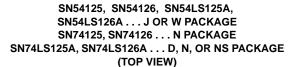
The SN54125, SN54126, SN74125, SN74126, and SN54LS126A are obsolete and are no longer supplied.

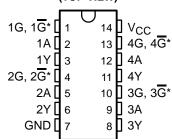
SN54125, SN54126, SN54LS125A, SN54LS126A, SN74125, SN74126, SN74LS125A, SN74LS126A QUADRUPLE BUS BUFFERS WITH 3-STATE OUTPUTS SDLS044A – DECEMBER 1983 – REVISED MARCH 2002

- Quad Bus Buffers
- 3-State Outputs
- Separate Control for Each Channel

description

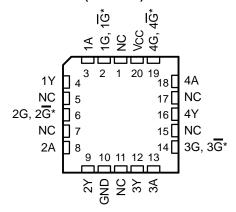
These bus buffers feature three-state outputs that, when enabled, have the low impedance characteristics of a TTL output with additional drive capability at high logic levels to permit driving heavily loaded bus lines without external pullup resistors. When disabled, both output transistors are turned off, presenting a high-impedance state to the bus so the output will act neither as a significant load nor as a driver. The '125 and 'LS125A devices' outputs are disabled when \overline{G} is high. The '126 and 'LS126A devices' outputs are disabled when G is low.





*G on '125 and 'LS125A devices; G on 126 and 'LS126A devices

SN54LS125A, SN54LS126A . . . FK PACKAGE (TOP VIEW)



*G on '125 and 'LS125A devices; G on 126 and 'LS126A devices NC – No internal connection



Please be aware that an important notice concerning availability, standard warranty, and use in critical applications of Texas Instruments semiconductor products and disclaimers thereto appears at the end of this data sheet.

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.



Copyright © 2002, Texas Instruments Incorporated 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.

SN54125, SN54126, SN54LS125A, SN54LS126A, SN74125, SN74126, SN74LS125A, SN74LS126A QUADRUPLE BUS BUFFERS WITH 3-STATE OUTPUTS

SDLS044A - DECEMBER 1983 - REVISED MARCH 2002

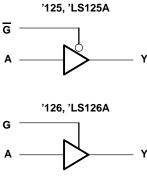
The SN54125, SN54126, SN74125, SN74126, and SN54LS126A are obsolete and are no longer supplied.

TA	PACI	KAGE [†]	ORDERABLE PART NUMBER	TOP-SIDE MARKING
	PDIP – N	Tube	SN74LS125AN	SN74LS125AN
	PDIP – N	Tube	SN74LS126AN	SN74LS126AN
		Tube	SN74LS125AD	LS125A
0°C to 70°C	SOIC – D	Tape and reel	SN74LS125ADR	L5125A
	30IC - D	Tube	SN74LS126AD	LS126A
		Tape and reel	SN74LS126ADR	L3120A
	SOP – NS	Tape and reel	SN74LS125ANSR	74LS125A
	30P - N3	Tape and reel	SN74LS126ANSR	74LS126A
	CDIP – J	Tube	SN54LS125AJ	SN54LS125AJ
–55°C to 125°C	CDIP – J	Tube	SNJ54LS125AJ	SNJ54LS125AJ
-55°C 10 125°C	CFP – W	Tube	SNJ54LS125AW	SNJ54LS125AW
	LCCC – FK	Tube	SNJ54LS125AFK	SNJ54LS125AFK

ORDERING INFORMATION

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

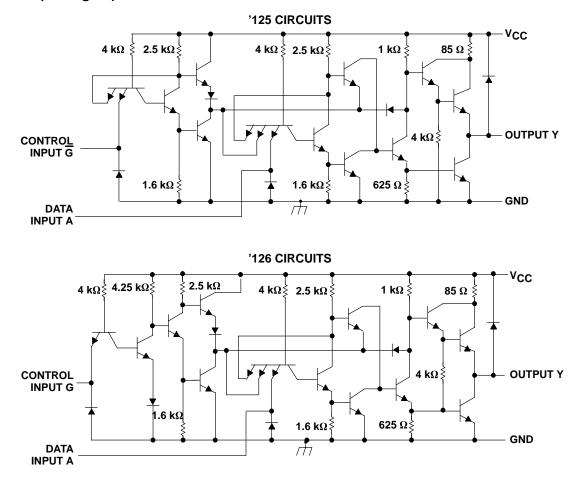
logic diagram (each gate)



Y = A



schematics (each gate)



absolute maximum ratings over operating free-air temperature (unless otherwise noted)[†] ('125 and '126)

Supply voltage, V _{CC} (see Note 1)	7 V
Input voltage, V ₁	5.5 V
Package thermal impedance, θ _{JA} (see Note 2): N package	°C/W
Storage temperature range, T _{stg}	50°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.

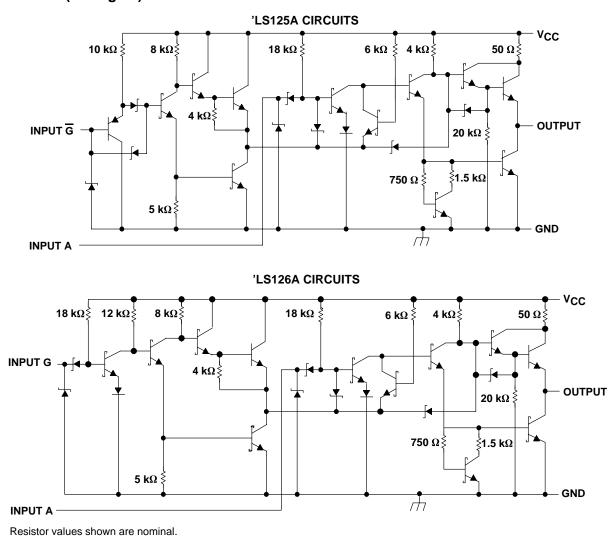
2. The package termal impedance is calculated in accordance with JESD 51-7.



SN54125, SN54126, SN54LS125A, SN54LS126A, SN74125, SN74126, SN74LS125A, SN74LS126A QUADRUPLE BUS BUFFERS WITH 3-STATE OUTPUTS SDLS044A – DECEMBER 1983 – REVISED MARCH 2002

The SN54125, SN54126, SN74125, SN74126, and SN54LS126A are obsolete and are no longer supplied.

schematics (each gate)



absolute maximum ratings over operating free-air temperature (unless otherwise noted)[†] ('LS125A and 'LS126A)

Supply voltage, V _{CC} (see Note 1)	
Input voltage, V ₁	
Package thermal impedance, θ_{JA} (see Note 2): D package	
N package	80°C/W
NS package	
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 termal impedance is calculated in accordance with JESD 51-7.



SN54125, SN54126, SN54LS125A, SN54LS126A, SN74125, SN74126, SN74LS125A, SN74LS126A QUADRUPLE BUS BUFFERS WITH 3-STATE OUTPUTS

SDLS044A - DECEMBER 1983 - REVISED MARCH 2002

recommended operating conditions

			SN54125 SN54126				UNIT	
		MIN	NOM	MAX	MIN	NOM	MAX	
Vcc	Supply voltage	4.5	5	5.5	4.75	5	5.25	V
VIH	High-level input voltage	2			2			V
VIL	Low-level input voltage			0.8			0.8	V
ЮН	High-level output current			-2			-5.2	mA
IOL	Low-level output current			16			16	mA
Т _А	Operating free-air temperature	-55		125	0		70	°C

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

PARAMETER		TEST CONDITIONS [†]			SN54125 SN54126			SN74125 SN74126		UNIT
						MAX	MIN	TYP‡	MAX	
VIK	$V_{CC} = MIN,$	lj = -12 mA				-1.5			-1.5	V
Vou	$V_{CC} = MIN,$	V _{IH} = 2 V,	I _{OH} = -2 mA	2.4	3.3					V
Vон	$V_{IL} = 0.8 V$		I _{OH} = -5.2 mA				2.4	3.1		v
Ve	$V_{CC} = MIN,$	V _{IH} = 2 V,	V _{IL} = 0.8 V,			0.4			0.4	V
VOL	I _{OL} = 16 mA					0.4			0.4	V
	$V_{CC} = MAX$	V _{IH} = 2 V,	V _O = 2.4 V			40			40	
loz	$V_{IL} = 0.8 V$		V _O = 0.4 V			-40			-40	μA
lı	V _{CC} = MAX,	V _I = 6.5 V	-			1			1	mA
Чн	V _{CC} = MAX,	V _I = 2.4 V				40			40	μA
١L	V _{CC} = MAX,	V _I = 0.4 V				-1.6			-1.6	mA
IOS§	$V_{CC} = MAX$			-30		-70	-28		-70	mA
	V _{CC} = MAX		'125		32	54		32	54	~ ^
Icc	(see Note 3)		'126		36	62		36	62	mA

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

[‡] All typical values are at $V_{CC} = 5 \text{ V}$, $T_A = 25^{\circ}\text{C}$.

§ Not more than one output should be shorted at a time.

NOTE 3: Data inputs = 0 V; output control = 4.5 V for '125 and 0 V for '126.

switching characteristics, $V_{CC} = 5 V$, $T_A = 25^{\circ}C$ (see Figure 1)

PARAMETER	TEST CONDITIONS			SN54125 SN74125			SN54126 SN74126			
			MIN	TYP	MAX	MIN	TYP	MAX		
^t PLH	$R_{1} = 400 \Omega_{2}$	C _I = 50 pF		8	13		8	13	ns	
^t PHL	NL = 400 32,	0L = 30 pi		12	18		12	18	110	
^t PZH	$R_{1} = 400 \Omega_{2}$	C _I = 50 pF		11	17		11	18	ns	
^t PZL	NL = 400 32,	0L = 30 pi		16	25		16	25	115	
^t PHZ	$R_1 = 400 \Omega$,	Cl = 5 pF		5	8		10	16	ns	
^t PLZ	ις _L = 400 s2,	0 <u> </u>		7	12		12	18	115	



SN54125, SN54126, SN54LS125A, SN54LS126A, SN74125, SN74126, SN74LS125A, SN74LS126A QUADRUPLE BUS BUFFERS WITH 3-STATE OUTPUTS

SDLS044A - DECEMBER 1983 - REVISED MARCH 2002

The SN54125, SN54126, SN74125, SN74126, and SN54LS126A are obsolete and are no longer supplied.

recommended operating conditions

		-	54LS12	-	SN74LS125A SN74LS126A			UNIT
		MIN	NOM	MAX	MIN	NOM	MAX	
VCC	Supply voltage	4.5	5	5.5	4.75	5	5.25	V
VIH	High-level input voltage	2			2			V
VIL	Low-level input voltage			0.7			0.8	V
ЮН	High-level output current			-1			-2.6	mA
IOL	Low-level output current			12			24	mA
Т _А	Operating free-air temperature	-55		125	0		70	°C

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

PARAMETER		TEST CONDITIONS [†]					SN74LS125A SN74LS126A			UNIT
				MIN	TYP‡	MAX	MIN	TYP‡	MAX	
VIK	$V_{CC} = MIN,$	l _l = –18 mA				-1.5			-1.5	V
Vou	V _{CC} = MIN,	V _{IL} = 0.7 V,	I _{OH} = -1 mA	2.4						v
VOH	V _{IH} = 2 V	V _{IL} = 0.8 V	I _{OH} = -2.6 mA				2.4			v
		V _{IL} = 0.7 V,	I _{OL} = 12 mA		0.25	0.4				
VOL	V _{CC} = MIN, V _{IH} = 2 V	V _{IL} = 0.8 V,	I _{OL} = 12 mA					0.25	0.4	V
	*IH = 2 *	V _{IL} = 0.8 V,	I _{OL} = 24 mA					0.35	0.5	
			V _O = 2.4 V			20				
	V _{CC} = MAX,	V _{IL} = 0.7 V	V _O = 0.4 V			-20				
I _{OZ}	V _{IH} = 2 V,	V _{IL} = 0.8 V	V _O = 2.4 V						20	μA
		VIL = 0.8 V	V _O = 0.4 V						-20	
Ц	V _{CC} = MAX,	VI = 7 V				0.1			0.1	mA
IН	V _{CC} = MAX,	V _I = 2.7 V				20			20	μA
t.	V _{CC} = MAX,	'LS125A-G inpu	ts			-0.2			-0.2	mA
ΙL	V _I = 0.4 V	'LS125A-A input	ts; 'LS126A All inputs			-0.4			-0.4	mA
IOS§	V _{CC} = MAX	-		-40		-225	-40		-225	mA
	V _{CC} = MAX		'LS125A		11	20		11	20	mA
ICC	(see Note 4)		'LS126A		12	22		12	22	THA

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

[‡] All typical values are at $V_{CC} = 5 V$, $T_A = 25^{\circ}C$.

§ Not more than one output should be shorted at a time, and the duration of the short circuit should not exceed one second.

NOTE 4: Data inputs = 0 V; output control = 4.5 V for 'LS125A and 0 V for 'LS126A.

switching characteristics, $V_{CC} = 5 V$, $T_A = 25^{\circ}C$ (see Figure 1)

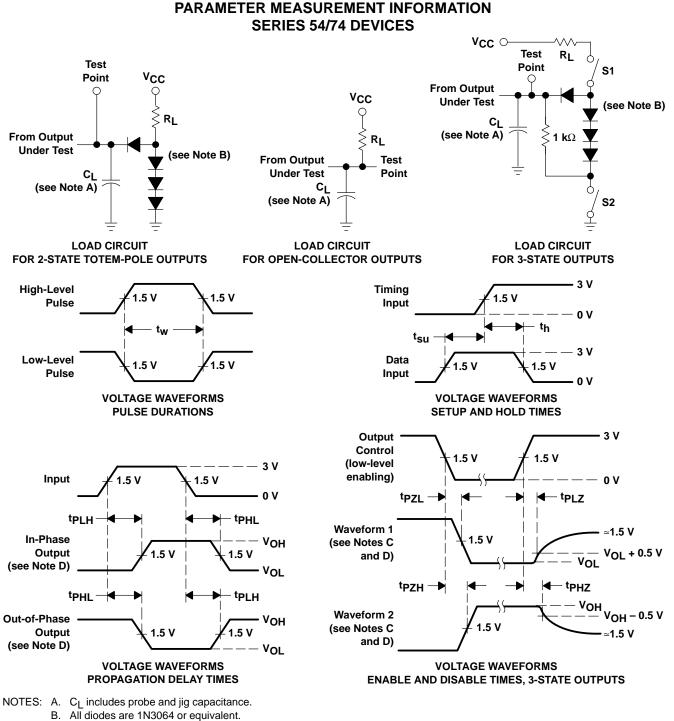
PARAMETER	TEST CONDITIONS			SN54LS125A SN74LS125A			SN54LS126A SN74LS126A		
			MIN	TYP	MAX	MIN	TYP	MAX	
^t PLH	R _I = 667 Ω,	C _L = 45 pF		9	15		9	15	ns
^t PHL	NL = 007 32,	0L = 40 pi		7	18		8	18	113
^t PZH	R ₁ = 667 Ω,	C _I = 45 pF		12	20		16	25	ns
^t PZL	NL = 007 32,	0L = 43 pi		15	25		21	35	115
^t PHZ	R _I = 667 Ω,	C ₁ = 5 pF			20			25	ns
^t PLZ	NL = 007 22,	0L = 0 pi			20			25	115



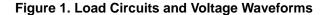
The SN54125, SN54126, SN74125, SN74126, and SN54LS126A are obsolete and are no longer supplied.

SN54125, SN54126, SN54LS125A, SN54LS126A, SN74125, SN74126, SN74LS125A, SN74LS126A QUADRUPLE BUS BUFFERS WITH 3-STATE OUTPUTS

SDLS044A - DECEMBER 1983 - REVISED MARCH 2002



- C. Waveform 1 is for an output with internal conditions such that the output is low except when disabled by the output control. Waveform 2 is for an output with internal conditions such that the output is high except when disabled by the output control.
- D. S1 and S2 are closed for tpLH, tpHL, tpHZ, and tpLZ; S1 is open and S2 is closed for tpZH; S1 is closed and S2 is open for tpZL. E. All input pulses are supplied by generators having the following characteristics: PRR \leq 1 MHz, Z₀ \approx 50 Ω ; t_r and t_f \leq 7 ns for Series
- 54/74 devices and t_r and $t_f \le 2.5$ ns for Series 54S/74S devices.
- F. The outputs are measured one at a time with one input transition per measurement.

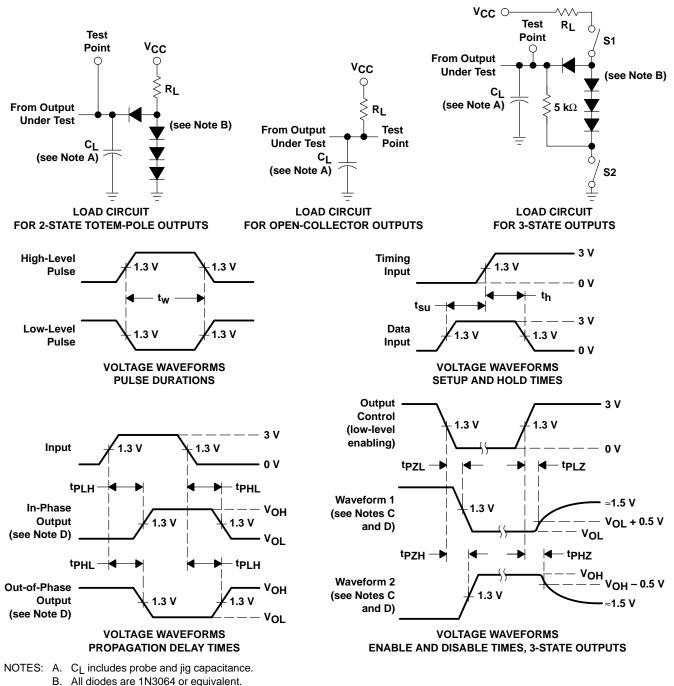




SN54125, SN54126, SN54LS125A, SN54LS126A, SN74125, SN74126, SN74LS125A, SN74LS126A QUADRUPLE BUS BUFFERS WITH 3-STATE OUTPUTS SDLS044A – DECEMBER 1983 – REVISED MARCH 2002

The SN54125, SN54126, SN74125, SN74126, and SN54LS126A are obsolete and are no longer supplied.

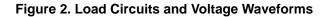
PARAMETER MEASUREMENT INFORMATION SERIES 54LS/74LS DEVICES



C. Waveform 1 is for an output with internal conditions such that the output is low except when disabled by the output control. Waveform 2 is for an output with internal conditions such that the output is high except when disabled by the output control.

D. S1 and S2 are closed for tpLH, tpHL, tpHZ, and tpLZ; S1 is open and S2 is closed for tpZH; S1 is closed and S2 is open for tpZL.

- E. Phase relationships between inputs and outputs have been chosen arbitrarily for these examples.
- F. All input pulses are supplied by generators having the following characteristics: PRR \leq 1 MHz, Z_O \approx 50 Ω , t_f \leq 1.5 ns, t_f \leq 2.6 ns.
- G. The outputs are measured one at a time with one input transition per measurement.





IMPORTANT NOTICE

Texas Instruments Incorporated and its subsidiaries (TI) reserve the right to make corrections, modifications, enhancements, improvements, and other changes to its products and services at any time and to discontinue any product or service without notice. Customers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All products are sold subject to TI's terms and conditions of sale supplied at the time of order acknowledgment.

TI warrants performance of its hardware products to the specifications applicable at the time of sale in accordance with TI's standard warranty. Testing and other quality control techniques are used to the extent TI deems necessary to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed.

TI assumes no liability for applications assistance or customer product design. Customers are responsible for their products and applications using TI components. To minimize the risks associated with customer products and applications, customers should provide adequate design and operating safeguards.

TI does not warrant or represent that any license, either express or implied, is granted under any TI patent right, copyright, mask work right, or other TI intellectual property right relating to any combination, machine, or process in which TI products or services are used. Information published by TI regarding third-party products or services does not constitute a license from TI to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from TI under the patents or other intellectual property of TI.

Reproduction of information in TI data books or data sheets is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. Reproduction of this information with alteration is an unfair and deceptive business practice. TI is not responsible or liable for such altered documentation.

Resale of TI products or services with statements different from or beyond the parameters stated by TI for that product or service voids all express and any implied warranties for the associated TI product or service and is an unfair and deceptive business practice. TI is not responsible or liable for any such statements.

TI products are not authorized for use in safety-critical applications (such as life support) where a failure of the TI product would reasonably be expected to cause severe personal injury or death, unless officers of the parties have executed an agreement specifically governing such use. Buyers represent that they have all necessary expertise in the safety and regulatory ramifications of their applications, and acknowledge and agree that they are solely responsible for all legal, regulatory and safety-related requirements concerning their products and any use of TI products in such safety-critical applications, notwithstanding any applications-related information or support that may be provided by TI. Further, Buyers must fully indemnify TI and its representatives against any damages arising out of the use of TI products in such safety-critical applications.

TI products are neither designed nor intended for use in military/aerospace applications or environments unless the TI products are specifically designated by TI as military-grade or "enhanced plastic." Only products designated by TI as military-grade meet military specifications. Buyers acknowledge and agree that any such use of TI products which TI has not designated as military-grade is solely at the Buyer's risk, and that they are solely responsible for compliance with all legal and regulatory requirements in connection with such use.

TI products are neither designed nor intended for use in automotive applications or environments unless the specific TI products are designated by TI as compliant with ISO/TS 16949 requirements. Buyers acknowledge and agree that, if they use any non-designated products in automotive applications, TI will not be responsible for any failure to meet such requirements.

Following are URLs where you can obtain information on other Texas Instruments products and application solutions:

Products		Applications	
Amplifiers	amplifier.ti.com	Audio	www.ti.com/audio
Data Converters	dataconverter.ti.com	Automotive	www.ti.com/automotive
DSP	dsp.ti.com	Broadband	www.ti.com/broadband
Interface	interface.ti.com	Digital Control	www.ti.com/digitalcontrol
Logic	logic.ti.com	Military	www.ti.com/military
Power Mgmt	power.ti.com	Optical Networking	www.ti.com/opticalnetwork
Microcontrollers	microcontroller.ti.com	Security	www.ti.com/security
Low Power Wireless	www.ti.com/lpw	Telephony	www.ti.com/telephony
		Video & Imaging	www.ti.com/video
		Wireless	www.ti.com/wireless

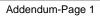
Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265 Copyright © 2007, Texas Instruments Incorporated

18-Sep-2008

PACKAGING INFORMATION

TEXAS INSTRUMENTS www.ti.com

Orderable Device	Status ⁽¹⁾	Package Type	Package Drawing	Pins	Package Qty	Eco Plan ⁽²⁾	Lead/Ball Finish	MSL Peak Temp ⁽³⁾
JM38510/32301B2A	ACTIVE	LCCC	FK	20	1	TBD	POST-PLATE	N / A for Pkg Type
JM38510/32301BCA	ACTIVE	CDIP	J	14	1	TBD	A42 SNPB	N / A for Pkg Type
JM38510/32301BDA	ACTIVE	CFP	W	14	1	TBD	A42	N / A for Pkg Type
JM38510/32301SCA	ACTIVE	CDIP	J	14	1	TBD	A42 SNPB	N / A for Pkg Type
JM38510/32301SDA	ACTIVE	CFP	W	14	1	TBD	A42	N / A for Pkg Type
SN54126J	OBSOLETE	CDIP	J	14		TBD	Call TI	Call TI
SN54LS125AJ	ACTIVE	CDIP	J	14	1	TBD	A42 SNPB	N / A for Pkg Type
SN74125N	OBSOLETE	PDIP	Ν	14		TBD	Call TI	Call TI
SN74125N3	OBSOLETE	PDIP	Ν	14		TBD	Call TI	Call TI
SN74126N	OBSOLETE	PDIP	Ν	14		TBD	Call TI	Call TI
SN74LS125AD	ACTIVE	SOIC	D	14	50	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS125ADBR	ACTIVE	SSOP	DB	14	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS125ADBRE4	ACTIVE	SSOP	DB	14	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS125ADBRG4	ACTIVE	SSOP	DB	14	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS125ADE4	ACTIVE	SOIC	D	14	50	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS125ADG4	ACTIVE	SOIC	D	14	50	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS125ADR	ACTIVE	SOIC	D	14	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS125ADRE4	ACTIVE	SOIC	D	14	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS125ADRG4	ACTIVE	SOIC	D	14	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS125AN	ACTIVE	PDIP	Ν	14	25	Pb-Free (RoHS)	CU NIPDAU	N / A for Pkg Type
SN74LS125AN3	OBSOLETE	PDIP	Ν	14		TBD	Call TI	Call TI
SN74LS125ANE4	ACTIVE	PDIP	N	14	25	Pb-Free (RoHS)	CU NIPDAU	N / A for Pkg Type
SN74LS125ANSR	ACTIVE	SO	NS	14	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS125ANSRE4	ACTIVE	SO	NS	14	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS125ANSRG4	ACTIVE	SO	NS	14	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS126AD	ACTIVE	SOIC	D	14	50	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS126ADE4	ACTIVE	SOIC	D	14	50	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS126ADG4	ACTIVE	SOIC	D	14	50	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS126ADR	ACTIVE	SOIC	D	14	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM



Orderable Device	Status ⁽¹⁾	Package Type	Package Drawing	Pins	Package Qty	e Eco Plan ⁽²⁾	Lead/Ball Finish	MSL Peak Temp ⁽³⁾
SN74LS126ADRE4	ACTIVE	SOIC	D	14	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS126ADRG4	ACTIVE	SOIC	D	14	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS126AJ	OBSOLETE	CDIP	J	14		TBD	Call TI	Call TI
SN74LS126AN	ACTIVE	PDIP	Ν	14	25	Pb-Free (RoHS)	CU NIPDAU	N / A for Pkg Type
SN74LS126ANE4	ACTIVE	PDIP	Ν	14	25	Pb-Free (RoHS)	CU NIPDAU	N / A for Pkg Type
SN74LS126ANSR	ACTIVE	SO	NS	14	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS126ANSRE4	ACTIVE	SO	NS	14	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LS126ANSRG4	ACTIVE	SO	NS	14	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SNJ54126J	OBSOLETE	CDIP	J	14		TBD	Call TI	Call TI
SNJ54126W	OBSOLETE	CFP	W	14		TBD	Call TI	Call TI
SNJ54LS125AFK	ACTIVE	LCCC	FK	20	1	TBD	POST-PLATE	N / A for Pkg Type
SNJ54LS125AJ	ACTIVE	CDIP	J	14	1	TBD	A42 SNPB	N / A for Pkg Type
SNJ54LS125AW	ACTIVE	CFP	W	14	1	TBD	A42	N / A for Pkg Type

⁽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.

OBSOLETE: TI has discontinued the production of the device.

⁽²⁾ Eco Plan - The planned eco-friendly classification: Pb-Free (RoHS), Pb-Free (RoHS Exempt), 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.

Pb-Free (RoHS Exempt): This component has a RoHS exemption for either 1) lead-based flip-chip solder bumps used between the die and package, or 2) lead-based die adhesive used between the die and leadframe. The component is otherwise considered Pb-Free (RoHS compatible) as defined above.

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.

Important Information and Disclaimer:The information provided on this page represents TI's knowledge and belief as of the date that it is provided. TI bases its knowledge and belief on information provided by third parties, and makes no representation or warranty as to the accuracy of such information. Efforts are underway to better integrate information from third parties. TI has taken and continues to take reasonable steps to provide representative and accurate information but may not have conducted destructive testing or chemical analysis on incoming materials and chemicals. TI and TI suppliers consider certain information to be proprietary, and thus CAS numbers and other limited information may not be available for release.

In no event shall TI's liability arising out of such information exceed the total purchase price of the TI part(s) at issue in this document sold by TI to Customer on an annual basis.

TAPE AND REEL INFORMATION





QUADRANT ASSIGNMENTS FOR PIN 1 ORIENTATION IN TAPE

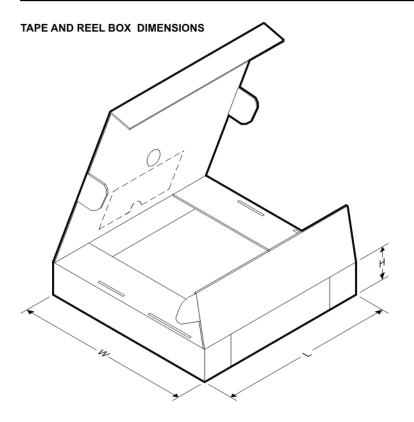


Device	Package Type	Package Drawing		SPQ	Reel Diameter (mm)	Reel Width W1 (mm)	A0 (mm)	B0 (mm)	K0 (mm)	P1 (mm)	W (mm)	Pin1 Quadrant
SN74LS125ADBR	SSOP	DB	14	2000	330.0	16.4	8.2	6.6	2.5	12.0	16.0	Q1
SN74LS125ADR	SOIC	D	14	2500	330.0	16.4	6.5	9.0	2.1	8.0	16.0	Q1
SN74LS125ANSR	SO	NS	14	2000	330.0	16.4	8.2	10.5	2.5	12.0	16.0	Q1
SN74LS126ADR	SOIC	D	14	2500	330.0	16.4	6.5	9.0	2.1	8.0	16.0	Q1
SN74LS126ANSR	SO	NS	14	2000	330.0	16.4	8.2	10.5	2.5	12.0	16.0	Q1



PACKAGE MATERIALS INFORMATION

11-Mar-2008



*All dimensions are nominal

Device	Package Type	Package Drawing	Pins	SPQ	Length (mm)	Width (mm)	Height (mm)
SN74LS125ADBR	SSOP	DB	14	2000	346.0	346.0	33.0
SN74LS125ADR	SOIC	D	14	2500	346.0	346.0	33.0
SN74LS125ANSR	SO	NS	14	2000	346.0	346.0	33.0
SN74LS126ADR	SOIC	D	14	2500	346.0	346.0	33.0
SN74LS126ANSR	SO	NS	14	2000	346.0	346.0	33.0

MECHANICAL DATA

MSSO002E - JANUARY 1995 - REVISED DECEMBER 2001

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



MECHANICAL DATA

PLASTIC SMALL-OUTLINE PACKAGE

0,51 0,35 ⊕0,25⊛ 1,27 8 14 0,15 NOM 5,60 8,20 5,00 7,40 \bigcirc Gage Plane ₽ 0,25 7 1 1,05 0,55 0°-10° Δ 0,15 0,05 Seating Plane — 2,00 MAX 0,10PINS ** 14 16 20 24 DIM 10,50 10,50 12,90 15,30 A MAX A MIN 9,90 9,90 12,30 14,70 4040062/C 03/03

NOTES: A. All linear dimensions are in millimeters.

NS (R-PDSO-G**)

14-PINS SHOWN

- B. This drawing is subject to change without notice.
- C. Body dimensions do not include mold flash or protrusion, not to exceed 0,15.



J (R-GDIP-T**) 14 LEADS SHOWN

CERAMIC DUAL IN-LINE PACKAGE



NOTES: A. All linear dimensions are in inches (millimeters).

- B. This drawing is subject to change without notice.
- C. This package is hermetically sealed with a ceramic lid using glass frit.
- D. Index point is provided on cap for terminal identification only on press ceramic glass frit seal only.
- E. Falls within MIL STD 1835 GDIP1-T14, GDIP1-T16, GDIP1-T18 and GDIP1-T20.

MLCC006B - OCTOBER 1996

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



W (R-GDFP-F14)

CERAMIC DUAL FLATPACK



- 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



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.
- Body length does not include mold flash, protrusions, or gate burrs. Mold flash, protrusions, or gate burrs shall not exceed .006 (0,15) per end.

Body width does not include interlead flash. Interlead flash shall not exceed .017 (0,43) per side.

E. Reference JEDEC MS-012 variation AB.



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).
- \triangle The 20 pin end lead shoulder width is a vendor option, either half or full width.



IMPORTANT NOTICE

Texas Instruments Incorporated and its subsidiaries (TI) reserve the right to make corrections, modifications, enhancements, improvements, and other changes to its products and services at any time and to discontinue any product or service without notice. Customers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All products are sold subject to TI's terms and conditions of sale supplied at the time of order acknowledgment.

TI warrants performance of its hardware products to the specifications applicable at the time of sale in accordance with TI's standard warranty. Testing and other quality control techniques are used to the extent TI deems necessary to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed.

TI assumes no liability for applications assistance or customer product design. Customers are responsible for their products and applications using TI components. To minimize the risks associated with customer products and applications, customers should provide adequate design and operating safeguards.

TI does not warrant or represent that any license, either express or implied, is granted under any TI patent right, copyright, mask work right, or other TI intellectual property right relating to any combination, machine, or process in which TI products or services are used. Information published by TI regarding third-party products or services does not constitute a license from TI to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from TI under the patents or other intellectual property of TI.

Reproduction of TI information in TI data books or data sheets is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. Reproduction of this information with alteration is an unfair and deceptive business practice. TI is not responsible or liable for such altered documentation. Information of third parties may be subject to additional restrictions.

Resale of TI products or services with statements different from or beyond the parameters stated by TI for that product or service voids all express and any implied warranties for the associated TI product or service and is an unfair and deceptive business practice. TI is not responsible or liable for any such statements.

TI products are not authorized for use in safety-critical applications (such as life support) where a failure of the TI product would reasonably be expected to cause severe personal injury or death, unless officers of the parties have executed an agreement specifically governing such use. Buyers represent that they have all necessary expertise in the safety and regulatory ramifications of their applications, and acknowledge and agree that they are solely responsible for all legal, regulatory and safety-related requirements concerning their products and any use of TI products in such safety-critical applications, notwithstanding any applications-related information or support that may be provided by TI. Further, Buyers must fully indemnify TI and its representatives against any damages arising out of the use of TI products in such safety-critical applications.

TI products are neither designed nor intended for use in military/aerospace applications or environments unless the TI products are specifically designated by TI as military-grade or "enhanced plastic." Only products designated by TI as military-grade meet military specifications. Buyers acknowledge and agree that any such use of TI products which TI has not designated as military-grade is solely at the Buyer's risk, and that they are solely responsible for compliance with all legal and regulatory requirements in connection with such use.

TI products are neither designed nor intended for use in automotive applications or environments unless the specific TI products are designated by TI as compliant with ISO/TS 16949 requirements. Buyers acknowledge and agree that, if they use any non-designated products in automotive applications, TI will not be responsible for any failure to meet such requirements.

Following are URLs where you can obtain information on other Texas Instruments products and application solutions:

Products		Applications	
Amplifiers	amplifier.ti.com	Audio	www.ti.com/audio
Data Converters	dataconverter.ti.com	Automotive	www.ti.com/automotive
DSP	dsp.ti.com	Broadband	www.ti.com/broadband
Clocks and Timers	www.ti.com/clocks	Digital Control	www.ti.com/digitalcontrol
Interface	interface.ti.com	Medical	www.ti.com/medical
Logic	logic.ti.com	Military	www.ti.com/military
Power Mgmt	power.ti.com	Optical Networking	www.ti.com/opticalnetwork
Microcontrollers	microcontroller.ti.com	Security	www.ti.com/security
RFID	www.ti-rfid.com	Telephony	www.ti.com/telephony
RF/IF and ZigBee® Solutions	www.ti.com/lprf	Video & Imaging	www.ti.com/video
		Wireless	www.ti.com/wireless

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265 Copyright © 2008, Texas Instruments Incorporated