### SN54S134, SN74S134 12-INPUT POSITIVE-NAND GATES WITH 3-STATE OUTPUTS

#### SDLS203

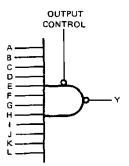
- Package Options Include Plastic "Small Outline" Packages, Ceramic Chip Carriers and Flat Packages, and Plastic and Ceramic DIPs
- Dependable Texas Instruments Quality and Reliability

#### description

The 'S134 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 lines without external pull-up 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 'S134 outputs are diabled when G is high.

#### logic diagram

positive logic



 $Y = \overline{A \cdot B \cdot C \cdot D} \cdot \overline{E \cdot F \cdot G \cdot H \cdot I \cdot J \cdot K \cdot L} \text{ or }$ 

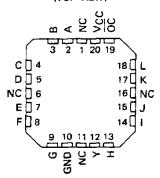
Output is off (disabled) when output control is binh

Y = Ā + B + Ĉ + D + Ē + F + G + H + T + J + K + L

#### DECEMBER 1983 - REVISED MARCH 1988

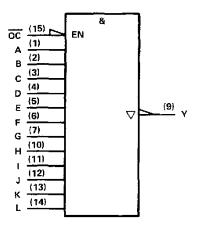
SN74S134	J OR W PACKAGE D OR N PACKAGE P VIEW)
A [] 1	16 V <u>C</u> C
B [] 2	15 OC
C [] 3	14 L
D [] 4	13 K
E [] 5	12 J
F [] 6	11 D
G [] 7	10 H
GND [] 8	9 Y

SN54S134 . . . FK PACKAGE (TOP VIEW)



NC - No internal connection

#### logic symbol<sup>†</sup>

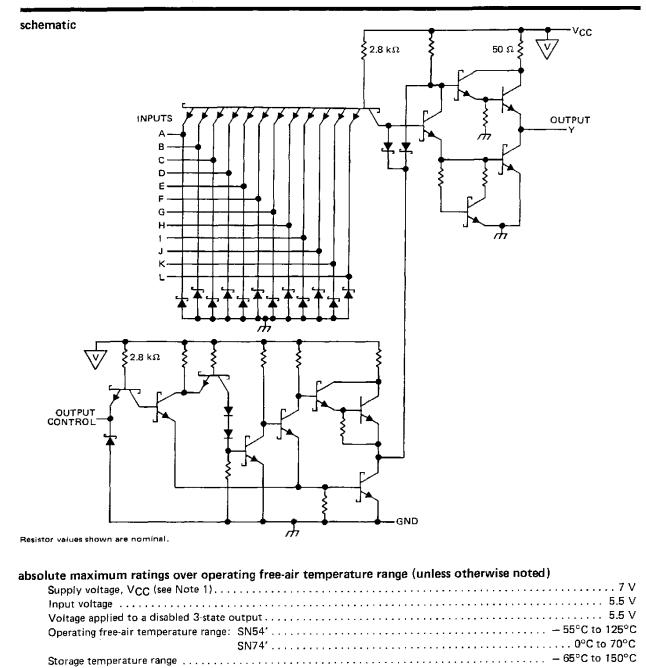


<sup>†</sup>This symbol is in accordance with ANSI/IEEE Std 91-1984 and IEC Publication 617-12. Pin numbers shown are for D, J, N, and W packages.

PRODUCTION DATA documents contain information 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.



### SN54S134, SN74S134 12-INPUT POSITIVE NAND GATES WITH 3-STATE OUTPUTS



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

TEXAS TEXAS INSTRUMENTS

### SN54S134, SN74S134 **12-INPUT POSITIVE-NAND GATES WITH 3-STATE OUTPUTS**

#### recommended operating conditions

			SN54S134			SN74S134		
		MIN	NOM	MAX	MIN	NOM	MAX	UNIT
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			- 6.5	Αm
IOL	Low-level output current			20			20	mА
ТA	Operating free-air temperature	- 55	•	125	0		70	°C

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

-			CONDITIONS <sup>†</sup>	5	SN54S13	34	5	SN74S13	34	
PARAMETER		IES	CONDITIONS	MIN	TYP ‡	MAX	MIN	TYP‡	MAX	UNIT
VIK	Vcc = MIN,	l <sub>l</sub> = 18 mA				- 1.2			- 1.2	V
	V <sub>CC</sub> = MIN,	V <sub>1H</sub> = 2 V	IOH = -2 mA	2.4	3,4					v
∨он	V <sub>IL</sub> = 0.8 V		I <sub>OH</sub> = → 6.5 mA				2.4	3.2		l_``_
	V <sub>CC</sub> = MIN,	V <sub>IH</sub> = 2 V,	V <sub>IL</sub> = 0.8 V,			0.5			0.5	v
Vol	I <sub>OL</sub> = 20 mA					0.5			0.5	v
	V <sub>CC</sub> = MAX,	V <sub>1H</sub> = 2 V,	V <sub>O</sub> = 2.4 V			50			50	
loz	V <sub>IL</sub> ≈ 0.8 V		V <sub>O</sub> = 0.5 V	· · · · · · · · · · · · · · · · · · ·		- 50			- 50	μA
<u>ا</u>	V <sub>CC</sub> = MAX,	V1 = 5.5 V				1			1	mÁ
Ιн	VCC = MAX,	V1 = 2.7 V				50			50	μA
IL.	V <sub>CC</sub> = MAX,	VI ≍ 0.5 V				- 2			- 2	mΑ
loss	V <sub>CC</sub> = MAX			- 40		- 100	<b>- 4</b> 0		- 100	mA
			Outputs high		7	13		7	13	
<sup>1</sup> cc	V <sub>CC</sub> = MAX		Outputs low		9	16		9	16	mΑ
			Outputs disabled		14	25		14	25	

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

<sup>‡</sup> 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, and duration of the short circuit should not exceed one second.

#### SN54S134 SN74S134 PARAMETER TEST CONDITIONS UNIT MIN TYP MAX MIN TYP MAX $R_L = 280 \Omega$ , CL = 15 pF 4 6 6 <sup>I</sup>PLH 4 ns $R_{L} = 280 \Omega$ , CL = 50 pF 5.5 <sup>t</sup>PLH 5.5 ns RL = 280 Ω, Cլ ≈ 15 pF 7.5 <sup>t</sup>PHL 5 5 7.5 ns CL = 50 pF $R_L = 280 \Omega$ , 7 7 <sup>t</sup>PHL ns 19.5 13 19.5 <sup>t</sup>PZH 13 п5 $R_L$ = 280 $\Omega$ , $C_L = 50 pF$ 14 21 14 21 пŝ ₽ZL 5.5 8.5 5.5 8.5 τρнΖ ns $R_L = 280 \Omega$ , $C_L = 5 pF$ TPLZ 9 14 9 14 ns

#### switching characteristics, VCC = 5 V, $TA = 25^{\circ}C$ (see note 2)

NOTE 2: Load circuits and voltage waveforms are shown in Section 1.

### PACKAGING INFORMATION

Orderable Device	Status <sup>(1)</sup>	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/Ball Finish	MSL Peak Temp <sup>(3)</sup>
SN54S134J	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	N / A for Pkg Type
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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

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<sup>(2)</sup> 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.

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<sup>(3)</sup> 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



- 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.



- 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-F16 and JEDEC MO-092AC



PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



- 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.



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SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



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- 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.



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SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
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- $\triangle$  The 20 pin end lead shoulder width is a vendor option, either half or full width.



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PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



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SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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<sup>(2)</sup> 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.

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<sup>(3)</sup> 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



- 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.



- 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-F16 and JEDEC MO-092AC



PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



- 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.



### PACKAGING INFORMATION

Orderable Device	Status <sup>(1)</sup>	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/Ball Finish	MSL Peak Temp <sup>(3)</sup>
SN54S134J	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	N / A for Pkg Type
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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- 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.



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PLASTIC DUAL-IN-LINE PACKAGE

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SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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### PACKAGING INFORMATION

Orderable Device	Status <sup>(1)</sup>	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/Ball Finish	MSL Peak Temp <sup>(3)</sup>
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SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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- 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.



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16 PINS SHOWN



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Orderable Device	Status <sup>(1)</sup>	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/Ball Finish	MSL Peak Temp <sup>(3)</sup>
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SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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- 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.



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PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



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### PACKAGING INFORMATION

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SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
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16 PINS SHOWN



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- E. Falls within MIL STD 1835 GDIP1-T14, GDIP1-T16, GDIP1-T18 and GDIP1-T20.



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  - 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-F16 and JEDEC MO-092AC



PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



- 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.



### PACKAGING INFORMATION

Orderable Device	Status <sup>(1)</sup>	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/Ball Finish	MSL Peak Temp <sup>(3)</sup>
SN54S134J	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	N / A for Pkg Type
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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<sup>(3)</sup> 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



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PLASTIC DUAL-IN-LINE PACKAGE

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SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
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SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
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<sup>(3)</sup> 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



- 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.



- 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-F16 and JEDEC MO-092AC



PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



- 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.





## PACKAGING INFORMATION

Orderable Device	Status <sup>(1)</sup>	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/Ball Finish	MSL Peak Temp <sup>(3)</sup>
SN54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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<sup>(2)</sup> 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.

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



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- 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.



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  - D. Index point is provided on cap for terminal identification only.
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PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



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





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SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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- 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.



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PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



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





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Orderable Device	Status <sup>(1)</sup>	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/Ball Finish	MSL Peak Temp <sup>(3)</sup>
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SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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## PACKAGING INFORMATION

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SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
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PLASTIC DUAL-IN-LINE PACKAGE

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- Falls within JEDEC MS-001, except 18 and 20 pin minimum body length (Dim A).
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## PACKAGING INFORMATION

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SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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<sup>(2)</sup> 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.

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<sup>(3)</sup> 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



- 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.



- 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-F16 and JEDEC MO-092AC



PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



- 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.





## PACKAGING INFORMATION

Orderable Device	Status <sup>(1)</sup>	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/Ball Finish	MSL Peak Temp <sup>(3)</sup>
SN54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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



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- 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.



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PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



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SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



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Orderable Device	Status <sup>(1)</sup>	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/Ball Finish	MSL Peak Temp <sup>(3)</sup>
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SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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  - 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-F16 and JEDEC MO-092AC



PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



- 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.





## PACKAGING INFORMATION

Orderable Device	Status <sup>(1)</sup>	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/Ball Finish	MSL Peak Temp <sup>(3)</sup>
SN54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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<sup>(2)</sup> 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.

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<sup>(3)</sup> 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



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- 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.



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PLASTIC DUAL-IN-LINE PACKAGE

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SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
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SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
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<sup>(3)</sup> 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



- 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.



- 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-F16 and JEDEC MO-092AC



PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



- 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.





## PACKAGING INFORMATION

Orderable Device	Status <sup>(1)</sup>	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/Ball Finish	MSL Peak Temp <sup>(3)</sup>
SN54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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<sup>(2)</sup> 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.

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



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- 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.



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  - D. Index point is provided on cap for terminal identification only.
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PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



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





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SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



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Orderable Device	Status <sup>(1)</sup>	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/Ball Finish	MSL Peak Temp <sup>(3)</sup>
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SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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## PACKAGING INFORMATION

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SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
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PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



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- Falls within JEDEC MS-001, except 18 and 20 pin minimum body length (Dim A).
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## PACKAGING INFORMATION

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SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
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SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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<sup>(2)</sup> 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.

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<sup>(3)</sup> 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



- 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.



- 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-F16 and JEDEC MO-092AC



PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



- 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.





## PACKAGING INFORMATION

Orderable Device	Status <sup>(1)</sup>	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/Ball Finish	MSL Peak Temp <sup>(3)</sup>
SN54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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



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- 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.



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PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



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SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



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## PACKAGING INFORMATION

Orderable Device	Status <sup>(1)</sup>	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/Ball Finish	MSL Peak Temp <sup>(3)</sup>
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SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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PLASTIC DUAL-IN-LINE PACKAGE

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PLASTIC DUAL-IN-LINE PACKAGE

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  - D. Index point is provided on cap for terminal identification only.
  - E. Falls within MIL STD 1835 GDFP1-F16 and JEDEC MO-092AC



PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



- 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.





## PACKAGING INFORMATION

Orderable Device	Status <sup>(1)</sup>	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/Ball Finish	MSL Peak Temp <sup>(3)</sup>
SN54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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<sup>(3)</sup> 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



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- 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.



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SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
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SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
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SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
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<sup>(3)</sup> 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



- 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.



- 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-F16 and JEDEC MO-092AC



PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



- 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.





## PACKAGING INFORMATION

Orderable Device	Status <sup>(1)</sup>	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/Ball Finish	MSL Peak Temp <sup>(3)</sup>
SN54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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**OBSOLETE:** TI has discontinued the production of the device.

<sup>(2)</sup> 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.

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



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- 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.



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  - E. Falls within MIL STD 1835 GDFP1-F16 and JEDEC MO-092AC



PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



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- 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.





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SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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



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- 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.



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PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



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## PACKAGING INFORMATION

Orderable Device	Status <sup>(1)</sup>	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/Ball Finish	MSL Peak Temp <sup>(3)</sup>
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SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
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SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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<sup>(2)</sup> 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.

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<sup>(3)</sup> 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



- 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.



- 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-F16 and JEDEC MO-092AC



PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



- 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.





## PACKAGING INFORMATION

Orderable Device	Status <sup>(1)</sup>	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/Ball Finish	MSL Peak Temp <sup>(3)</sup>
SN54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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- E. Falls within MIL STD 1835 GDIP1-T14, GDIP1-T16, GDIP1-T18 and GDIP1-T20.



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PLASTIC DUAL-IN-LINE PACKAGE

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SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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16 PINS SHOWN



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## PACKAGING INFORMATION

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





## PACKAGING INFORMATION

Orderable Device	Status <sup>(1)</sup>	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/Ball Finish	MSL Peak Temp <sup>(3)</sup>
SN54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

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<sup>(2)</sup> 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.

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<sup>(3)</sup> 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



- 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.



- A. All linear dimensions are in inches (millimeters).
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  - 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-F16 and JEDEC MO-092AC



PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



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- Falls within JEDEC MS-001, except 18 and 20 pin minimum body length (Dim A).
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Orderable Device	Status <sup>(1)</sup>	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/Ball Finish	MSL Peak Temp <sup>(3)</sup>
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SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
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- 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.



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SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
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SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
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J (R-GDIP-T\*\*) 14 LEADS SHOWN



- 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.



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PLASTIC DUAL-IN-LINE PACKAGE

16 PINS SHOWN



- 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.





## PACKAGING INFORMATION

Orderable Device	Status <sup>(1)</sup>	Package Type	Package Drawing	Pins	Package Qty	Eco Plan <sup>(2)</sup>	Lead/Ball Finish	MSL Peak Temp <sup>(3)</sup>
SN54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SN74S134N	OBSOLETE	PDIP	Ν	16		TBD	Call TI	Call TI
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type
SNJ54S134W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type

<sup>(1)</sup> 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.

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<sup>(2)</sup> 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.

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