

The SN5405 is obsolete and no longer is supplied.

SN54LS05, SN54S05 SN7405, SN74LS05, SN74S05 HEX INVERTERS WITH OPEN-COLLECTOR OUTPUTS

SDLS030A – DECEMBER 1983 – REVISED NOVEMBER 2003

- Package Options Include Plastic Small-Outline (D, NS), Shrink Small-Outline (DB), and Ceramic Flat (W) Packages, Ceramic Chip Carriers (FK), and Standard Plastic (N) and Ceramic (J) DIPs

- Dependable Texas Instrument Quality and Reliability

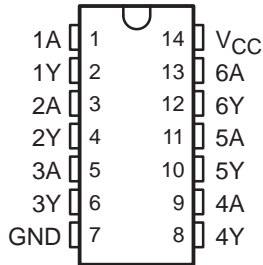
SN5405, SN54LS05, SN54S05 . . . J PACKAGE

SN7405 . . . N PACKAGE

SN74LS05 . . . D, DB, N, OR NS PACKAGE

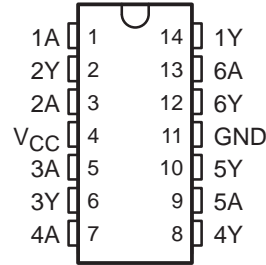
SN74S05 . . . D, N, OR NS PACKAGE

(TOP VIEW)



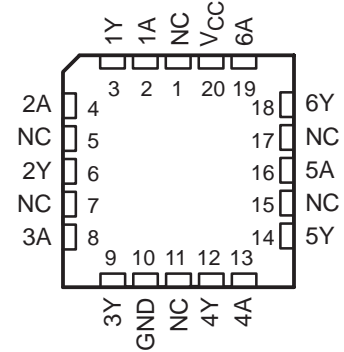
SN54LS05, SN54S05 . . . W PACKAGE

(TOP VIEW)



SN54LS05, SN54S05 . . . FK PACKAGE

(TOP VIEW)



NC – No internal connection

description/ordering information

These devices contain six independent inverters. To perform correctly, the open-collector outputs require pullup resistors. These devices may be connected to other open-collector outputs to implement active-low wired-OR or active-high wire-AND functions. Open-collector devices often are used to generate high V_{OH} levels.

ORDERING INFORMATION

T_A	PACKAGE†		ORDERABLE PART NUMBER	TOP-SIDE MARKING	
0°C to 70°C	PDIP – N	Tube	SN7405N	SN7405N	
			SN74LS05N	SN74LS05N	
			SN74S05N	SN74S05N	
	SOIC – D	Tube	SN74LS05D	LS05	
			Tape and reel		SN74LS05DR
			Tube	SN74S05D	S05
				Tape and reel	
	SOP – NS	Tape and reel	SN74LS05NSR	74LS05	
SN74S05NSR			74S05		
–55°C to 125°C	CDIP – J	Tube	SNJ54LS05J	SNJ54LS05J	
			SNJ54S05J	SNJ54S05J	
	CDIP – W	Tube	SNJ54LS05W	SNJ54LS05W	
			SNJ54S05W	SNJ54S05W	
	LCCC – FK	Tube	SNJ54LS05FK	SNJ54LS05FK	
SNJ54S05FK			SNJ54S05FK		

† Package drawings, standard packing quantities, thermal data, symbolization, and PCB design guidelines are available at www.ti.com/sc/package.



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PRODUCTION DATA information is current as of publication date. Products conform to specifications per the terms of Texas Instruments standard warranty. Production processing does not necessarily include testing of all parameters.

 **TEXAS
INSTRUMENTS**

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On products compliant to MIL-PRF-38535, all parameters are tested unless otherwise noted. On all other products, production processing does not necessarily include testing of all parameters.

SN54LS05, SN54S05
SN7405, SN74LS05, SN74S05
HEX INVERTERS WITH OPEN-COLLECTOR OUTPUTS

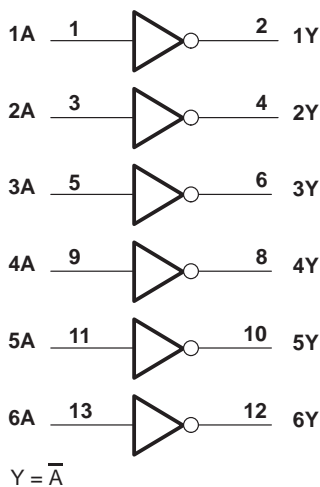
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FUNCTION TABLE
(each inverter)

INPUT A	OUTPUT Y
H	L
L	H

logic diagram (positive logic)



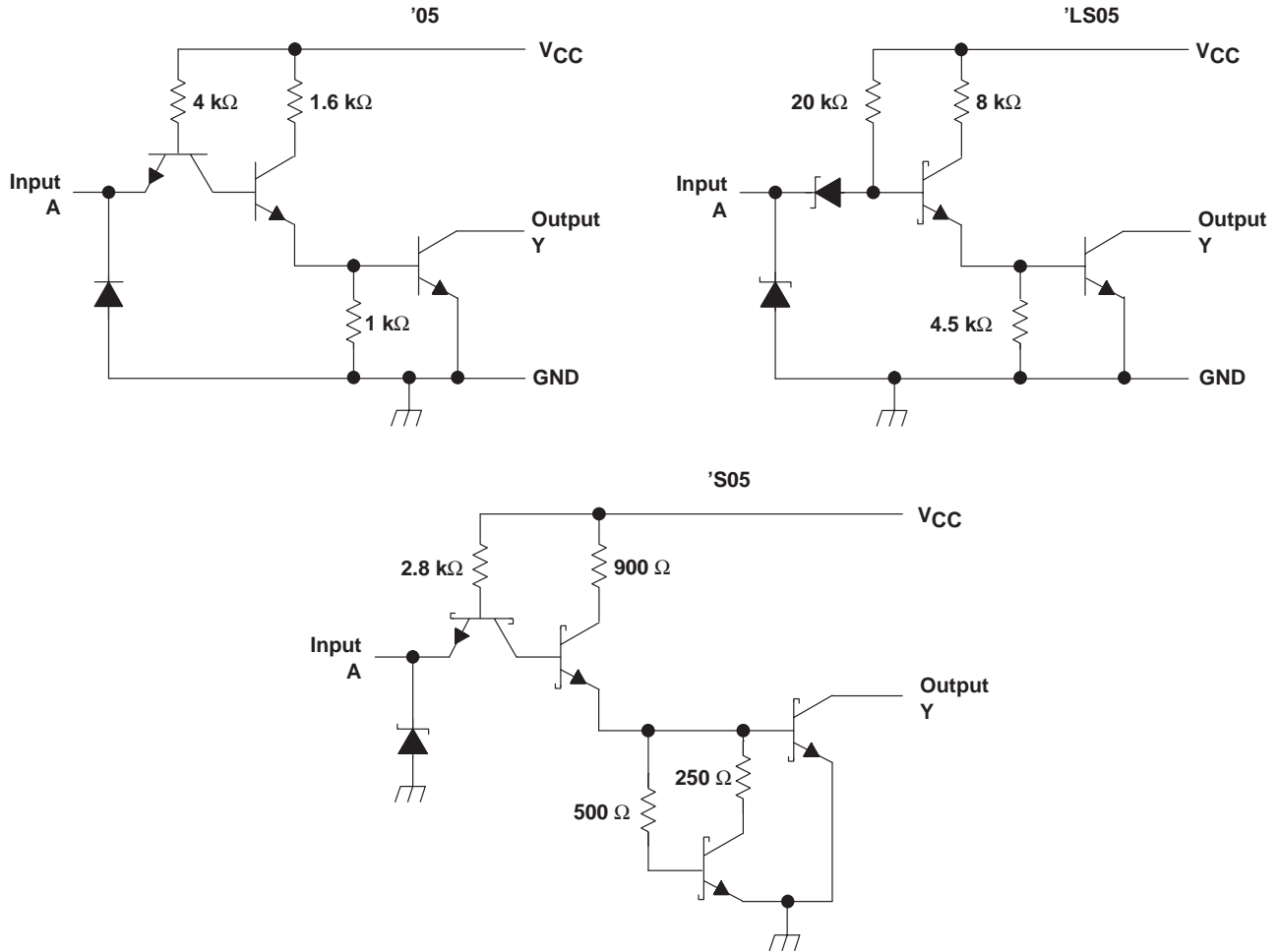
Pin numbers shown are for the D, DB, J, N, and NS packages.

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SN54LS05, SN54S05 SN7405, SN74LS05, SN74S05 HEX INVERTERS WITH OPEN-COLLECTOR OUTPUTS

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schematic (each inverter)



Resistor values shown are nominal.

absolute maximum ratings over operating free-air temperature (unless otherwise noted)[†]

Supply voltage, V_{CC} (see Note 1): '05, 'LS05, 'S05	7 V
Input voltage, V_I : '05, 'S05	5.5 V
'LS05	7 V
Off-state output voltage, V_O	7 V
Package thermal impedance, θ_{JA} (see Note 2): D package	86°C/W
DB package	96°C/W
N package	80°C/W
NS package	76°C/W
Storage temperature range, T_{Stg}	-65°C to 150°C

[†] Stresses beyond those listed under "absolute maximum ratings" may cause permanent damage to the device. These are stress ratings only, and functional operation of the device at these or any other conditions beyond those indicated under "recommended operating conditions" is not implied. Exposure to absolute-maximum-rated conditions for extended periods may affect device reliability.

NOTES: 1. Voltage values are with respect to network ground terminal.

2. The package thermal impedance is calculated in accordance with JESD 51-7.



**SN54LS05, SN54S05
SN7405, SN74LS05, SN74S05
HEX INVERTERS WITH OPEN-COLLECTOR OUTPUTS**

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recommended operating conditions

	SN5405			SN7405			UNIT
	MIN	NOM	MAX	MIN	NOM	MAX	
V _{CC} Supply voltage	4.5	5	5.5	4.75	5	5.25	V
V _{IH} High-level input voltage	2			2			V
V _{IL} Low-level input voltage			0.8			0.8	V
V _{OH} High-level output voltage			5.5			5.5	V
I _{OL} Low-level output current			16			16	mA
T _A Operating free-air temperature	-55		125	0		70	°C

electrical characteristics over recommended operating free-air temperature range (unless otherwise noted)

PARAMETER	TEST CONDITIONS†	SN5405			SN7405			UNIT
		MIN	TYP‡	MAX	MIN	TYP‡	MAX	
V _{IK}	V _{CC} = MIN, I _I = -12 mA			-1.5			-1.5	V
I _{OH}	V _{CC} = MIN, V _{OH} = 5.5 V V _{IL} = 0.8 V V _{IL} = 0.7 V						0.25	mA
V _{OL}	V _{CC} = MIN, V _{IH} = 2 V, I _{OL} = 16 mA		0.2	0.4		0.2	0.4	V
I _I	V _{CC} = MAX, V _I = 5.5 V			1			1	mA
I _{IH}	V _{CC} = MAX, V _I = 2.4 V			40			40	µA
I _{IL}	V _{CC} = MAX, V _I = 0.4 V			-1.6			-1.6	mA
I _{CCH}	V _{CC} = MAX, V _I = 0 V		6	12		6	12	mA
I _{CCL}	V _{CC} = MAX, V _I = 4.5 V		18	33		18	33	mA

† For conditions shown as MIN or MAX, use the appropriate value specified under recommended operating conditions.

‡ All typical values are at V_{CC} = 5 V, T_A = 25°C.

switching characteristics, V_{CC} = 5 V, T_A = 25°C (see Figure 1)

PARAMETER	FROM (INPUT)	TO (OUTPUT)	TEST CONDITIONS		MIN	TYP	MAX	UNIT
t _{PLH}	A	Y	R _L = 4 kΩ	C _L = 15 pF		40	55	ns
t _{PHL}			R _L = 400 Ω			8	15	



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SN54LS05, SN54S05
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recommended operating conditions

		SN54LS05			SN74LS05			UNIT		
		MIN	NOM	MAX	MIN	NOM	MAX			
V _{CC}	Supply voltage	4.5	5	5.5	4.75	5	5.25	V		
V _{IH}	High-level input voltage	2			2			V		
V _{IL}	Low-level input voltage	0.7			0.8			V		
V _{OH}	High-level output voltage	5.5			5.5			V		
I _{OL}	Low-level output current	4			8			mA		
T _A	Operating free-air temperature	-55			125			0	70	°C

electrical characteristics over recommended operating free-air temperature range (unless otherwise noted)

PARAMETER	TEST CONDITIONS†	SN54LS05			SN74LS05			UNIT	
		MIN	TYP‡	MAX	MIN	TYP‡	MAX		
V _{IK}	V _{CC} = MIN, I _I = -18 mA	-1.5			-1.5			V	
I _{OH}	V _{CC} = MIN, V _{IL} = MAX, V _{OH} = 5.5 V	0.1			0.1			mA	
V _{OL}	V _{CC} = MIN, V _{IH} = 2 V	I _{OL} = 4 mA		0.25	0.4	0.25		0.4	V
		I _{OL} = 8 mA				0.35		0.5	
I _I	V _{CC} = MAX, V _I = 7 V	0.1			0.1			mA	
I _{IH}	V _{CC} = MAX, V _I = 2.7 V	20			20			μA	
I _{IL}	V _{CC} = MAX, V _I = 0.4 V	-0.4			-0.4			mA	
I _{CCH}	V _{CC} = MAX, V _I = 0 V	1.2		2.4	1.2		2.4	mA	
I _{CCL}	V _{CC} = MAX, V _I = 4.5 V	3.6		6.6	3.6		6.6	mA	

† For conditions shown as MIN or MAX, use the appropriate value specified under recommended operating conditions.

‡ All typical values are at V_{CC} = 5 V, T_A = 25°C.

switching characteristics, V_{CC} = 5 V, T_A = 25°C (see Figure 2)

PARAMETER	FROM (INPUT)	TO (OUTPUT)	TEST CONDITIONS	MIN	TYP	MAX	UNIT
t _{PLH}	A	Y	R _L = 2 kΩ, C _L = 15 pF	17		32	ns
t _{PHL}				15		28	



**SN54LS05, SN54S05
SN7405, SN74LS05, SN74S05
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recommended operating conditions

	SN54S05			SN74S05			UNIT
	MIN	NOM	MAX	MIN	NOM	MAX	
V _{CC} Supply voltage	4.5	5	5.5	4.75	5	5.25	V
V _{IH} High-level input voltage	2			2			V
V _{IL} Low-level input voltage			0.8			0.8	V
V _{OH} High-level output voltage			5.5			5.5	V
I _{OL} Low-level output current			20			20	mA
T _A Operating free-air temperature	-55		125	0		70	°C

electrical characteristics over recommended operating free-air temperature range (unless otherwise noted)

PARAMETER	TEST CONDITIONS†		SN54S05			SN74S05			UNIT
			MIN	TYP‡	MAX	MIN	TYP‡	MAX	
V _{IK}	V _{CC} = MIN,	I _I = -18 mA			-1.2			-1.2	V
I _{OH}	V _{CC} = MIN,	V _{OH} = 5.5 V					0.25		mA
		V _{IL} = 0.8 V							
		V _{IL} = 0.7 V			0.25				
V _{OL}	V _{CC} = MIN,	V _{IH} = 2 V, I _{OL} = 20 mA			0.5			0.5	V
I _I	V _{CC} = MAX,	V _I = 5.5 V			1			1	mA
I _{IH}	V _{CC} = MAX,	V _I = 2.7 V			50			50	µA
I _{IL}	V _{CC} = MAX,	V _I = 0.5 V			-2			-2	mA
I _{CCH}	V _{CC} = MAX,	V _I = 0 V		9	19.8		9	19.8	mA
I _{CCL}	V _{CC} = MAX,	V _I = 4.5 V		30	54		30	54	mA

† For conditions shown as MIN or MAX, use the appropriate value specified under recommended operating conditions.

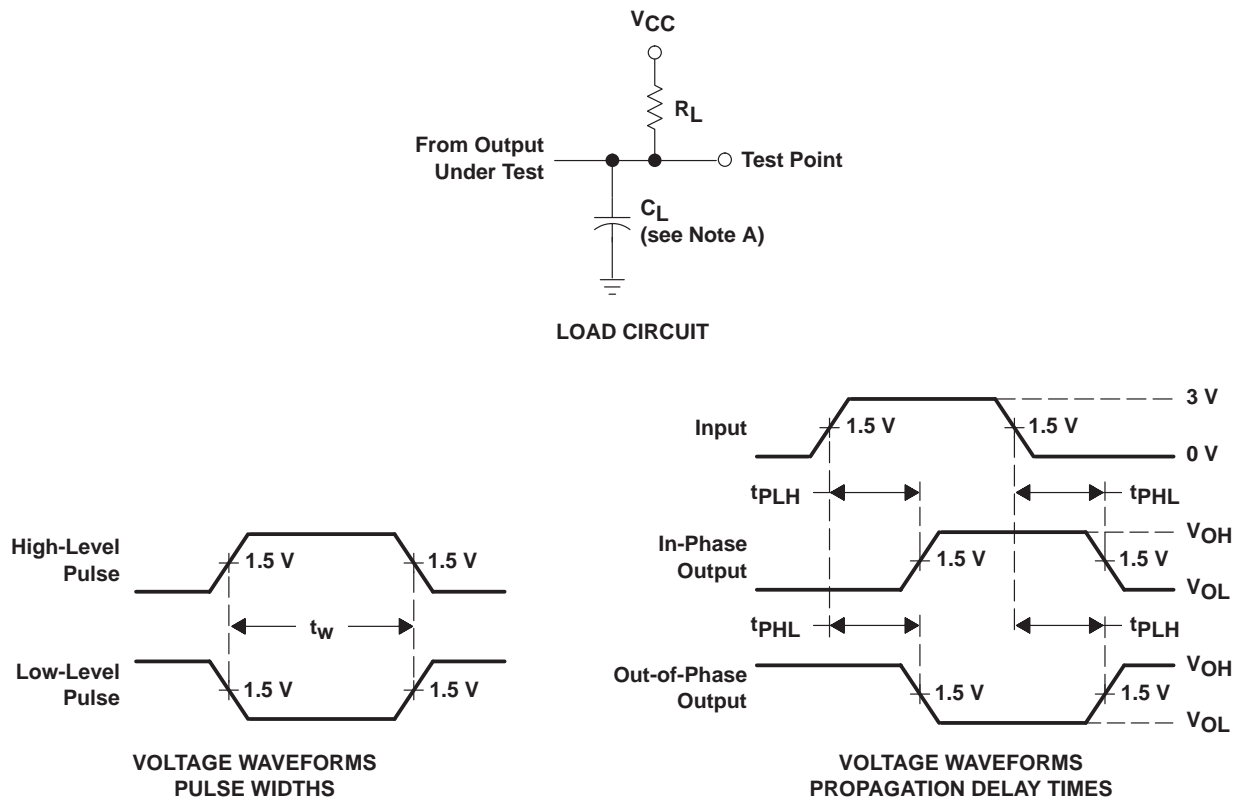
‡ All typical values are at V_{CC} = 5 V, T_A = 25°C.

switching characteristics, V_{CC} = 5 V, T_A = 25°C (see Figure 1)

PARAMETER	FROM (INPUT)	TO (OUTPUT)	TEST CONDITIONS		MIN	TYP	MAX	UNIT
t _{PLH}	A	Y	R _L = 280 Ω	C _L = 15 pF	2	5	7.5	ns
t _{PHL}					2	4.5	7	
t _{PLH}				C _L = 50 pF	7.5	ns		
t _{PHL}					7			



**PARAMETER MEASUREMENT INFORMATION
SERIES 54/74 AND 54S/74S DEVICES**



- NOTES: A. C_L includes probe and jig capacitance.
 B. In the examples above, the phase relationships between inputs and outputs have been chosen arbitrarily.
 C. All input pulses are supplied by generators having the following characteristics: $PRR \leq 1$ MHz, $Z_O = 50 \Omega$, and:
 For Series 54/74, $t_r \leq 7$ ns, $t_f \leq 7$ ns.
 For Series 54S/74S, $t_r \leq 2.5$ ns, $t_f \leq 2.5$ ns.
 D. The outputs are measured one at a time with one input transition per measurement.

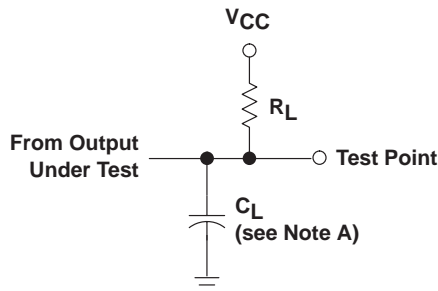
Figure 1. Load Circuit and Voltage Waveforms

**SN54LS05, SN54S05
SN7405, SN74LS05, SN74S05
HEX INVERTERS WITH OPEN-COLLECTOR OUTPUTS**

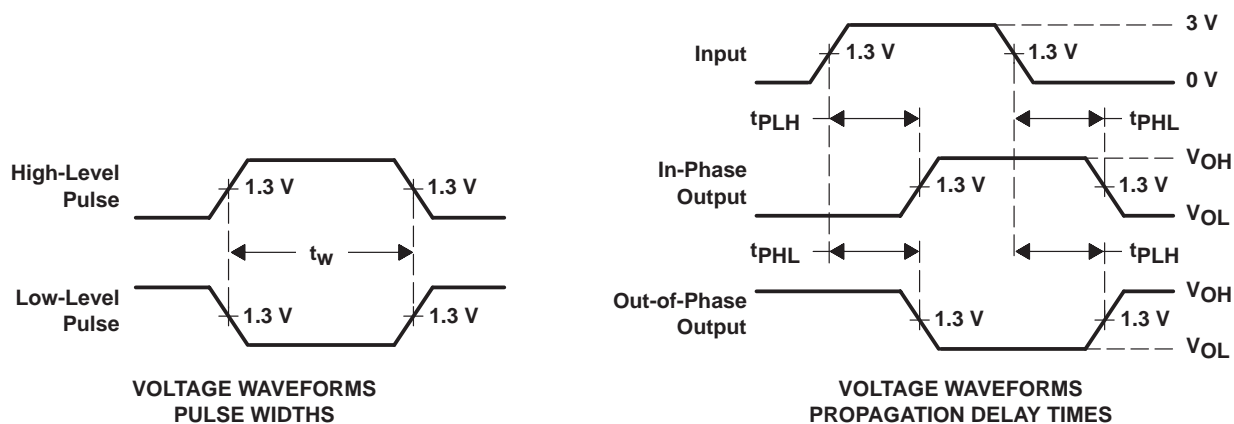
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**PARAMETER MEASUREMENT INFORMATION
SERIES 54LS/74LS DEVICES**



LOAD CIRCUIT



- NOTES: A. C_L includes probe and jig capacitance.
 B. In the examples above, the phase relationships between inputs and outputs have been chosen arbitrarily.
 C. All input pulses are supplied by generators having the following characteristics: $PRR \leq 1$ MHz, $Z_O = 50 \Omega$, $t_r \leq 1.5$ ns, $t_f \leq 2.6$ ns.
 D. The outputs are measured one at a time with one input transition per measurement.

Figure 2. Load Circuit and Voltage Waveforms

PACKAGING INFORMATION

Orderable Device	Status ⁽¹⁾	Package Type	Package Drawing	Pins	Package Qty	Eco Plan ⁽²⁾	Lead/Ball Finish	MSL Peak Temp ⁽³⁾
JM38510/07003BDA	ACTIVE	CFP	W	14	1	TBD	Call TI	Level-NC-NC-NC
JM38510/07004BCA	ACTIVE	CDIP	J	14	1	TBD	Call TI	Level-NC-NC-NC
SN54LS05J	ACTIVE	CDIP	J	14	1	TBD	Call TI	Level-NC-NC-NC
SN54S05J	ACTIVE	CDIP	J	14	1	TBD	Call TI	Level-NC-NC-NC
SN7405D	OBSOLETE	SOIC	D	14		TBD	Call TI	Call TI
SN7405DR	OBSOLETE	SOIC	D	14		TBD	Call TI	Call TI
SN7405N	ACTIVE	PDIP	N	14	25	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC
SN7405N3	OBSOLETE	PDIP	N	14		TBD	Call TI	Call TI
SN7405NE4	ACTIVE	PDIP	N	14	25	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC
SN74LS05D	ACTIVE	SOIC	D	14	50	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS05DBLE	OBSOLETE	SSOP	DB	14		TBD	Call TI	Call TI
SN74LS05DBR	ACTIVE	SSOP	DB	14	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS05DBRE4	ACTIVE	SSOP	DB	14	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS05DE4	ACTIVE	SOIC	D	14	50	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS05DR	ACTIVE	SOIC	D	14	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS05DRE4	ACTIVE	SOIC	D	14	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS05N	ACTIVE	PDIP	N	14	25	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC
SN74LS05N3	OBSOLETE	PDIP	N	14		TBD	Call TI	Call TI
SN74LS05NE4	ACTIVE	PDIP	N	14	25	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC
SN74LS05NSR	ACTIVE	SO	NS	14	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS05NSRG4	ACTIVE	SO	NS	14	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74S05D	ACTIVE	SOIC	D	14	50	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74S05DE4	ACTIVE	SOIC	D	14	50	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74S05DR	ACTIVE	SOIC	D	14	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74S05DRE4	ACTIVE	SOIC	D	14	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74S05N	ACTIVE	PDIP	N	14	25	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC
SN74S05N3	OBSOLETE	PDIP	N	14		TBD	Call TI	Call TI
SN74S05NE4	ACTIVE	PDIP	N	14	25	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC
SN74S05NSR	ACTIVE	SO	NS	14	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM

Orderable Device	Status ⁽¹⁾	Package Type	Package Drawing	Pins	Package Qty	Eco Plan ⁽²⁾	Lead/Ball Finish	MSL Peak Temp ⁽³⁾
SN74S05NSRE4	ACTIVE	SO	NS	14	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SNJ54LS05FK	ACTIVE	LCCC	FK	20	1	TBD	Call TI	Level-NC-NC-NC
SNJ54LS05J	ACTIVE	CDIP	J	14	1	TBD	Call TI	Level-NC-NC-NC
SNJ54LS05W	ACTIVE	CFP	W	14	1	TBD	Call TI	Level-NC-NC-NC
SNJ54S05FK	ACTIVE	LCCC	FK	20	1	TBD	Call TI	Level-NC-NC-NC
SNJ54S05J	ACTIVE	CDIP	J	14	1	TBD	Call TI	Level-NC-NC-NC
SNJ54S05W	ACTIVE	CFP	W	14	1	TBD	Call TI	Level-NC-NC-NC

⁽¹⁾ The marketing status values are defined as follows:

ACTIVE: Product device recommended for new designs.

LIFEBUY: TI has announced that the device will be discontinued, and a lifetime-buy period is in effect.

NRND: Not recommended for new designs. Device is in production to support existing customers, but TI does not recommend using this part in a new design.

PREVIEW: Device has been announced but is not in production. Samples may or may not be available.

OBSELETE: TI has discontinued the production of the device.

⁽²⁾ Eco Plan - The planned eco-friendly classification: Pb-Free (RoHS) or Green (RoHS & no Sb/Br) - please check <http://www.ti.com/productcontent> for the latest availability information and additional product content details.

TBD: The Pb-Free/Green conversion plan has not been defined.

Pb-Free (RoHS): TI's terms "Lead-Free" or "Pb-Free" mean semiconductor products that are compatible with the current RoHS requirements for all 6 substances, including the requirement that lead not exceed 0.1% by weight in homogeneous materials. Where designed to be soldered at high temperatures, TI Pb-Free products are suitable for use in specified lead-free processes.

Green (RoHS & no Sb/Br): TI defines "Green" to mean Pb-Free (RoHS compatible), and free of Bromine (Br) and Antimony (Sb) based flame retardants (Br or Sb do not exceed 0.1% by weight in homogeneous material)

⁽³⁾ MSL, Peak Temp. -- The Moisture Sensitivity Level rating according to the JEDEC industry standard classifications, and peak solder temperature.

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J (R-GDIP-T**)

14 LEADS SHOWN

CERAMIC DUAL IN-LINE PACKAGE



DIM \ PINS **	14	16	18	20
A	0.300 (7,62) BSC	0.300 (7,62) BSC	0.300 (7,62) BSC	0.300 (7,62) BSC
B MAX	0.785 (19,94)	.840 (21,34)	0.960 (24,38)	1.060 (26,92)
B MIN	—	—	—	—
C MAX	0.300 (7,62)	0.300 (7,62)	0.310 (7,87)	0.300 (7,62)
C MIN	0.245 (6,22)	0.245 (6,22)	0.220 (5,59)	0.245 (6,22)

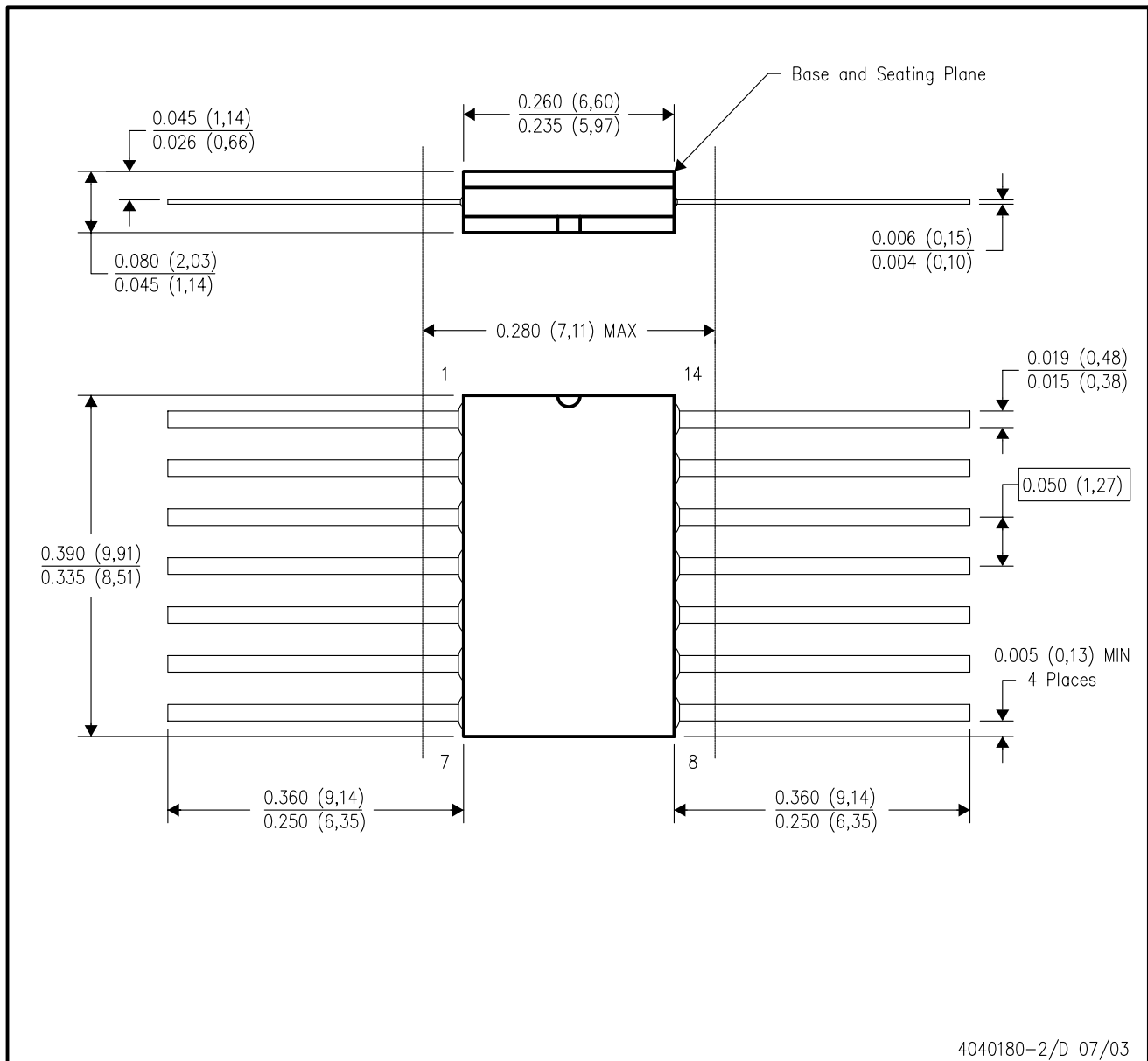


4040083/F 03/03

- NOTES:
- All linear dimensions are in inches (millimeters).
 - This drawing is subject to change without notice.
 - This package is hermetically sealed with a ceramic lid using glass frit.
 - Index point is provided on cap for terminal identification only on press ceramic glass frit seal only.
 - Falls within MIL STD 1835 GDIP1-T14, GDIP1-T16, GDIP1-T18 and GDIP1-T20.

W (R-GDFP-F14)

CERAMIC DUAL FLATPACK



- NOTES:
- A. All linear dimensions are in inches (millimeters).
 - B. This drawing is subject to change without notice.
 - C. This package can be hermetically sealed with a ceramic lid using glass frit.
 - D. Index point is provided on cap for terminal identification only.
 - E. Falls within MIL STD 1835 GDFP1-F14 and JEDEC MO-092AB

FK (S-CQCC-N**)

LEADLESS CERAMIC CHIP CARRIER

28 TERMINAL SHOWN



- NOTES:
- A. All linear dimensions are in inches (millimeters).
 - B. This drawing is subject to change without notice.
 - C. This package can be hermetically sealed with a metal lid.
 - D. The terminals are gold plated.
 - E. Falls within JEDEC MS-004

N (R-PDIP-T**)

PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



- NOTES:
- A. All linear dimensions are in inches (millimeters).
 - B. This drawing is subject to change without notice.
 - Falls within JEDEC MS-001, except 18 and 20 pin minimum body length (Dim A).
 - The 20 pin end lead shoulder width is a vendor option, either half or full width.

D (R-PDSO-G14)

PLASTIC SMALL-OUTLINE PACKAGE



- NOTES:
- A. All linear dimensions are in inches (millimeters).
 - B. This drawing is subject to change without notice.
 - C. Body dimensions do not include mold flash or protrusion not to exceed 0.006 (0,15).
 - D. Falls within JEDEC MS-012 variation AB.

MECHANICAL DATA

NS (R-PDSO-G)**

PLASTIC SMALL-OUTLINE PACKAGE

14-PINS SHOWN



4040062/C 03/03

- NOTES:
- A. All linear dimensions are in millimeters.
 - B. This drawing is subject to change without notice.
 - C. Body dimensions do not include mold flash or protrusion, not to exceed 0,15.

DB (R-PDSO-G**)

PLASTIC SMALL-OUTLINE

28 PINS SHOWN



- NOTES: A. All linear dimensions are in millimeters.
 B. This drawing is subject to change without notice.
 C. Body dimensions do not include mold flash or protrusion not to exceed 0,15.
 D. Falls within JEDEC MO-150

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TI Home > Semiconductors > Logic > Buffers, Drivers and Transceivers > Inverting Buffers and Drivers >

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clear gif

SN74S05, Status: ACTIVE

View RoHS Compliant Devices

Hex inverters with open collector outputs



clear gif

<input type="checkbox"/> Features	<input type="checkbox"/> Samples	<input type="checkbox"/> Technical Documents
<input type="checkbox"/> Quality & Pb-Free Data	<input type="checkbox"/> Pricing/Packaging	<input type="checkbox"/> Applications Notes
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Datasheet



Download Datasheet

SN54LS05, SN54S05, SN7405, SN74LS05, SN74S05 (Rev. A) (sn74s05.pdf, 555 KB)
03 Nov 2003 Download

	SN54S05	SN74S05
Voltage Nodes(V)	5	5
No. of Gates	6	6
Vcc range(V)	4.5 to 5.5	4.75 to 5.25
Input Level	TTL	TTL
Output Level	TTL	TTL
Output Drive(mA)		- /20
tpd max(ns)		7.5
Static Current		36.9
	Samples	Samples
	Inventory	Inventory

Product Information

Features Save this to your personal library

Package Options Include Plastic Small-Outline (D, NS), Shrink Small-Outline (DB), and Ceramic Flat (W) Packages, Ceramic Chip Carriers (FK), and Standard Plastic (N) and Ceramic (J) DIPs Dependable Texas Instruments Quality and Reliability

The SN5405 is obsolete and no longer is supplied.

Description

These devices contain six independent inverters. To perform correctly, the open-collector outputs require pullup resistors. These devices may be connected to other open-collector outputs to implement active-low wired-OR or active-high wire-AND functions. Open-collector devices often are used to generate high V_{OH} levels.

Pricing/Packaging/CAD Design Tools/Samples

			Price	Packaging			CAD Design Tools	Samples
Device	Status	Temp (°C)	Budget Price (\$US) QTY	Industry Standard (TI Pkg) Pins	Top Side Marking	Standard Pack Quantity	Footprints	Samples
SN74S05D	ACTIVE	0 to 70	0.57 1KU	SOIC (D) 14	View	50	<input type="checkbox"/>	Purchase Samples
SN74S05DE4	ACTIVE	0 to 70	0.57 1KU	SOIC (D) 14	View	50	<input type="checkbox"/>	Purchase Samples
SN74S05DR	ACTIVE	0 to 70	0.57 1KU	SOIC (D) 14	View	2500	<input type="checkbox"/>	Purchase Samples
SN74S05DRE4	ACTIVE	0 to 70	0.57 1KU	SOIC (D) 14	View	2500	<input type="checkbox"/>	Purchase Samples
SN74S05N	ACTIVE	0 to 70	0.57 1KU	PDIP (N) 14	View	25	<input type="checkbox"/>	Purchase Samples
SN74S05N3	OBSOLETE	0 to 70		PDIP (N) 14	View		<input type="checkbox"/>	Not Available
SN74S05NE4	ACTIVE	0 to 70	0.57 1KU	PDIP (N) 14	View	25	<input type="checkbox"/>	Purchase Samples
SN74S05NSR	ACTIVE	0 to 70	0.57 1KU	SO (NS) 14	View	2000	<input type="checkbox"/>	Purchase Samples
SN74S05NSRE4	ACTIVE	0 to 70	0.57 1KU	SO (NS) 14	View	2000	<input type="checkbox"/>	Purchase Samples

Inventory

		TI Inventory Status			Reported Distributor Inventory			
SN74S05D		As of 9:04 AM GMT, 29 Nov 2005			As of 9:04 AM GMT, 29 Nov 2005			
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase	
	0*	>10k 12 Dec	10 Weeks	Europe	EBV Elektronik	50	<input type="text"/>	
SN74S05DE4		As of 9:04 AM GMT, 29 Nov 2005			As of 9:04 AM GMT, 29 Nov 2005			
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase	
	0*	>10k 12 Dec	10 Weeks	None Reported View Distributors				
SN74S05DR		As of 9:04 AM GMT, 29 Nov 2005			As of 9:04 AM GMT, 29 Nov 2005			
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase	
	0*	>10k 3 Mar	14 Weeks	None Reported View Distributors				
SN74S05DRE4		As of 9:04 AM GMT, 29 Nov 2005			As of 9:04 AM GMT, 29 Nov 2005			
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase	
	0*	>10k 3 Mar	14 Weeks	None Reported View Distributors				
SN74S05N		As of 9:04 AM GMT, 29 Nov 2005			As of 9:04 AM GMT, 29 Nov 2005			
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase	
	1000*	>10k 12 Dec	10 Weeks	None Reported View Distributors				
SN74S05NE4		As of 9:04 AM GMT, 29 Nov 2005			As of 9:04 AM GMT, 29 Nov 2005			
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase	
	1000*	>10k 12 Dec	10 Weeks	None Reported View Distributors				
SN74S05NSR		As of 9:04 AM GMT, 29 Nov 2005			As of 9:04 AM GMT, 29 Nov 2005			
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase	
	0*	391 6 Jan	10 Weeks	None Reported View Distributors				
		264 13 Jan						
		625 20 Jan						
		968 27 Jan						
		1 14 Feb						
SN74S05NSRE4		As of 9:04 AM GMT, 29 Nov 2005			As of 9:04 AM GMT, 29 Nov 2005			
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase	

View all Distributors

Choose a Region



0*	391 6 Jan	10 Weeks	None Reported View Distributors		
	264 13 Jan				
	625 20 Jan				
	968 27 Jan				
	1 14 Feb				

* Our information is updated daily, so please check back with us soon if this does not meet your needs. You may also contact your [TI Authorized Distributor](#), including those [listed above](#), for real time stock information.

** Lead time information is not available at this time. However, our information is updated daily so please check back with us soon. Please contact your preferred [TI Authorized Distributor](#) for additional information.

Quality & Lead (Pb)-Free Data

<input type="checkbox"/>	Product Content				MTBF/FIT Rate	
Device	Eco Plan*	Lead/Ball Finish	MSL Rating/Peak Reflow	Details	Details	
SN74S05D <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	View	View	
SN74S05DE4 <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	View	View	
SN74S05DR <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	View	View	
SN74S05DRE4 <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	View	View	
SN74S05N <input type="checkbox"/>	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC	View	View	
SN74S05NE4 <input type="checkbox"/>	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC	View	View	
SN74S05NSR <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	View	View	
SN74S05NSRE4 <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	View	View	

* The planned eco-friendly classification: Pb-Free (RoHS) or Green (RoHS & no Sb/Br) - please click on the Product Content Details "View" link in the table above for the latest availability information and additional product content details.

If the information you are requesting is not available online at this time, contact one of our [Product Information Centers](#) regarding the availability of this information.

Technical Documents

<input type="checkbox"/> Datasheets	Keep track of what's new
SN54LS05, SN54S05, SN7405, SN74LS05, SN74S05 (Rev. A) (sn74s05.pdf, 555 KB) 03 Nov 2003 Download	
<input type="checkbox"/> Application Notes	
Semiconductor Packing Material Electrostatic Discharge (ESD) Protection (szza047.htm, 9 KB) 08 Jul 2004 Abstract	
Shelf-Life Evaluation of Lead-Free Component Finishes (szza046.htm, 9 KB) 24 May 2004 Abstract	
Understanding and Interpreting Standard-Logic Data Sheets (Rev. B) (szza036b.htm, 8 KB) 28 May 2003 Abstract	
Designing With Logic (Rev. C) (sdya009c.htm, 9 KB) 01 Jun 1997 Abstract	
Live Insertion (sdya012.htm, 9 KB) 01 Oct 1996 Abstract	
Input and Output Characteristics of Digital Integrated Circuits (sdya010.htm, 9 KB) 01 Oct 1996 Abstract	
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