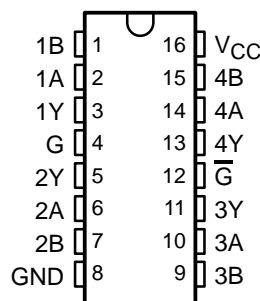


AM26LS32AC, AM26LS32AI, AM26LS33AC, AM26LS32AM, AM26LS33AM QUADRUPLE DIFFERENTIAL LINE RECEIVERS

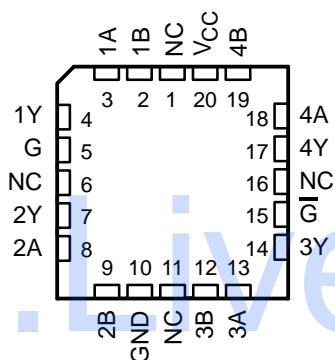
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- **AM26LS32A Devices Meet or Exceed the Requirements of ANSI TIA/EIA-422-B, TIA/EIA-423-B, and ITU Recommendations V.10 and V.11**
- **AM26LS32A Devices Have ± 7 -V Common-Mode Range With ± 200 -mV Sensitivity**
- **AM26LS33A Devices Have ± 15 -V Common-Mode Range With ± 500 -mV Sensitivity**
- **Input Hysteresis . . . 50 mV Typical**
- **Operate From a Single 5-V Supply**
- **Low-Power Schottky Circuitry**
- **3-State Outputs**
- **Complementary Output-Enable Inputs**
- **Input Impedance . . . 12 k Ω Min**
- **Designed to Be Interchangeable With Advanced Micro Devices AM26LS32™ and AM26LS33™**

AM26LS32AC . . . D, N, OR NS PACKAGE
AM26LS32AI, AM26LS33AC . . . D OR N PACKAGE
AM26LS32AM, AM26LS33AM . . . J PACKAGE
(TOP VIEW)



AM26LS32AM, AM26LS33AM . . . FK PACKAGE
(TOP VIEW)



NC – No internal connection

description

The AM26LS32A and AM26LS33A devices are quadruple differential line receivers for balanced and unbalanced digital data transmission. The enable function is common to all four receivers and offers a choice of active-high or active-low input. The 3-state outputs permit connection directly to a bus-organized system. Fail-safe design ensures that, if the inputs are open, the outputs always are high.

Compared to the AM26LS32 and the AM26LS33, the AM26LS32A and AM26LS33A incorporate an additional stage of amplification to improve sensitivity. The input impedance has been increased, resulting in less loading of the bus line. The additional stage has increased propagation delay; however, this does not affect interchangeability in most applications.

The AM26LS32AC and AM26LS33AC are characterized for operation from 0°C to 70°C. The AM26LS32AI is characterized for operation from -40°C to 85°C. The AM26LS32AM and AM26LS33AM are characterized for operation over the full military temperature range of -55°C to 125°C.



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.

AM26LS32 and AM26LS33 are trademarks of Advanced Micro Devices, Inc.

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

**TEXAS
INSTRUMENTS**

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**AM26LS32AC, AM26LS32AI, AM26LS33AC,
AM26LS32AM, AM26LS33AM
QUADRUPLE DIFFERENTIAL LINE RECEIVERS**

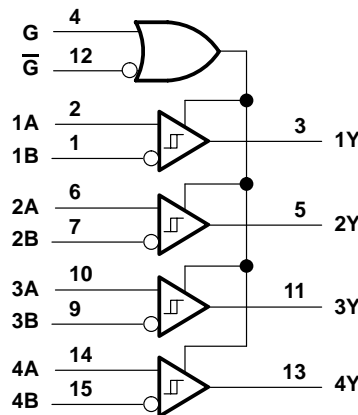
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FUNCTION TABLE
(each receiver)

DIFFERENTIAL A – B	ENABLES		OUTPUT Y
	G	\overline{G}	
$V_{ID} \geq V_{IT+}$	H	X	H
	X	L	H
$V_{IT-} \leq V_{ID} \leq V_{IT+}$	H	X	?
	X	L	?
$V_{ID} \leq V_{IT-}$	H	X	L
	X	L	L
X	L	H	Z
Open	H	X	H
	X	L	H

H = high level, L = low level, ? = indeterminate,
X = irrelevant, Z = high impedance (off)

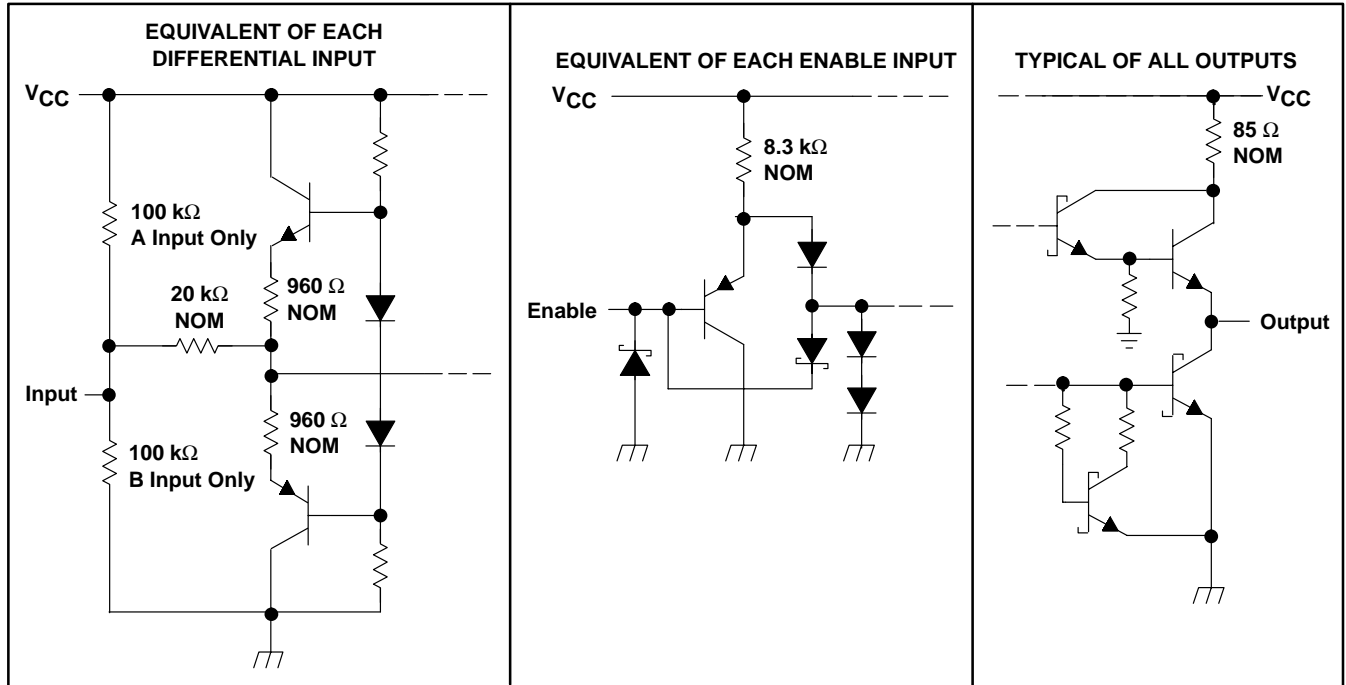
logic diagram (positive logic)



AM26LS32AC, AM26LS32AI, AM26LS33AC, AM26LS32AM, AM26LS33AM QUADRUPLE DIFFERENTIAL LINE RECEIVERS

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schematics of inputs and outputs



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

Supply voltage, V_{CC} (see Note 1)	7 V
Input voltage, V_I : Any differential input	± 25 V
Other inputs	7 V
Differential input voltage, V_{ID} (see Note 2)	± 25 V
Continuous total power dissipation	See Dissipation Rating Table
Package thermal impedance, θ_{JA} (see Note 3): D package	73°C/W
N package	67°C/W
NS package	64°C/W
Case temperature for 60 seconds, T_C : FK package	260°C
Lead temperature 1,6 mm (1/16 inch) from case for 10 seconds: D or N package	260°C
Lead temperature 1,6 mm (1/16 inch) from case for 60 seconds: J package	300°C
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:
- All voltage values, except differential voltages, are with respect to the network ground terminal.
 - Differential voltage values are at the noninverting (A) input terminals with respect to the inverting (B) input terminals.
 - The package thermal impedance is calculated in accordance with JESD 51-7.

DISSIPATION RATING TABLE

PACKAGE	$T_A \leq 25^\circ\text{C}$ POWER RATING	DERATING FACTOR ABOVE $T_A = 25^\circ\text{C}$	$T_A = 70^\circ\text{C}$ POWER RATING	$T_A = 125^\circ\text{C}$ POWER RATING
FK	1375 mW	11.0 mW/°C	880 mW	275 mW
J	1375 mW	11.0 mW/°C	880 mW	275 mW

AM26LS32AC, AM26LS32AI, AM26LS33AC, AM26LS32AM, AM26LS33AM QUADRUPLE DIFFERENTIAL LINE RECEIVERS

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recommended operating conditions

		MIN	NOM	MAX	UNIT		
V _{CC}	Supply voltage	AM26LS32AC, AM26LS32AI, AM26LS33AC		4.75	5	5.25	V
		AM26LS32AM, AM26LS33AM		4.5	5	5.5	
V _{IH}	High-level input voltage	2				V	
V _{IL}	Low-level input voltage				0.8	V	
V _{IC}	Common-mode input voltage	AM26LS32A		±7		V	
		AM26LS33A		±15			
I _{OH}	High-level output current				-440	μA	
I _{OL}	Low-level output current				8	mA	
T _A	Operating free-air temperature	AM26LS32AC, AM26LS33AC		0	70	°C	
		AM26LS32AI		-40	85		
		AM26LS32AM, AM26LS33AM		-55	125		

electrical characteristics over recommended ranges of V_{CC}, V_{IC}, and operating free-air temperature (unless otherwise noted)

PARAMETER	TEST CONDITIONS		MIN	TYP†	MAX	UNIT
V _{IT+}	Positive-going input threshold voltage	V _O = V _{OHmin} , I _{OH} = -440 μA	AM26LS32A		0.2	V
			AM26LS33A		0.5	
V _{IT-}	Negative-going input threshold voltage	V _O = 0.45 V, I _{OL} = 8 mA	AM26LS32A		-0.2‡	V
			AM26LS33A		-0.5‡	
V _{hys}	Hysteresis voltage (V _{IT+} - V _{IT-})		50			mV
V _{IK}	Enable-input clamp voltage	V _{CC} = MIN, I _I = -18 mA			-1.5	V
V _{OH}	High-level output voltage	V _{CC} = MIN, V _{ID} = 1 V, V _{I(G)} = 0.8 V, I _{OH} = -440 μA	AM26LS32AC AM26LS33AC		2.7	V
			AM26LS32AM, AM26LS32AI, AM26LS33AM		2.5	
V _{OL}	Low-level output voltage	V _{CC} = MIN, V _{ID} = -1 V, V _{I(G)} = 0.8 V	I _{OL} = 4 mA		0.4	V
			I _{OL} = 8 mA		0.45	
I _{OZ}	Off-state (high-impedance state) output current	V _{CC} = MAX	V _O = 2.4 V		20	μA
			V _O = 0.4 V		-20	
I _I	Line input current	V _I = 15 V, Other input at -10 V to 15 V			1.2	mA
		V _I = -15 V, Other input at -15 V to 10 V			-1.7	
I _{I(EN)}	Enable input current	V _I = 5.5 V			100	μA
I _{IH}	High-level enable current	V _I = 2.7 V			20	μA
I _{IL}	Low-level enable current	V _I = 0.4 V			-0.36	mA
r _I	Input resistance	V _{IC} = -15 V to 15 V, One input to ac ground	12	15		kΩ
I _{OS}	Short-circuit output current§	V _{CC} = MAX	-15		-85	mA
I _{CC}	Supply current	V _{CC} = MAX, All outputs disabled	52		70	mA

† All typical values are at V_{CC} = 5 V, T_A = 25°C, and V_{IC} = 0.

‡ The algebraic convention, in which the less positive (more negative) limit is designated as minimum, is used in this data sheet for threshold levels only.

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



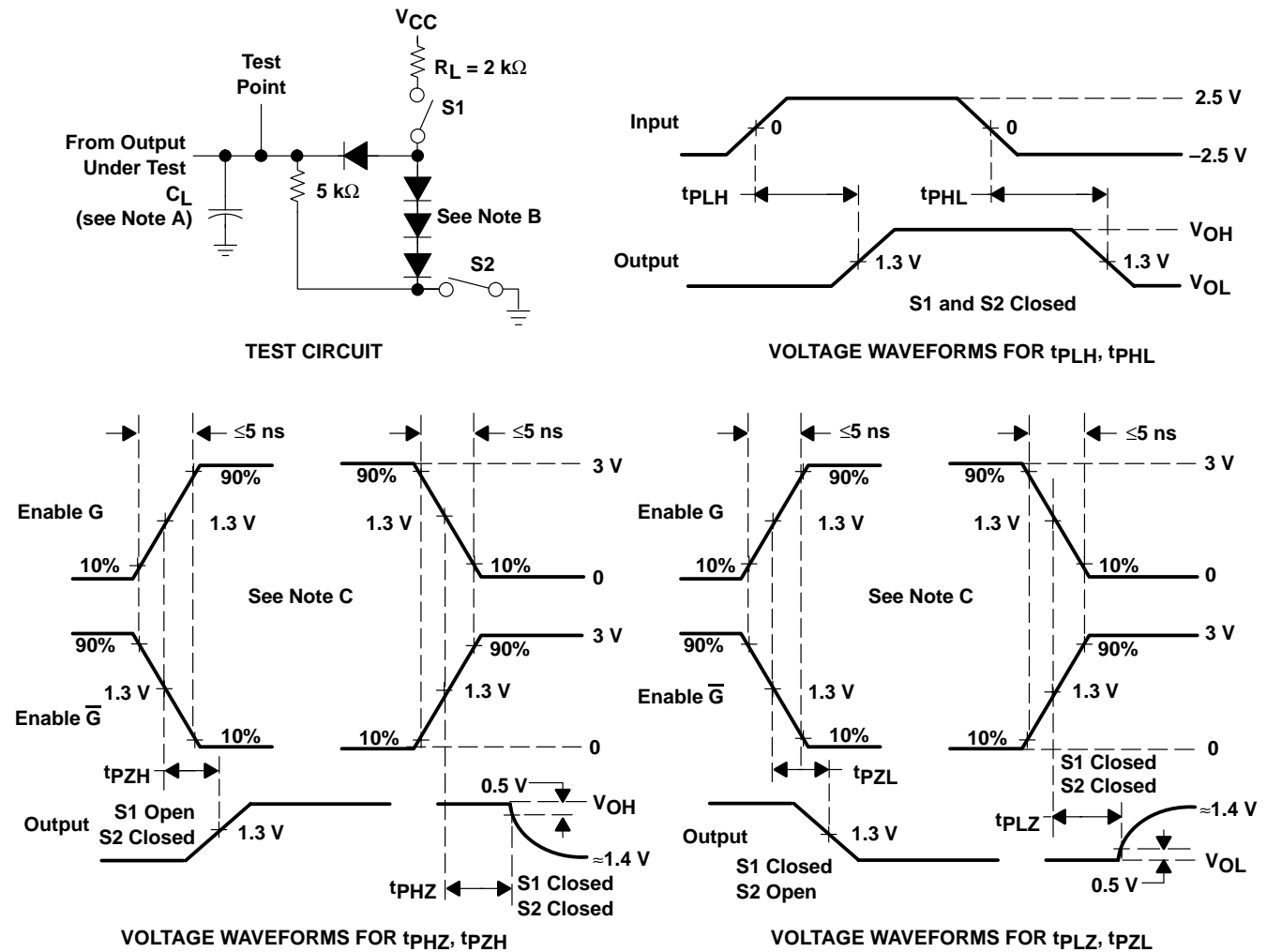
AM26LS32AC, AM26LS32AI, AM26LS33AC, AM26LS32AM, AM26LS33AM QUADRUPLE DIFFERENTIAL LINE RECEIVERS

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switching characteristics, $V_{CC} = 5\text{ V}$, $T_A = 25^\circ\text{C}$

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNIT
t_{PLH} Propagation delay time, low-to-high-level output	$C_L = 15\text{ pF}$, See Figure 1		20	35	ns
t_{PHL} Propagation delay time, high-to-low-level output			22	35	
t_{PZH} Output enable time to high level	$C_L = 15\text{ pF}$, See Figure 1		17	22	ns
t_{PZL} Output enable time to low level			20	25	
t_{PHZ} Output disable time from high level	$C_L = 5\text{ pF}$, See Figure 1		21	30	ns
t_{PLZ} Output disable time from low level			30	40	

PARAMETER MEASUREMENT INFORMATION



- NOTES: A. C_L includes probe and jig capacitance.
 B. All diodes are 1N3064 or equivalent.
 C. Enable G is tested with \bar{G} high; \bar{G} is tested with G low.

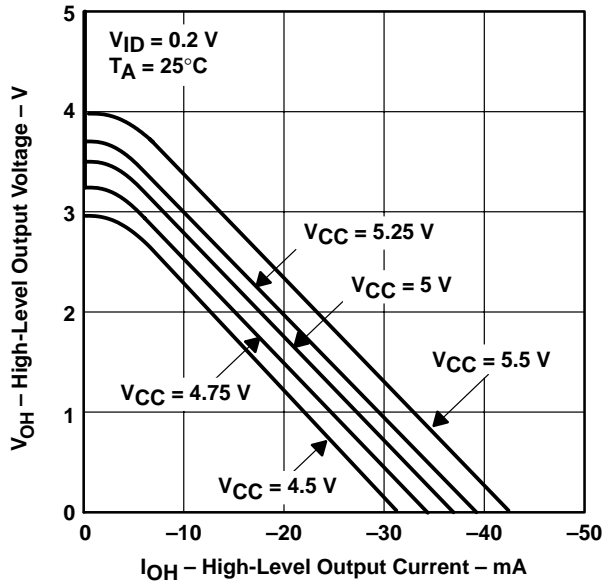
Figure 1

**AM26LS32AC, AM26LS32AI, AM26LS33AC,
AM26LS32AM, AM26LS33AM
QUADRUPLE DIFFERENTIAL LINE RECEIVERS**

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TYPICAL CHARACTERISTICS

**HIGH-LEVEL OUTPUT VOLTAGE
vs
HIGH-LEVEL OUTPUT CURRENT†**



† $V_{CC} = 5.5\text{ V}$ and $V_{CC} = 4.5\text{ V}$ applies to M-suffix devices only.

Figure 2

**HIGH-LEVEL OUTPUT VOLTAGE
vs
FREE-AIR TEMPERATURE**

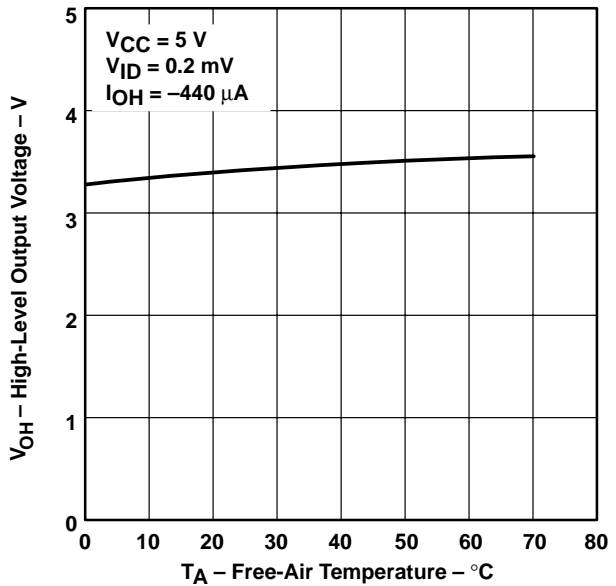


Figure 3

**LOW-LEVEL OUTPUT VOLTAGE
vs
LOW-LEVEL OUTPUT CURRENT**

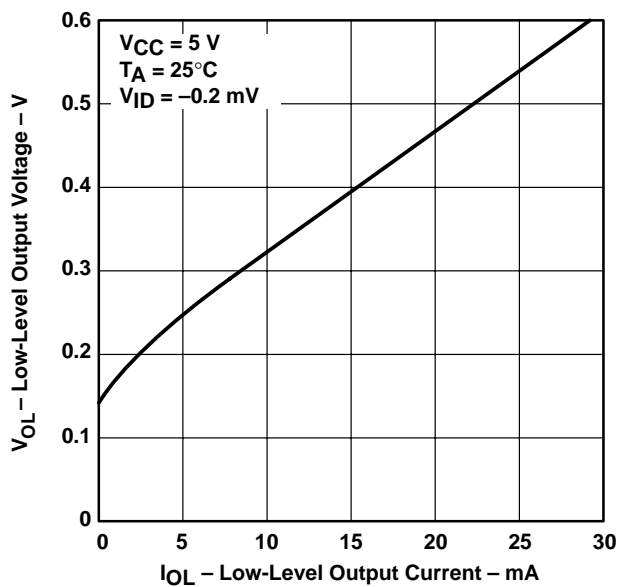


Figure 4

**LOW-LEVEL OUTPUT VOLTAGE
vs
FREE-AIR TEMPERATURE**

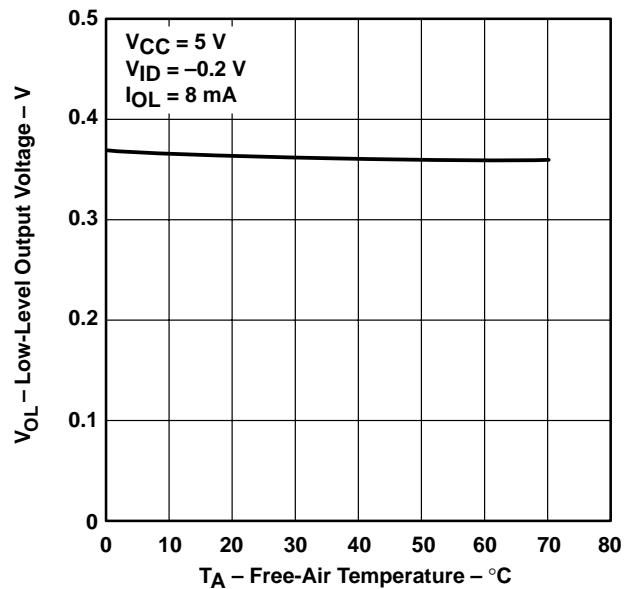


Figure 5



TYPICAL CHARACTERISTICS

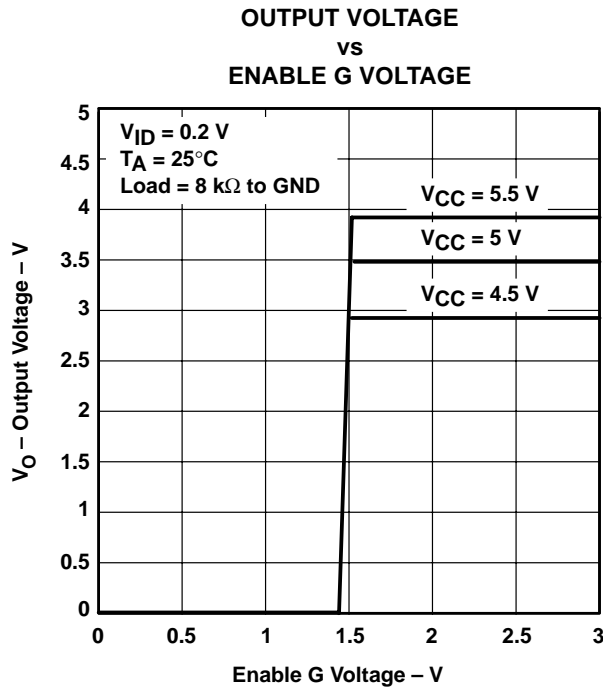


Figure 6

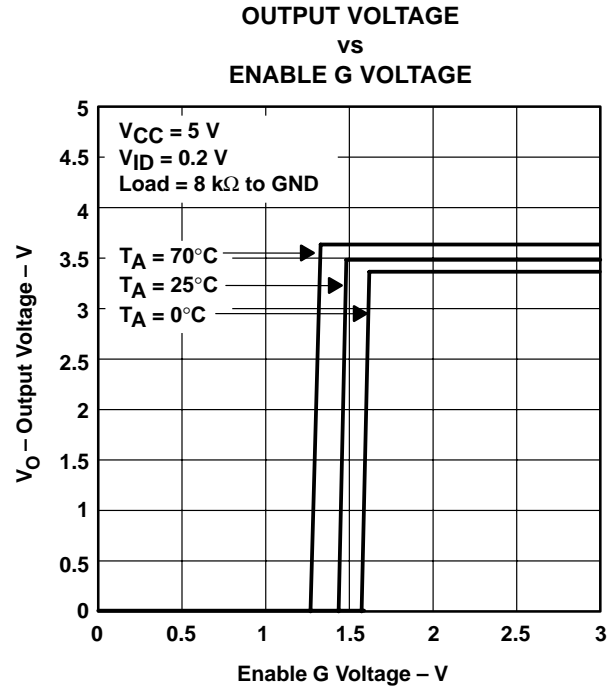


Figure 7

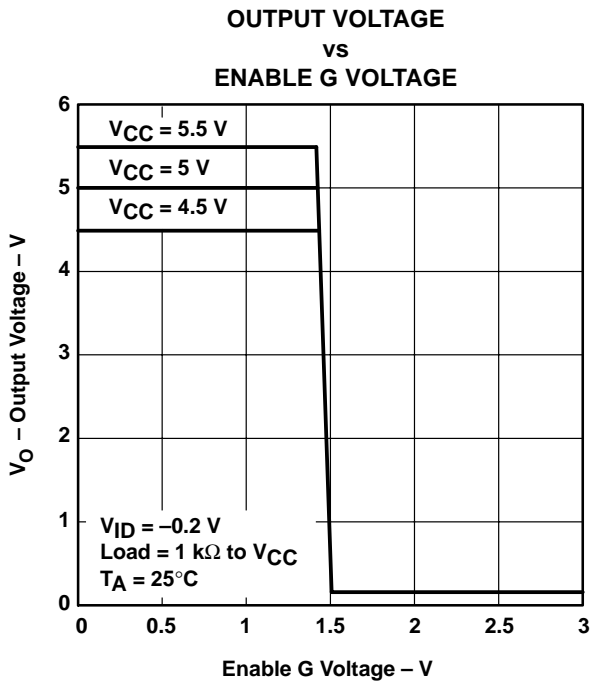


Figure 8

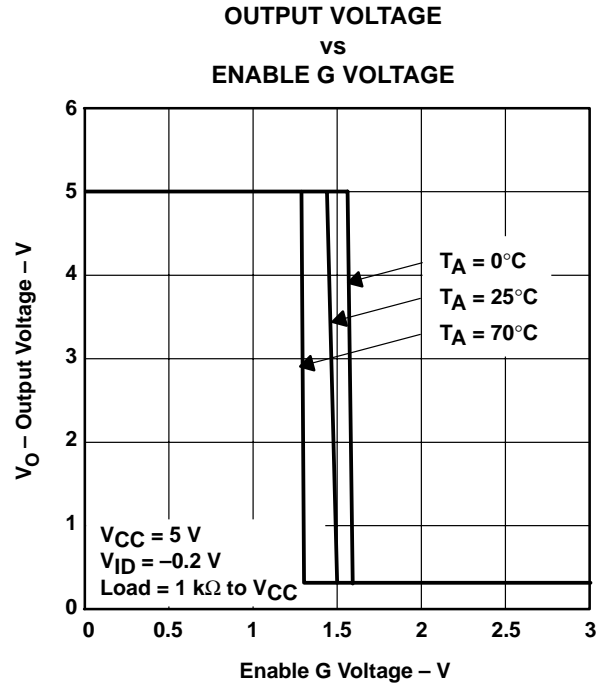


Figure 9

**AM26LS32AC, AM26LS32AI, AM26LS33AC,
AM26LS32AM, AM26LS33AM
QUADRUPLE DIFFERENTIAL LINE RECEIVERS**

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TYPICAL CHARACTERISTICS

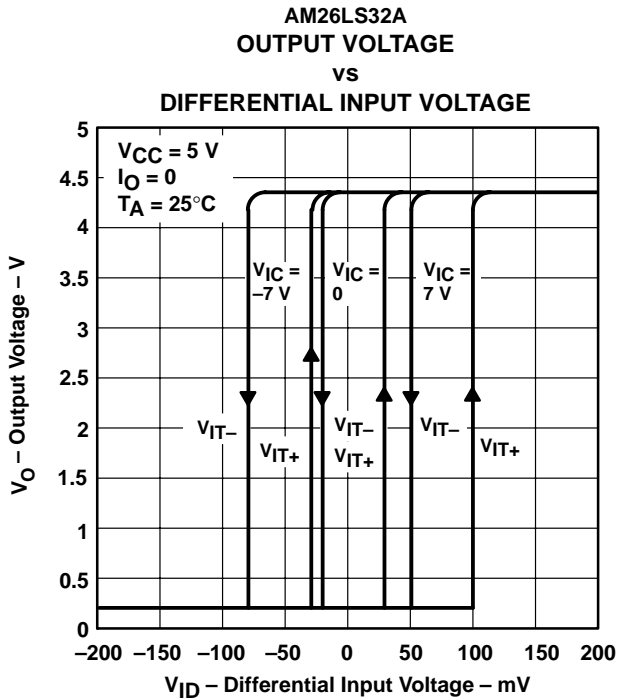


Figure 10

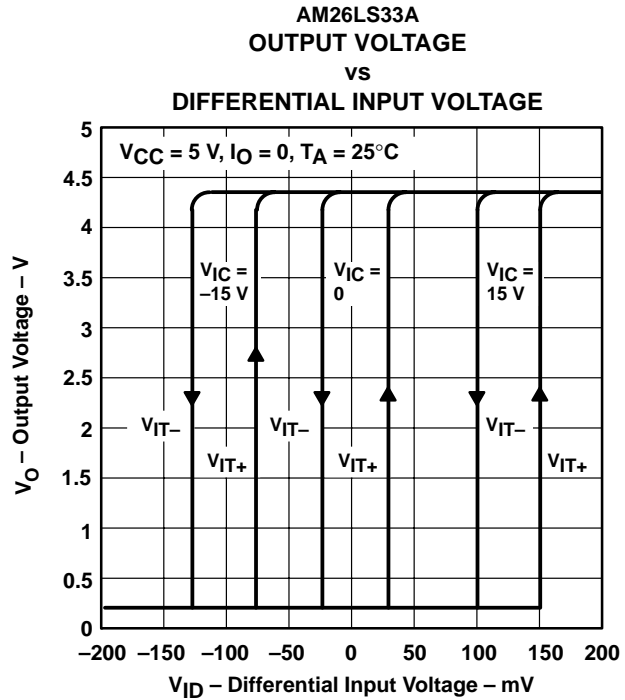


Figure 11

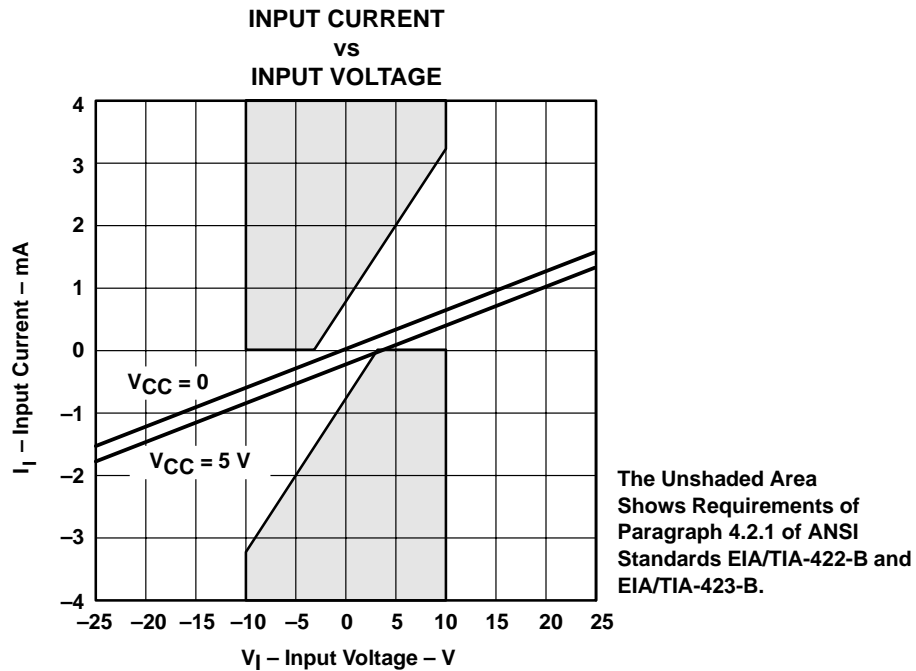
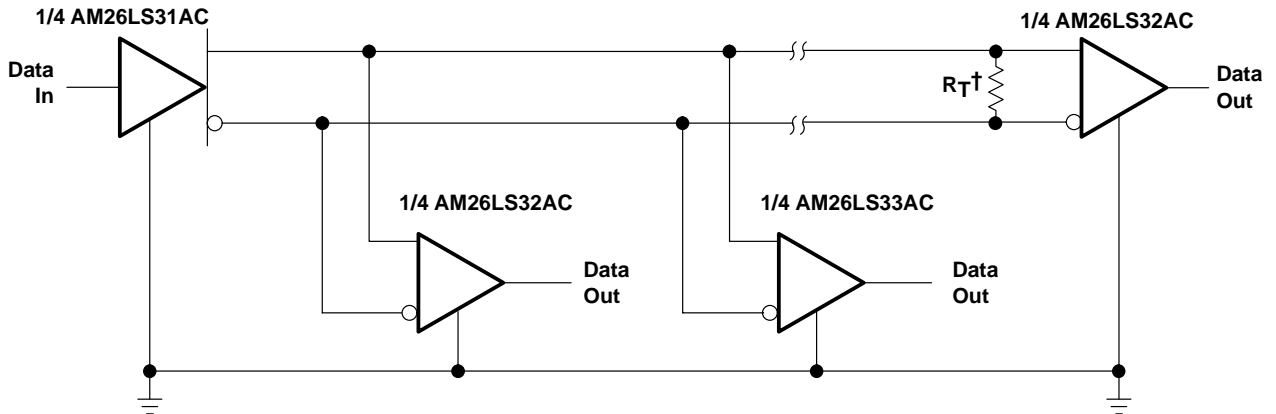


Figure 12



APPLICATION INFORMATION



† R_T equals the characteristic impedance of the line.

Figure 13. Circuit With Multiple Receivers

PACKAGING INFORMATION

Orderable Device	Status ⁽¹⁾	Package Type	Package Drawing	Pins	Package Qty	Eco Plan ⁽²⁾	Lead/Ball Finish	MSL Peak Temp ⁽³⁾
5962-7802003M2A	ACTIVE	LCCC	FK	20	1	TBD	POST-PLATE	Level-NC-NC-NC
5962-7802003MEA	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	Level-NC-NC-NC
5962-7802003MFA	ACTIVE	CFP	W	16	1	TBD	A42 SNPB	Level-NC-NC-NC
5962-7802004M2A	ACTIVE	LCCC	FK	20	1	TBD	POST-PLATE	Level-NC-NC-NC
5962-7802004MEA	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	Level-NC-NC-NC
5962-7802004MFA	ACTIVE	CFP	W	16	1	TBD	A42 SNPB	Level-NC-NC-NC
78020032A	OBSOLETE	LCCC	FK	20		TBD	Call TI	Call TI
7802003FA	OBSOLETE	CFP	W	16		TBD	Call TI	Call TI
AM26LS32ACD	ACTIVE	SOIC	D	16	40	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
AM26LS32ACDE4	ACTIVE	SOIC	D	16	40	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
AM26LS32ACDR	ACTIVE	SOIC	D	16	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
AM26LS32ACDRE4	ACTIVE	SOIC	D	16	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
AM26LS32ACN	ACTIVE	PDIP	N	16	25	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC
AM26LS32ACNE4	ACTIVE	PDIP	N	16	25	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC
AM26LS32ACNSR	ACTIVE	SO	NS	16	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
AM26LS32ACNSRG4	ACTIVE	SO	NS	16	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
AM26LS32AID	ACTIVE	SOIC	D	16	40	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
AM26LS32AIDE4	ACTIVE	SOIC	D	16	40	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
AM26LS32AIDR	ACTIVE	SOIC	D	16	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
AM26LS32AIDRE4	ACTIVE	SOIC	D	16	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
AM26LS32AIN	ACTIVE	PDIP	N	16	25	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC
AM26LS32AINE4	ACTIVE	PDIP	N	16	25	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC
AM26LS32AMFKB	ACTIVE	LCCC	FK	20	1	TBD	POST-PLATE	Level-NC-NC-NC
AM26LS32AMJ	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	Level-NC-NC-NC
AM26LS32AMJB	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	Level-NC-NC-NC
AM26LS32AMWB	ACTIVE	CFP	W	16	1	TBD	A42 SNPB	Level-NC-NC-NC
AM26LS33ACD	ACTIVE	SOIC	D	16	40	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
AM26LS33ACDG4	ACTIVE	SOIC	D	16	40	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
AM26LS33ACDR	ACTIVE	SOIC	D	16	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
AM26LS33ACDRG4	ACTIVE	SOIC	D	16	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM

Orderable Device	Status ⁽¹⁾	Package Type	Package Drawing	Pins	Package Qty	Eco Plan ⁽²⁾	Lead/Ball Finish	MSL Peak Temp ⁽³⁾
						no Sb/Br)		
AM26LS33ACN	ACTIVE	PDIP	N	16	25	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC
AM26LS33ACNE4	ACTIVE	PDIP	N	16	25	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC
AM26LS33AMFKB	ACTIVE	LCCC	FK	20	1	TBD	POST-PLATE	Level-NC-NC-NC
AM26LS33AMJ	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	Level-NC-NC-NC
AM26LS33AMJB	ACTIVE	CDIP	J	16	1	TBD	A42 SNPB	Level-NC-NC-NC
AM26LS33AMWB	ACTIVE	CFP	W	16	1	TBD	A42 SNPB	Level-NC-NC-NC

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

ACTIVE: Product device recommended for new designs.

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

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

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

OBsolete: TI has discontinued the production of the device.

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

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

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

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

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

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J (R-GDIP-T**)

14 LEADS SHOWN

CERAMIC DUAL IN-LINE PACKAGE



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



4040083/F 03/03

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

W (R-GDFP-F16)

CERAMIC DUAL FLATPACK



4040180-3/D 07/03

- NOTES:
- A. All linear dimensions are in inches (millimeters).
 - B. This drawing is subject to change without notice.
 - C. This package can be hermetically sealed with a ceramic lid using glass frit.
 - D. Index point is provided on cap for terminal identification only.
 - E. Falls within MIL STD 1835 GDFP1-F16 and JEDEC MO-092AC

FK (S-CQCC-N**)

LEADLESS CERAMIC CHIP CARRIER

28 TERMINAL SHOWN



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

N (R-PDIP-T**)

PLASTIC DUAL-IN-LINE PACKAGE

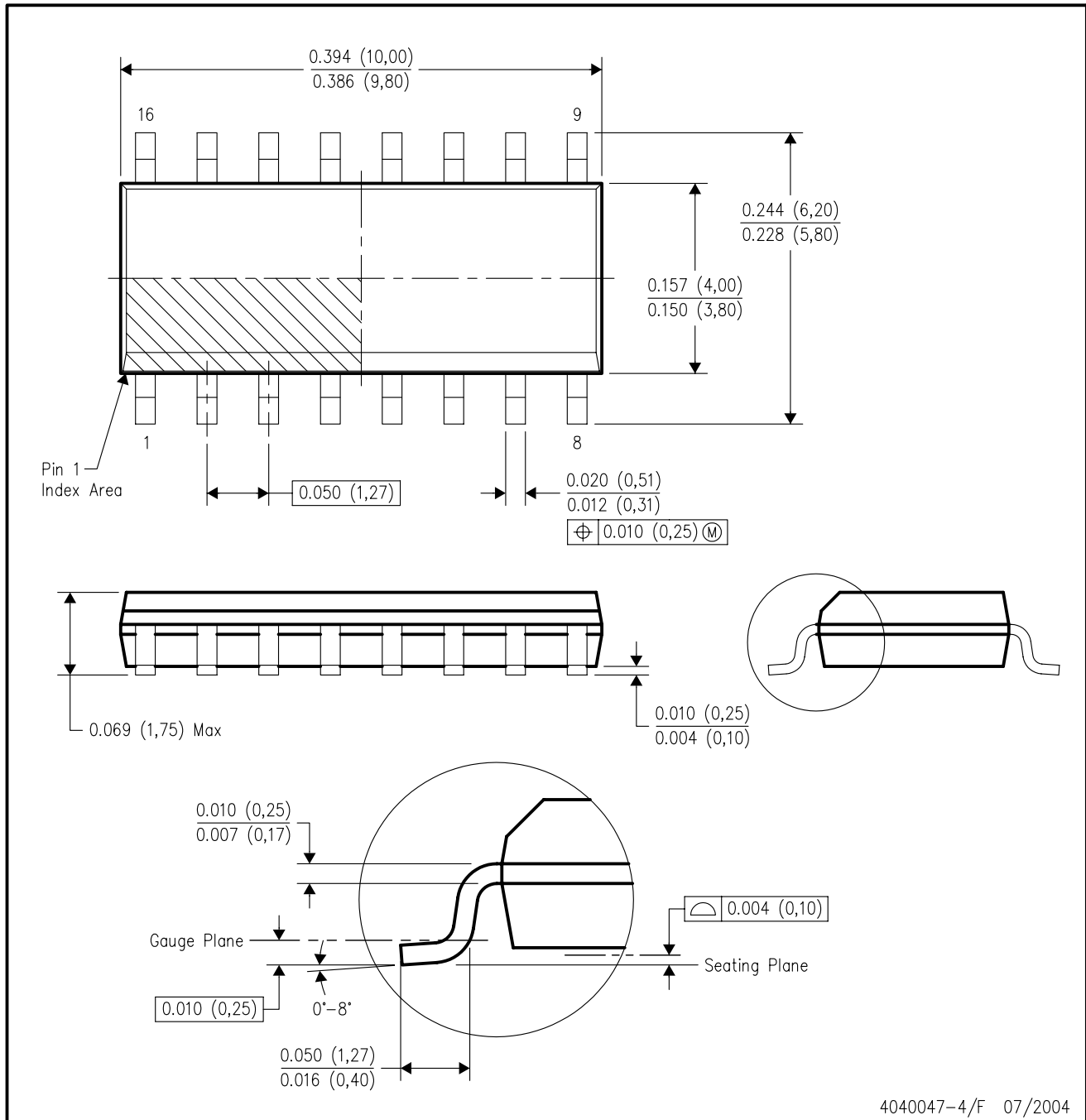
16 PINS SHOWN



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

D (R-PDSO-G16)

PLASTIC SMALL-OUTLINE PACKAGE



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

MECHANICAL DATA

NS (R-PDSO-G**)

PLASTIC SMALL-OUTLINE PACKAGE

14-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.

IMPORTANT NOTICE

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AM26LS32A, Status: ACTIVE

View RoHS Compliant Devices

Quadruple Differential Line Receiver



clear gif

<input type="checkbox"/> Features	<input type="checkbox"/> Samples	<input type="checkbox"/> Technical Documents
<input type="checkbox"/> Quality & Pb-Free Data	<input type="checkbox"/> Pricing/Packaging	<input type="checkbox"/> Applications Notes
<input type="checkbox"/> Related Products	<input type="checkbox"/> Inventory	<input type="checkbox"/> Simulation Models
<input type="checkbox"/> Tools & Software	<input type="checkbox"/> Symbols/Footprints	<input type="checkbox"/> Reference Designs



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- Part Marking Lookup

Datasheet



Download Datasheet

Quadruple Differential Line Receivers (Rev. D) (am26ls32a.pdf, 549 KB)
13 Mar 2002 [Download](#)

	AM26LS32A
Receivers Per Package	4
Supply Voltage(s)(V)	5
ESD(kV)	2
Signaling Rate(Mbps)	10
ICC(Max)(mA)	70
Footprint	AM26LS32
Temp Range(C)	-55 to 125, -40 to 85, 0 to 70
Pin/Package	16CDIP,16CFP,16PDIP,16SO,16SOIC,20LCCC
Approx. 1KU Price (US\$)	.36
	Samples
	Inventory

Related Block Diagrams

- Military ElectroOptics
- Military Radar



Product Information

Features Save this to your personal library

AM26LS32A Devices Meet or Exceed the Requirements of ANSI TIA/EIA-422-B, TIA/EIA-423-B, and ITU Recommendations V.10 and V.11
 AM26LS32A Devices Have ©7-V Common-Mode Range With ©200-mV Sensitivity
 AM26LS33A Devices Have ©15-V Common-Mode Range With ©500-mV Sensitivity
 Input Hysteresis . . . 50 mV Typical
 Operate From a Single 5-V Supply
 Low-Power Schottky Circuitry
 3-State Outputs
 Complementary Output-Enable Inputs
 Input Impedance . . . 12 k \cdot Min
 Designed to Be Interchangeable With Advanced Micro Devices AM26LS32™ and AM26LS33™

AM26LS32 and AM26LS33 are trademarks of Advanced Micro Devices, Inc.

Description

The AM26LS32A and AM26LS33A devices are quadruple differential line receivers for balanced and unbalanced digital data transmission. The enable function is common to all four receivers and offers a choice of active-high or active-low input. The 3-state outputs permit connection directly to a bus-organized system. Fail-safe design ensures that, if the inputs are open, the outputs always are high.

Compared to the AM26LS32 and the AM26LS33, the AM26LS32A and AM26LS33A incorporate an additional stage of amplification to improve sensitivity. The input impedance has been increased, resulting in less loading of the bus line. The additional stage has increased propagation delay; however, this does not affect interchangeability in most applications.

The AM26LS32AC and AM26LS33AC are characterized for operation from 0°C to 70°C. The AM26LS32AI

is characterized for operation from -40°C to 85°C. The AM26LS32AM and AM26LS33AM are characterized for operation over the full military temperature range of -55°C to 125°C.

Pricing/Packaging/CAD Design Tools/Samples										
				Price	Packaging			CAD Design Tools		Samples
Device	Status	Temp (°C)	DSCC #	Budget Price (\$US) QTY	Industry Standard (TI Pkg) Pins	Top Side Marking	Standard Pack Quantity	Symbols	Footprints	Samples
5962-7802003M2A	ACTIVE	-55 to 125		15.46 1KU	LCCC (FK) 20		1	<input type="checkbox"/>	<input type="checkbox"/>	Request Military Samples
5962-7802003MEA	ACTIVE	-55 to 125		4.29 1KU	CDIP (J) 16		1	<input type="checkbox"/>	<input type="checkbox"/>	Request Military Samples
5962-7802003MFA	ACTIVE	-55 to 125		10.01 1KU	CFP (W) 16		1	<input type="checkbox"/>		Request Military Samples
78020032A	OBSOLETE	-55 to 125			LCCC (FK) 20				<input type="checkbox"/>	Not Available
7802003FA	OBSOLETE	-55 to 125			CFP (W) 16					Not Available
AM26LS32ACD	ACTIVE	0 to 70		0.45 1KU	SOIC (D) 16	View	40	<input type="checkbox"/>	<input type="checkbox"/>	Purchase Samples
AM26LS32ACDE4	ACTIVE	0 to 70		0.45 1KU	SOIC (D) 16	View	40	<input type="checkbox"/>	<input type="checkbox"/>	Purchase Samples
AM26LS32ACDR	ACTIVE	0 to 70		0.45 1KU	SOIC (D) 16	View	2500	<input type="checkbox"/>	<input type="checkbox"/>	Contact TI Distributor or Sales Office
AM26LS32ACDRE4	ACTIVE	0 to 70		0.45 1KU	SOIC (D) 16	View	2500	<input type="checkbox"/>	<input type="checkbox"/>	Request Free Samples
AM26LS32ACN	ACTIVE	0 to 70		0.45 1KU	PDIP (N) 16	View	25	<input type="checkbox"/>	<input type="checkbox"/>	Contact TI Distributor or Sales Office
AM26LS32ACNE4	ACTIVE	0 to 70		0.45 1KU	PDIP (N) 16	View	25	<input type="checkbox"/>	<input type="checkbox"/>	Request Free Samples
AM26LS32ACNSR	ACTIVE	0 to 70		0.45 1KU	SO (NS) 16	View	2000	<input type="checkbox"/>	<input type="checkbox"/>	Contact TI Distributor or Sales Office
AM26LS32ACNSRG4	ACTIVE	0 to 70		0.50 1KU	SO (NS) 16	View	2000	<input type="checkbox"/>	<input type="checkbox"/>	Purchase Samples
AM26LS32AID	ACTIVE	-40 to 85		0.36 1KU	SOIC (D) 16	View	40	<input type="checkbox"/>	<input type="checkbox"/>	Purchase Samples
AM26LS32AIDE4	ACTIVE	-40 to 85		0.36 1KU	SOIC (D) 16	View	40	<input type="checkbox"/>	<input type="checkbox"/>	Purchase Samples
AM26LS32AIDR	ACTIVE	-40 to 85		0.36 1KU	SOIC (D) 16	View	2500	<input type="checkbox"/>	<input type="checkbox"/>	Contact TI Distributor or Sales Office
AM26LS32AIDRE4	ACTIVE	-40 to 85		0.36 1KU	SOIC (D) 16	View	2500	<input type="checkbox"/>	<input type="checkbox"/>	Request Free Samples
AM26LS32AIN	ACTIVE	-40 to 85		0.36 1KU	PDIP (N) 16	View	25	<input type="checkbox"/>	<input type="checkbox"/>	Contact TI Distributor or Sales Office
AM26LS32AINE4	ACTIVE	-40 to 85		0.36 1KU	PDIP (N) 16	View	25	<input type="checkbox"/>	<input type="checkbox"/>	Request Free Samples
AM26LS32AMFKB	ACTIVE	-55 to 125	5962-7802003M2A	15.46 1KU	LCCC (FK) 20		1	<input type="checkbox"/>	<input type="checkbox"/>	Request Military Samples
AM26LS32AMJ	ACTIVE	-55 to 125		2.86 1KU	CDIP (J) 16		1	<input type="checkbox"/>	<input type="checkbox"/>	Request Military Samples
AM26LS32AMJB	ACTIVE	-55 to 125	5962-7802003MEA	4.29 1KU	CDIP (J) 16		1	<input type="checkbox"/>	<input type="checkbox"/>	Request Military Samples
AM26LS32AMWB	ACTIVE	-55 to 125	5962-7802003MFA	10.01 1KU	CFP (W) 16		1	<input type="checkbox"/>		Request Military Samples

Inventory							
	TI Inventory Status			Reported Distributor Inventory			
5962-7802003M2A	As of 9:57 AM GMT, 29 Nov 2005			As of 9:57 AM GMT, 29 Nov 2005			
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase
	8896*	>10k 23 Jan	8 Weeks	Americas	Avnet	723	<input type="text"/>
				Europe	Arrow Northern Europe	197	<input type="text"/>
					EBV Elektronik	14	<input type="text"/>
5962-7802003MEA	As of 9:57 AM GMT, 29 Nov 2005			As of 9:57 AM GMT, 29 Nov 2005			
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase
	3770*	>10k 28 Dec	7 Weeks	Americas	Avnet	893	<input type="text"/>
5962-7802003MFA	As of 9:57 AM GMT, 29 Nov 2005			As of 9:57 AM GMT, 29 Nov 2005			
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase
	58*	>10k 28 Dec	8 Weeks	None Reported View Distributors			
AM26LS32ACD	As of 9:57 AM GMT, 29 Nov 2005			As of 9:57 AM GMT, 29 Nov 2005			
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase
	5000*	2720 29 Nov	4 Weeks	Americas	Newark InOne	806	<input type="text"/>
		3258 2 Dec		Europe	Abacus Polar	>1k	<input type="text"/>
		695 5 Dec			Arrow Northern Europe	>1k	<input type="text"/>
		>10k 23 Dec			Arrow Southern Europe	520	<input type="text"/>
					Avnet-SILICA	>1k	<input type="text"/>
					EBV Elektronik	>1k	<input type="text"/>
					Farnell InOne	>1k	<input type="text"/>
					Spoerle	>1k	<input type="text"/>
AM26LS32ACDE4	As of 9:57 AM GMT, 29 Nov 2005			As of 9:57 AM GMT, 29 Nov 2005			
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase
	5000*	2720 29 Nov	4 Weeks	None Reported View Distributors			
		3258 2 Dec					
		695 5 Dec					
		>10k 23 Dec					
AM26LS32ACDR	As of 9:57 AM GMT, 29 Nov 2005			As of 9:57 AM GMT, 29 Nov 2005			
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase
	0*	>10k 23 Dec	4 Weeks	Americas	DigiKey	>1k	<input type="text"/>
				Europe	Arrow Southern Europe	>1k	<input type="text"/>
					Avnet-SILICA	>1k	<input type="text"/>
AM26LS32ACDRE4	As of 9:57 AM GMT, 29 Nov 2005			As of 9:57 AM GMT, 29 Nov 2005			
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase
	0*	>10k 23 Dec	4 Weeks	None Reported View Distributors			

View all Distributors

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AM26LS32ACN	As of 9:57 AM GMT, 29 Nov 2005			As of 9:57 AM GMT, 29 Nov 2005					
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase		
	1175*	>10k 26 Jan	8 Weeks	Americas	Avnet	>1k	<input type="text"/>		
					DigiKey	>1k	<input type="text"/>		
					Newark InOne	586	<input type="text"/>		
						Europe	Abacus Polar	>1k	<input type="text"/>
							Arrow Northern Europe	>1k	<input type="text"/>
							Arrow Southern Europe	>1k	<input type="text"/>
							Avnet-SILICA	>1k	<input type="text"/>
							EBV Elektronik	>1k	<input type="text"/>
							Farnell InOne	748	<input type="text"/>
							Spoerle	>1k	<input type="text"/>
AM26LS32ACNE4	As of 9:57 AM GMT, 29 Nov 2005			As of 9:57 AM GMT, 29 Nov 2005					
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase		
	1175*	>10k 26 Jan	8 Weeks	None Reported View Distributors					
AM26LS32ACNSR	As of 9:57 AM GMT, 29 Nov 2005			As of 9:57 AM GMT, 29 Nov 2005					
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase		
	0*	>10k 16 Dec	4 Weeks	Americas	DigiKey	>1k	<input type="text"/>		
				Europe	Avnet-SILICA	>1k	<input type="text"/>		
AM26LS32ACNSRG4	As of 9:57 AM GMT, 29 Nov 2005			As of 9:57 AM GMT, 29 Nov 2005					
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase		
	0*	>10k 19 Dec	10 Weeks	None Reported View Distributors					
AM26LS32AID	As of 9:57 AM GMT, 29 Nov 2005			As of 9:57 AM GMT, 29 Nov 2005					
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase		
	7080*	>10k 20 Dec	10 Weeks	Americas	Newark InOne	600	<input type="text"/>		
				Europe	Avnet-SILICA	440	<input type="text"/>		
				EBV Elektronik	120	<input type="text"/>			
				Spoerle	152	<input type="text"/>			
AM26LS32AIDE4	As of 9:57 AM GMT, 29 Nov 2005			As of 9:57 AM GMT, 29 Nov 2005					
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase		
	7080*	>10k 20 Dec	10 Weeks	None Reported View Distributors					
AM26LS32AIDR	As of 9:57 AM GMT, 29 Nov 2005			As of 9:57 AM GMT, 29 Nov 2005					
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase		
	0*	>10k 22 Dec	10 Weeks	None Reported View Distributors					
AM26LS32AIDRE4	As of 9:57 AM GMT, 29 Nov 2005			As of 9:57 AM GMT, 29 Nov 2005					
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase		
	0*	>10k 22 Dec	10 Weeks	None Reported View Distributors					
AM26LS32AIN	As of 9:57 AM GMT, 29 Nov 2005			As of 9:57 AM GMT, 29 Nov 2005					

	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase
	1500*	>10k 23 Jan	10 Weeks	Americas	DigiKey	310	<input type="text"/>
					Newark InOne	712	<input type="text"/>
AM26LS32AINE4	As of 9:57 AM GMT, 29 Nov 2005			As of 9:57 AM GMT, 29 Nov 2005			
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase
	1500*	>10k 23 Jan	10 Weeks	None Reported View Distributors			
AM26LS32AMFKB	As of 9:57 AM GMT, 29 Nov 2005			As of 9:57 AM GMT, 29 Nov 2005			
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase
	8896*	>10k 23 Jan	8 Weeks	Europe	Avnet-SILICA	14	<input type="text"/>
AM26LS32AMJ	As of 9:57 AM GMT, 29 Nov 2005			As of 9:57 AM GMT, 29 Nov 2005			
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase
	1655*	>10k 28 Dec	7 Weeks	Americas	Avnet	319	<input type="text"/>
				Europe	EBV Elektronik	70	<input type="text"/>
					Spoerle	100	<input type="text"/>
AM26LS32AMJB	As of 9:57 AM GMT, 29 Nov 2005			As of 9:57 AM GMT, 29 Nov 2005			
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase
	3770*	>10k 28 Dec	7 Weeks	Europe	Arrow Southern Europe	11	<input type="text"/>
					EBV Elektronik	43	<input type="text"/>
AM26LS32AMWB	As of 9:57 AM GMT, 29 Nov 2005			As of 9:57 AM GMT, 29 Nov 2005			
	In Stock	In Progress QTY Date	Lead Time	Region	Company	In Stock	Purchase
	58*	>10k 28 Dec	8 Weeks	None Reported View Distributors			

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Quality & Lead (Pb)-Free Data						
<input type="checkbox"/>	Product Content				MTBF/FIT Rate	
Device	Eco Plan*	Lead/Ball Finish	MSL Rating/Peak Reflow	Details	Details	
5962-7802003M2A	TBD	POST-PLATE	Level-NC-NC-NC	View	View	
5962-7802003MEA	TBD	A42 SNPB	Level-NC-NC-NC	View	View	
5962-7802003MFA	TBD	A42 SNPB	Level-NC-NC-NC	View	View	
AM26LS32ACD <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	View	View	
AM26LS32ACDE4 <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	View	View	
AM26LS32ACDR <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	View	View	
AM26LS32ACDRE4 <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	View	View	
AM26LS32ACN <input type="checkbox"/>	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC	View	View	
AM26LS32ACNE4 <input type="checkbox"/>	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC	View	View	
AM26LS32ACNSR <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	View	View	
AM26LS32ACNSRG4 <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	View	View	
AM26LS32AID <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	View	View	
AM26LS32AIDE4 <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	View	View	
AM26LS32AIDR <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	View	View	
AM26LS32AIDRE4 <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	View	View	
AM26LS32AIN <input type="checkbox"/>	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC	View	View	
AM26LS32AINE4 <input type="checkbox"/>	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC	View	View	
AM26LS32AMFKB	TBD	POST-PLATE	Level-NC-NC-NC	View	View	
AM26LS32AMJ	TBD	A42 SNPB	Level-NC-NC-NC	View	View	

AM26LS32AMJB	TBD	A42 SNPB	Level-NC-NC-NC	View	View
AM26LS32AMWB	TBD	A42 SNPB	Level-NC-NC-NC	View	View

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

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Technical Documents

Datasheets	Keep track of what's new
Quadruple Differential Line Receivers (Rev. D) (am26ls32a.pdf, 549 KB)	
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Application Notes	
View Application Notes for RS-422	
More Literature	
Standard Linear Products Cross-Reference (Rev. C) (slyt017c.pdf, 632 KB)	
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