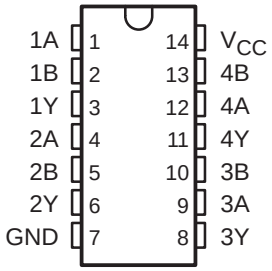
QUADRUPLE 2-INPUT POSITIVE-NAND GATES

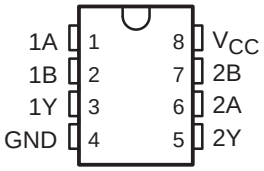
SDLS025B − DECEMBER 1983 − REVISED OCTOBER 2003

- **Package Options Include Plastic Small-Outline (D, NS, PS), Shrink Small-Outline (DB), and Ceramic Flat (W) Packages, Ceramic Chip Carriers (FK), and Standard Plastic (N) and Ceramic (J) DIPs**
- **Also Available as Dual 2-Input Positive-NAND Gate in Small-Outline (PS) Package**

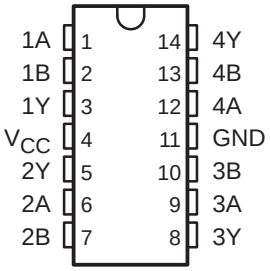
SN5400 . . . J PACKAGE
SN54LS00, SN54S00 . . . J OR W PACKAGE
SN7400, SN74S00 . . . D, N, OR NS PACKAGE
SN74LS00 . . . D, DB, N, OR NS PACKAGE
(TOP VIEW)



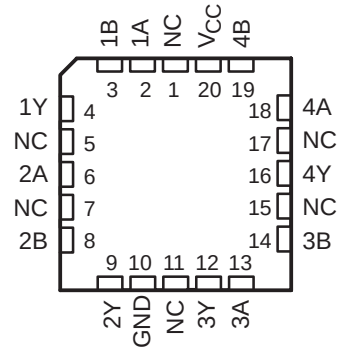
SN74LS00, SN74S00 . . . PS PACKAGE
(TOP VIEW)



SN5400 . . . W PACKAGE
(TOP VIEW)



SN54LS00, SN54S00 . . . FK PACKAGE
(TOP VIEW)



NC − No internal connection

description/ordering information

These devices contain four independent 2-input NAND gates. The devices perform the Boolean function $Y = \overline{A \bullet B}$ or $Y = \overline{A} + \overline{B}$ in positive logic.

description/ordering information (continued)

ORDERING INFORMATION

T_A	PACKAGE†		ORDERABLE PART NUMBER	TOP-SIDE MARKING
0°C to 70°C	PDIP − N	Tube	SN7400N	SN7400N
			SN74LS00N	SN74LS00N
			SN74S00N	SN74S00N
	SOIC − D	Tube	SN7400D	7400
		Tape and reel	SN7400DR	
		Tube	SN74LS00D	LS00
		Tape and reel	SN74LS00DR	
		Tube	SN74S00D	S00
		Tape and reel	SN74S00DR	
	SOP − NS	Tape and reel	SN7400NSR	SN7400
			SN74LS00NSR	74LS00
			SN74S00NSR	74S00
	SOP − PS	Tape and reel	SN74LS00PSR	LS00
			SN74S00PSR	S00
	SSOP − DB	Tape and reel	SN74LS00DBR	LS00
−55°C to 125°C	CDIP − J	Tube	SNJ5400J	SNJ5400J
			SNJ54LS00J	SNJ54LS00J
			SNJ54S00J	SNJ54S00J
	CFP − W	Tube	SNJ5400W	SNJ5400W
			SNJ54LS00W	SNJ54LS00W
			SNJ54S00W	SNJ54S00W
	LCCC − FK	Tube	SNJ54LS00FK	SNJ54LS00FK
			SNJ54S00FK	SNJ54S00FK

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

FUNCTION TABLE
(each gate)

INPUTS		OUTPUT
A	B	Y
H	H	L
L	X	H
X	L	H

logic diagram, each gate (positive logic)

PACKAGING INFORMATION

Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan (2)	Lead/Ball Finish	MSL Peak Temp (3)
JM38510/00104BCA	ACTIVE	CDIP	J	14	1	TBD	Call TI	Level-NC-NC-NC
JM38510/00104BDA	ACTIVE	CFP	W	14	1	TBD	Call TI	Level-NC-NC-NC
JM38510/07001BCA	ACTIVE	CDIP	J	14	1	TBD	Call TI	Level-NC-NC-NC
JM38510/07001BDA	ACTIVE	CFP	W	14	1	TBD	Call TI	Level-NC-NC-NC
JM38510/30001B2A	ACTIVE	LCCC	FK	20	1	TBD	Call TI	Level-NC-NC-NC
JM38510/30001BCA	ACTIVE	CDIP	J	14	1	TBD	Call TI	Level-NC-NC-NC
JM38510/30001BDA	ACTIVE	CFP	W	14	1	TBD	Call TI	Level-NC-NC-NC
JM38510/30001SCA	ACTIVE	CDIP	J	14	1	TBD	Call TI	Level-NC-NC-NC
JM38510/30001SDA	ACTIVE	CFP	W	14	1	TBD	Call TI	Level-NC-NC-NC
SN5400J	ACTIVE	CDIP	J	14	1	TBD	Call TI	Level-NC-NC-NC
SN54LS00J	ACTIVE	CDIP	J	14	1	TBD	Call TI	Level-NC-NC-NC
SN54S00J	ACTIVE	CDIP	J	14	1	TBD	Call TI	Level-NC-NC-NC
SN7400D	ACTIVE	SOIC	D	14	50	Pb-Free (RoHS)	CU NIPDAU	Level-2-260C-1 YEAR/ Level-1-235C-UNLIM
SN7400DR	ACTIVE	SOIC	D	14	2500	Pb-Free (RoHS)	CU NIPDAU	Level-2-260C-1 YEAR/ Level-1-235C-UNLIM
SN7400N	ACTIVE	PDIP	N	14	25	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC
SN7400N3	OBSOLETE	PDIP	N	14		TBD	Call TI	Call TI
SN7400NSR	ACTIVE	SO	NS	14	2000	Pb-Free (RoHS)	CU NIPDAU	Level-2-260C-1 YEAR/ Level-1-235C-UNLIM
SN74LS00D	ACTIVE	SOIC	D	14	50	Pb-Free (RoHS)	CU NIPDAU	Level-2-260C-1 YEAR/ Level-1-235C-UNLIM
SN74LS00DBLE	OBSOLETE	SSOP	DB	14		TBD	Call TI	Call TI
SN74LS00DBR	ACTIVE	SSOP	DB	14	2000	Pb-Free (RoHS)	CU NIPDAU	Level-2-260C-1 YEAR/ Level-1-235C-UNLIM
SN74LS00DBRE4	ACTIVE	SSOP	DB	14	2000	TBD	Call TI	Call TI
SN74LS00DR	ACTIVE	SOIC	D	14	2500	Pb-Free (RoHS)	CU NIPDAU	Level-2-260C-1 YEAR/ Level-1-235C-UNLIM
SN74LS00J	OBSOLETE	CDIP	J	14		TBD	Call TI	Call TI
SN74LS00N	ACTIVE	PDIP	N	14	25	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC
SN74LS00NSR	ACTIVE	SO	NS	14	2000	Pb-Free (RoHS)	CU NIPDAU	Level-2-260C-1 YEAR/ Level-1-235C-UNLIM
SN74LS00NSRG4	ACTIVE	SO	NS	14	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS00PSR	ACTIVE	SO	PS	8	2000	Pb-Free (RoHS)	CU NIPDAU	Level-2-260C-1 YEAR/ Level-1-235C-UNLIM
SN74S00D	ACTIVE	SOIC	D	14	50	Pb-Free (RoHS)	CU NIPDAU	Level-2-260C-1 YEAR/ Level-1-235C-UNLIM
SN74S00DR	ACTIVE	SOIC	D	14	2500	Pb-Free (RoHS)	CU NIPDAU	Level-2-260C-1 YEAR/ Level-1-235C-UNLIM
SN74S00N	ACTIVE	PDIP	N	14	25	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC
SN74S00N3	OBSOLETE	PDIP	N	14		TBD	Call TI	Call TI
SN74S00NSR	ACTIVE	SO	NS	14	2000	Pb-Free	CU NIPDAU	Level-2-260C-1 YEAR/