		—	—	-0.4	mA	$\overline{G}$ inputs $V_{CC} = 5.25$ V, $V_I = 0.4$ V	
$I_I$	—	—	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	$I_{CC}^{**}$	—	14	24	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 data inputs grounded and output control inputs at 4.5 V.

## Switching Characteristics

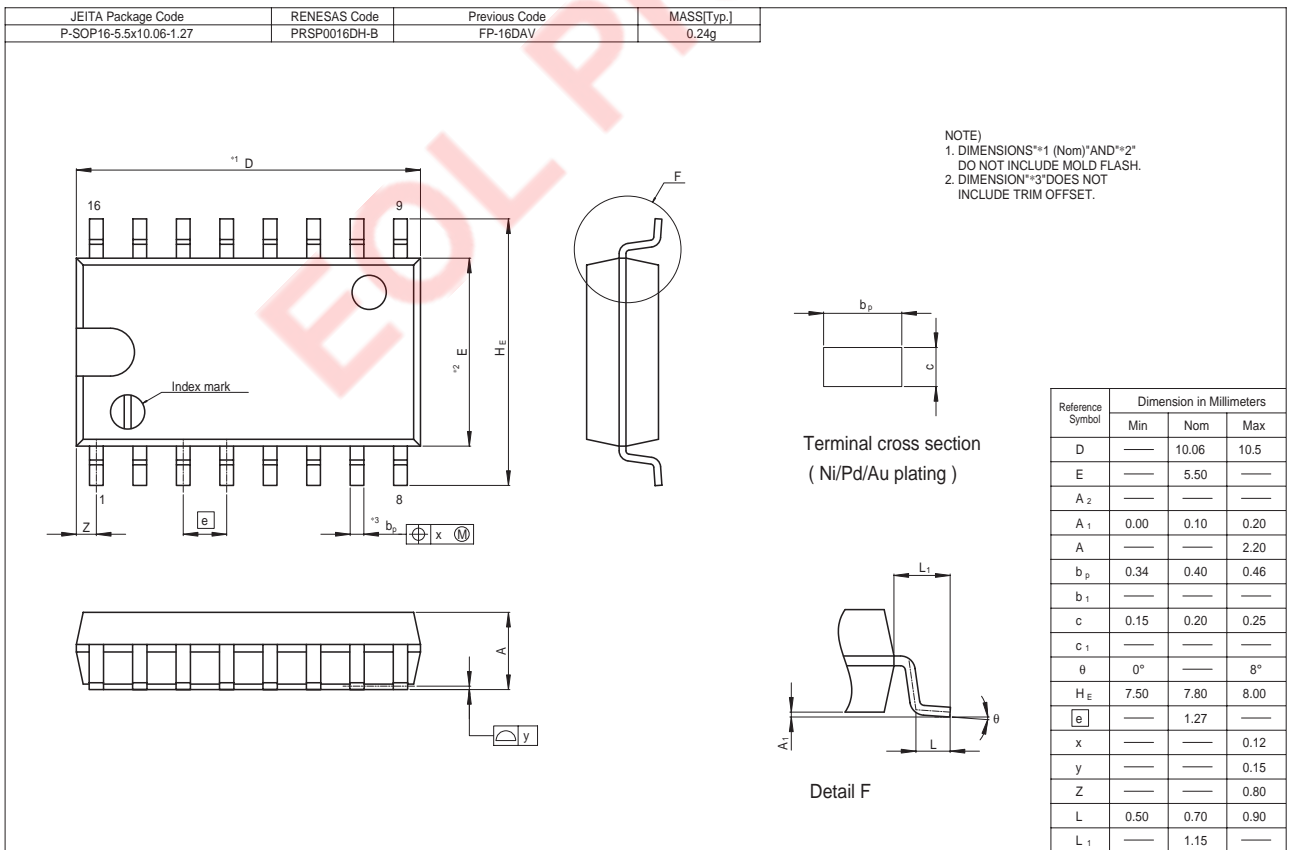
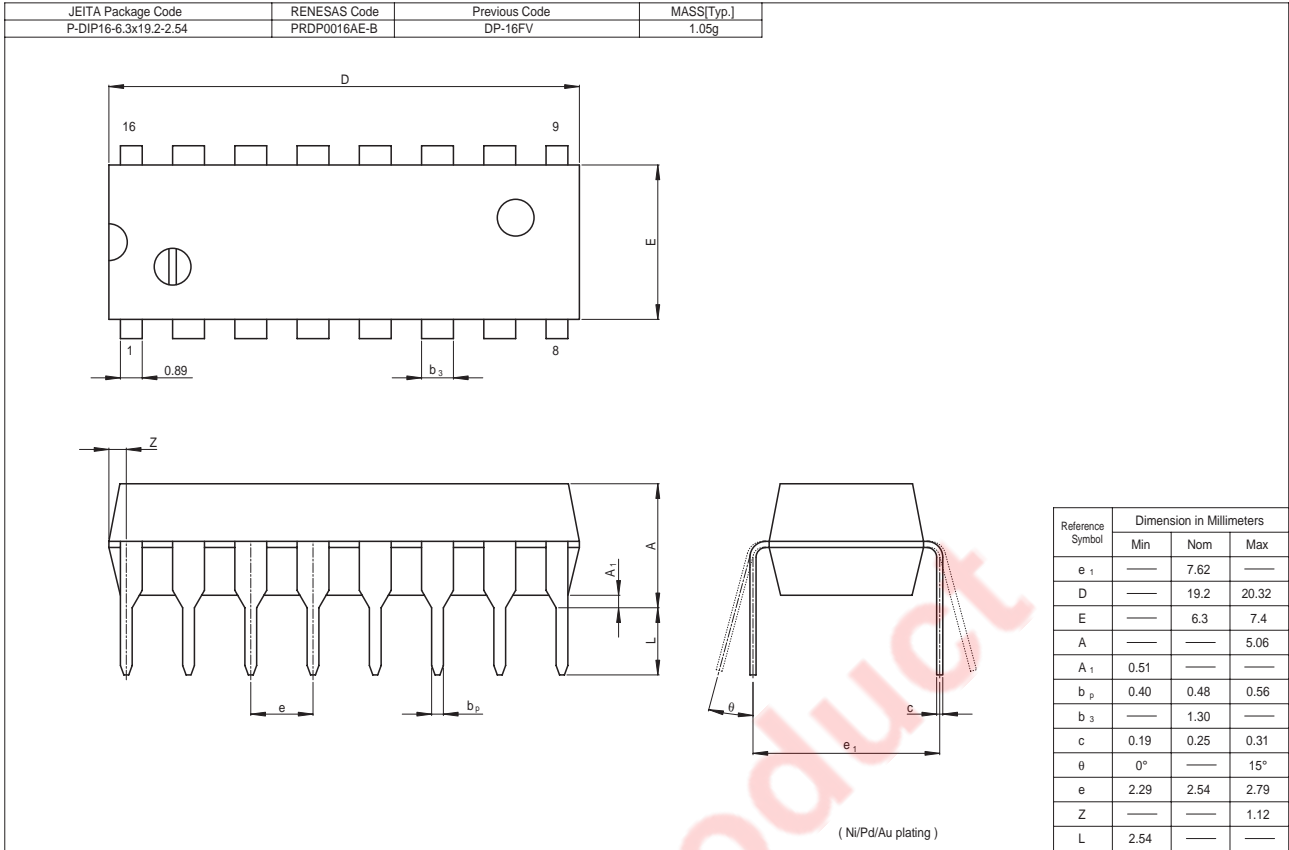
(V<sub>CC</sub> = 5 V, T<sub>a</sub> = 25°C)

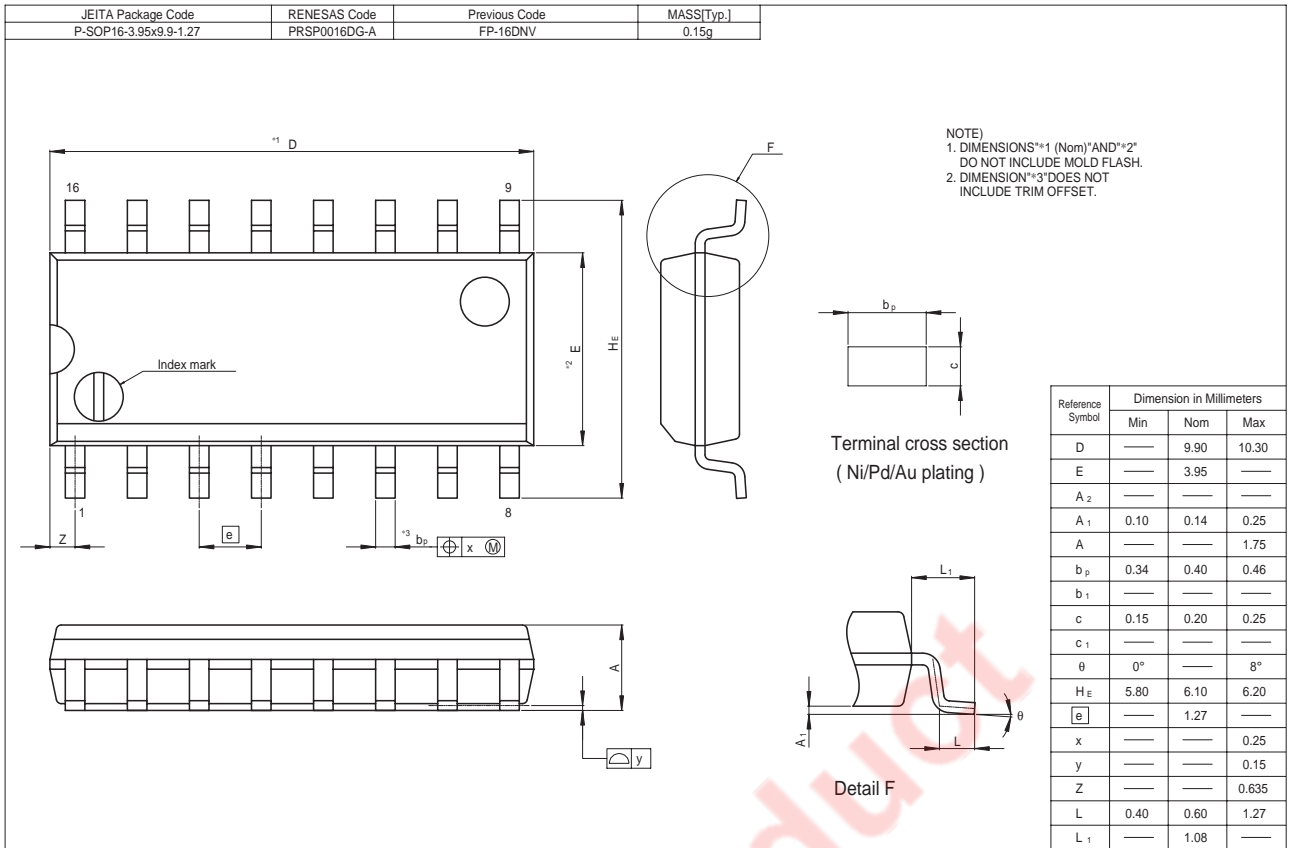
Item	Symbol	min.	typ.	max.	Unit	Condition
Propagation delay time	t <sub>PLH</sub>	—	10	16	ns	C <sub>L</sub> = 45 pF, R <sub>L</sub> = 667 Ω
	t <sub>PHL</sub>	—	9	22		
Output enable time	t <sub>ZH</sub>	—	19	35	ns	
	t <sub>ZL</sub>	—	24	40		
Output disable time	t <sub>HZ</sub>	—	—	30	ns	C <sub>L</sub> = 5 pF, R <sub>L</sub> = 667 Ω
	t <sub>LZ</sub>	—	—	35		

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

EOL Product

Package Dimensions





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