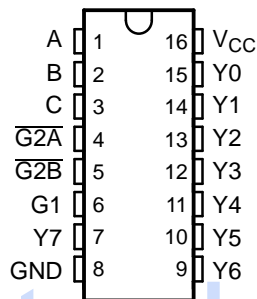


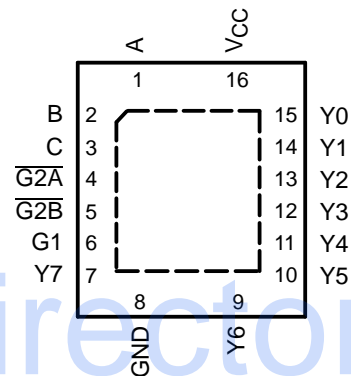
**FEATURES**

- Inputs Are TTL-Voltage Compatible
- 4.5-V to 5.5-V  $V_{CC}$  Operation
- Max  $t_{pd}$  of 7.6 ns at 5 V
- Typical  $V_{OLP}$  (Output Ground Bounce) <0.8 V at  $V_{CC} = 5 V, T_A = 25^\circ C$
- Typical  $V_{OHV}$  (Output  $V_{OH}$  Undershoot) >2.3 V at  $V_{CC} = 5 V, T_A = 25^\circ C$
- Support Mixed-Mode Voltage Operation on All Ports
- $I_{off}$  Supports Partial-Power Down Mode Operation
- Latch-Up Performance Exceeds 250 mA Per JESD 17
- ESD Protection Exceeds JESD 22
  - 2000-V Human-Body Model (A114-A)
  - 200-V Machine Model (A115-A)
  - 1000-V Charged-Device Model (C101)

D, DB, DGV, NS, OR PW PACKAGE  
(TOP VIEW)



RGY PACKAGE  
(TOP VIEW)



**DESCRIPTION/ORDERING INFORMATION**

The SN74LV138AT is a 3-line to 8-line decoder/demultiplexer, designed for high-performance memory-decoding or data-routing applications requiring very short propagation delay times. In high-performance memory systems, this decoder can be used to minimize the effects of system decoding. When employed with high-speed memories utilizing a fast enable circuit, the delay times of the decoder and the enable time of the memory usually are less than the typical access time of the memory. This means that the effective system delay introduced by the decoder is negligible.

**ORDERING INFORMATION**

$T_A$	PACKAGE <sup>(1)</sup>		ORDERABLE PART NUMBER	TOP-SIDE MARKING
-40°C to 125°C	QFN – RGY	Reel of 1000	SN74LV138ATRGYR	VV138AT
	SOIC – D	Tube of 40	SN74LV138ATD	LV138AT
		Reel fo 2500	SN74LV138ATDR	
	SOP – NS	Reel of 2000	SN74LV138ATNSR	74LV138AT
	SSOP – DB	Reel of 2000	SN74LV138ATDBR	LV138AT
	TVSOP – DGV	Reel of 2000	SN74LV138ATDGVR	LV138AT
	TSSOP – PW	Tube of 90	SN74LV138ATPW	LV138AT
		Reel of 2000	SN74LV138ATPWR	
Reel of 250		SN74LV138ATPWT		

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



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.

**SN74LV138AT**  
**3-LINE TO 8-LINE DECODER/DEMULTIPLEXER**

SCLS691 – AUGUST 2005

**DESCRIPTION/ORDERING INFORMATION (CONTINUED)**

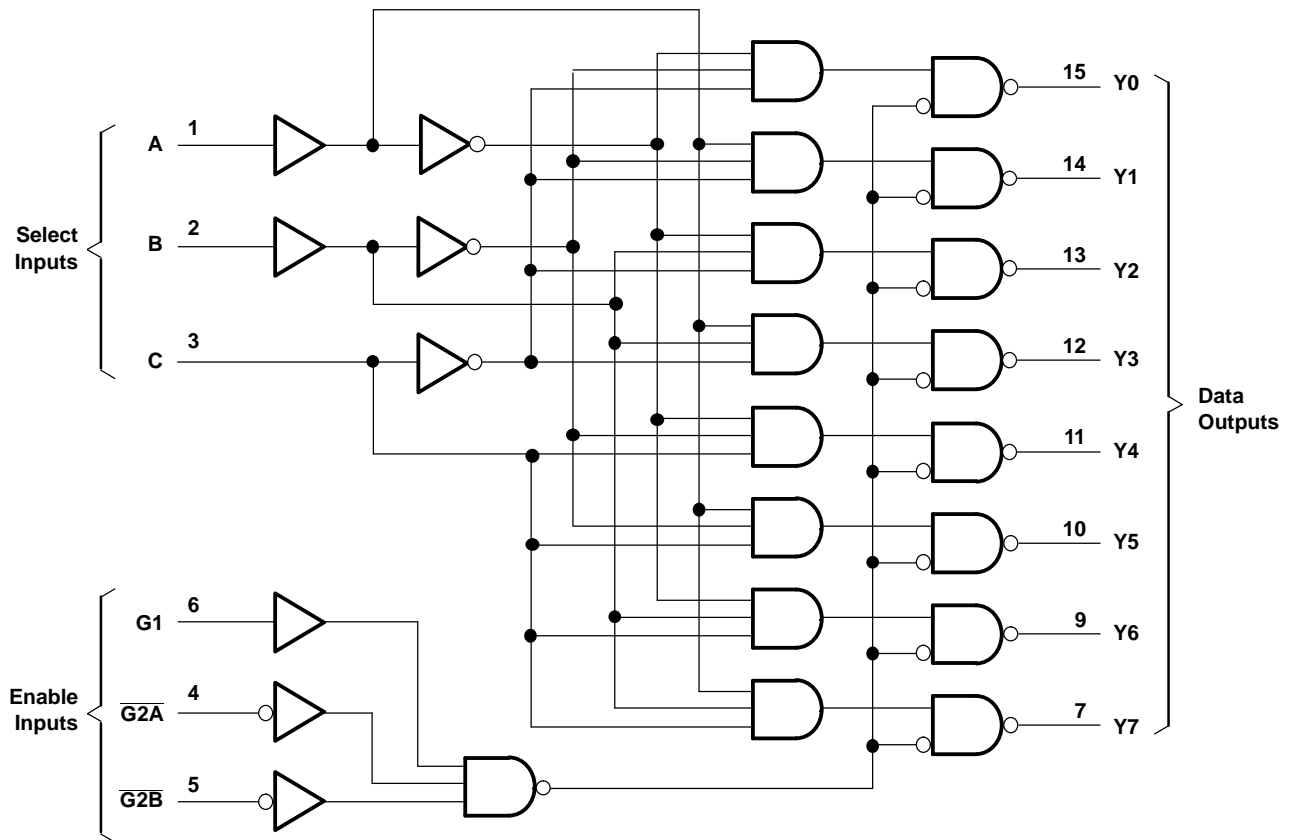
The conditions at the binary-select inputs (A, B, C) and the three enable inputs (G1,  $\overline{G2A}$ ,  $\overline{G2B}$ ) select one of eight output lines. The two active-low (G2A, G2B) and one active-high (G1) enable inputs reduce the need for external gates or inverters when expanding. A 24-line decoder can be implemented without external inverters and a 32-line decoder requires only one inverter. An enable input can be used as a data input for demultiplexing applications.

This device is fully specified for partial-power-down application using  $I_{off}$ . The  $I_{off}$  circuitry disables the outputs, preventing damaging current backflow through the device when it is powered down.

**FUNCTION TABLE**

ENABLE INPUTS			SELECT INPUTS			OUTPUTS							
G1	$\overline{G2A}$	$\overline{G2B}$	C	B	A	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7
X	H	X	X	X	X	H	H	H	H	H	H	H	H
X	X	H	X	X	X	H	H	H	H	H	H	H	H
L	X	X	X	X	X	H	H	H	H	H	H	H	H
H	L	L	L	L	L	L	H	H	H	H	H	H	H
H	L	L	L	L	H	H	L	H	H	H	H	H	H
H	L	L	L	H	L	H	H	L	H	H	H	H	H
H	L	L	L	H	H	H	H	H	L	H	H	H	H
H	L	L	H	L	L	H	H	H	H	L	H	H	H
H	L	L	H	L	H	H	H	H	H	H	L	H	H
H	L	L	H	H	L	H	H	H	H	H	H	L	H
H	L	L	H	H	H	H	H	H	H	H	H	H	L

LOGIC DIAGRAM (POSITIVE LOGIC)



# SN74LV138AT

## 3-LINE TO 8-LINE DECODER/DEMULTIPLEXER

SCLS691 – AUGUST 2005

### Absolute Maximum Ratings<sup>(1)</sup>

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

			MIN	MAX	UNIT
$V_{CC}$	Supply voltage		-0.5	7	V
$V_I$	Input voltage range <sup>(2)</sup>		-0.5	7	V
$V_O$	Output voltage range <sup>(2)(3)</sup>		-0.5	$V_{CC} + 0.5$	V
$I_{IK}$	Input clamp current	$V_I < 0$		-20	mA
$I_{OK}$	Output clamp current	$V_O < 0$ or $V_O > V_{CC}$		±50	mA
$I_O$	Continuous output current	$V_O = 0$ to $V_{CC}$		±25	mA
	Continuous current through $V_{CC}$ or GND			±50	mA
$\theta_{JA}$	Package thermal impedance	D package <sup>(4)</sup>		73	°C/W
		DB package <sup>(4)</sup>		82	
		DGV package <sup>(4)</sup>		120	
		NS package <sup>(4)</sup>		64	
		PW package <sup>(4)</sup>		108	
		RGY package <sup>(5)</sup>		39	
$T_{stg}$	Storage temperature range		-65	150	°C

- (1) 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.
- (2) The input and output voltage ratings may be exceeded if the input and output current ratings are observed.
- (3) This value is limited of 5.5 V maximum.
- (4) The package thermal impedance is calculated in accordance with JESD 51-7.
- (5) The package thermal impedance is calculated in accordance with JESD 51-5.

### Recommended Operating Conditions<sup>(1)</sup>

			MIN	MAX	UNIT
$V_{CC}$	Supply voltage		4.5	5.5	V
$V_{IH}$	High-level input voltage	$V_{CC} = 4.5$ V to $5.5$ V	2		V
$V_{IL}$	Low-level input voltage	$V_{CC} = 4.5$ V to $5.5$ V		0.8	V
$V_I$	Input voltage		0	5.5	V
$V_O$	Output voltage		0	$V_{CC}$	V
$I_{OH}$	High-level output current	$V_{CC} = 4.5$ V to $5.5$ V		-12	mA
$I_{OL}$	Low-level output current	$V_{CC} = 4.5$ V to $5.5$ V		12	mA
$\Delta t/\Delta v$	Input transition rise or fall rate	$V_{CC} = 4.5$ V to $5.5$ V		20	ns/V
$T_A$	Operating free-air temperature		-40	125	°C

- (1) All unused inputs of the device must be held at  $V_{CC}$  or GND to ensure proper device operation. Refer to the TI application report, *Implications of Slow or Floating CMOS Inputs*, literature number SCBA004.

## Electrical Characteristics

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

PARAMETER	TEST CONDITIONS	V <sub>CC</sub>	T <sub>A</sub> = 25°C			T <sub>A</sub> = -40°C to 85°C		T <sub>A</sub> = -40°C to 125°C		UNIT
			MIN	TYP	MAX	MIN	MAX	MIN	MAX	
V <sub>OH</sub>	I <sub>OH</sub> = -50 μA	4.5 V	4.4	4.5		4.4		4.4	V	
	I <sub>OH</sub> = -12 mA	4.5 V	3.8			3.8		3.8		
V <sub>OL</sub>	I <sub>OL</sub> = 50 μA	4.5 V		0	0.1		0.1		0.1	V
	I <sub>OL</sub> = 12 mA	4.5 V			0.55		0.55		0.55	
I <sub>I</sub>	V <sub>I</sub> = 5.5 V or GND	0 to 5.5 V			±0.1		±1		±1	μA
I <sub>CC</sub>	V <sub>I</sub> = V <sub>CC</sub> or GND, I <sub>O</sub> = 0	5.5 V			2		20		20	μA
ΔI <sub>CC</sub> ( <sup>1</sup> )	One input at 3.4 V, Other inputs at V <sub>CC</sub> or GND	5.5 V			1.35		1.5		1.5	mA
I <sub>off</sub>	V <sub>I</sub> or V <sub>O</sub> = 0 to 5.5 V	0			0.5		5		5	μA
C <sub>i</sub>	V <sub>I</sub> = V <sub>CC</sub> or GND			4	10		10		10	pF

(1) This is the increase in supply current for each input at one of the specified TTL voltage levels rather than 0 V or V<sub>CC</sub>.

## Switching Characteristics

over recommended operating free-air temperature range, V<sub>CC</sub> = 5 V ± 0.5 V (unless otherwise noted) (see [Figure 1](#))

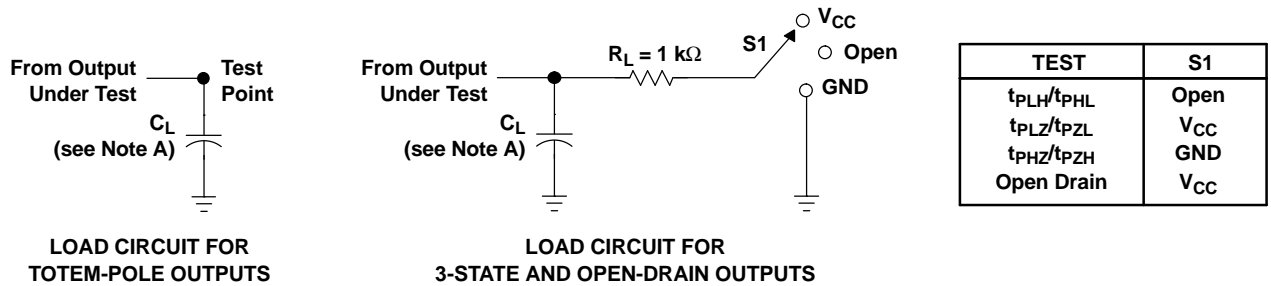
PARAMETER	FROM (INPUT)	TO (OUTPUT)	LOAD CAPACITANCE	T <sub>A</sub> = 25°C			T <sub>A</sub> = -40°C to 85°C		T <sub>A</sub> = -40°C to 125°C		UNIT
				MIN	TYP	MAX	MIN	MAX	MIN	MAX	
t <sub>pd</sub>	A, B, or C	Y	C <sub>L</sub> = 15 pF	2.7	7.6	10.4	1	12	1	13	ns
	G1			2.5	6.6	9.1	1	10.5	1	12	
	$\overline{G2A}$ or $\overline{G2B}$			2.8	7	9.6	1	11	1	12	
t <sub>pd</sub>	A, B, or C	Y	C <sub>L</sub> = 50 pF	3.9	8.1	11.4	1	13	1	14	ns
	G1			3.7	7.1	10.1	1	11.5	1	12	
	G2A or G2B			4	7.5	10.6	1	12	1	13	

## Operating Characteristics

V<sub>CC</sub> = 5 V, T<sub>A</sub> = 25°C

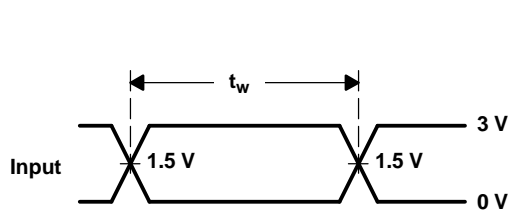
PARAMETER	TEST CONDITIONS	TYP	UNIT
C <sub>pd</sub> Power dissipation capacitance	C <sub>L</sub> = 50 pF, f = 10 MHz	79	pF

PARAMETER MEASUREMENT INFORMATION

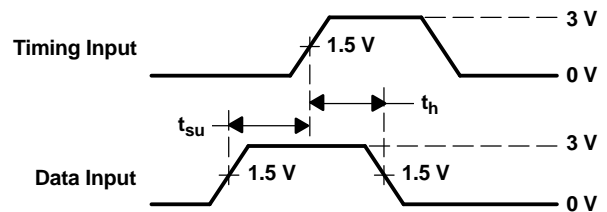


LOAD CIRCUIT FOR TOTEM-POLE OUTPUTS

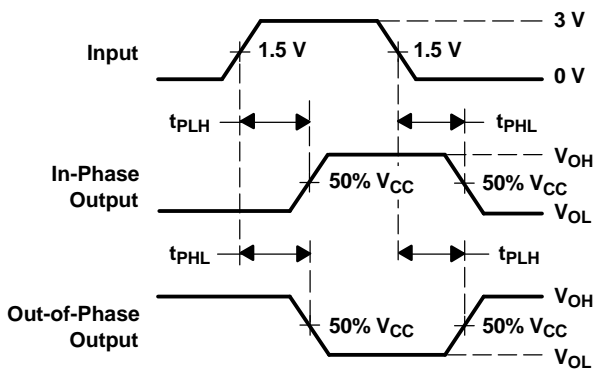
LOAD CIRCUIT FOR 3-STATE AND OPEN-DRAIN OUTPUTS



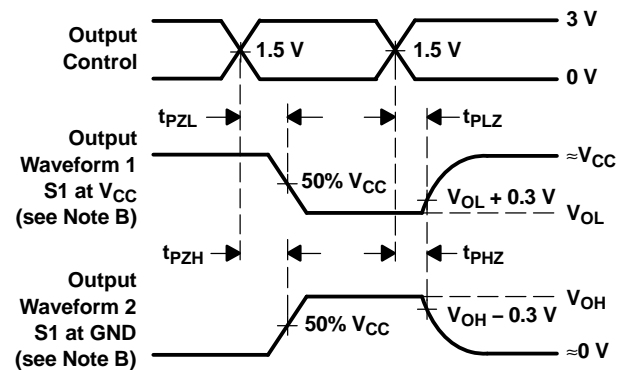
VOLTAGE WAVEFORMS PULSE DURATION



VOLTAGE WAVEFORMS SETUP AND HOLD TIMES



VOLTAGE WAVEFORMS PROPAGATION DELAY TIMES INVERTING AND NONINVERTING OUTPUTS



VOLTAGE WAVEFORMS ENABLE AND DISABLE TIMES LOW- AND HIGH-LEVEL ENABLING

- NOTES: A.  $C_L$  includes probe and jig capacitance.  
 B. 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.  
 C. All input pulses are supplied by generators having the following characteristics:  $PRR \leq 1$  MHz,  $Z_O = 50 \Omega$ ,  $t_r \leq 3$  ns,  $t_f \leq 3$  ns.  
 D. The outputs are measured one at a time, with one input transition per measurement.  
 E.  $t_{PLZ}$  and  $t_{PHZ}$  are the same as  $t_{dis}$ .  
 F.  $t_{PZL}$  and  $t_{PZH}$  are the same as  $t_{en}$ .  
 G.  $t_{PHL}$  and  $t_{PLH}$  are the same as  $t_{pd}$ .  
 H. All parameters and waveforms are not applicable to all devices.

Figure 1. Load Circuits and Voltage Waveforms

**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>
SN74LV138ATD	ACTIVE	SOIC	D	16	40	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LV138ATDBR	ACTIVE	SSOP	DB	16	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LV138ATDBRE4	ACTIVE	SSOP	DB	16	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LV138ATDE4	ACTIVE	SOIC	D	16	40	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LV138ATDGV	ACTIVE	TVSOP	DGV	16	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LV138ATDGVRE4	ACTIVE	TVSOP	DGV	16	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LV138ATDR	ACTIVE	SOIC	D	16	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LV138ATDRE4	ACTIVE	SOIC	D	16	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LV138ATNSR	ACTIVE	SO	NS	16	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LV138ATNSRE4	ACTIVE	SO	NS	16	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LV138ATPW	ACTIVE	TSSOP	PW	16	90	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LV138ATPWR	ACTIVE	TSSOP	PW	16	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LV138ATPWT	ACTIVE	TSSOP	PW	16	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
SN74LV138ATRGYR	ACTIVE	QFN	RGY	16	1000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1YEAR

<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.

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

<sup>(2)</sup> 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)

<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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DGV (R-PDSO-G\*\*)

PLASTIC SMALL-OUTLINE

24 PINS SHOWN

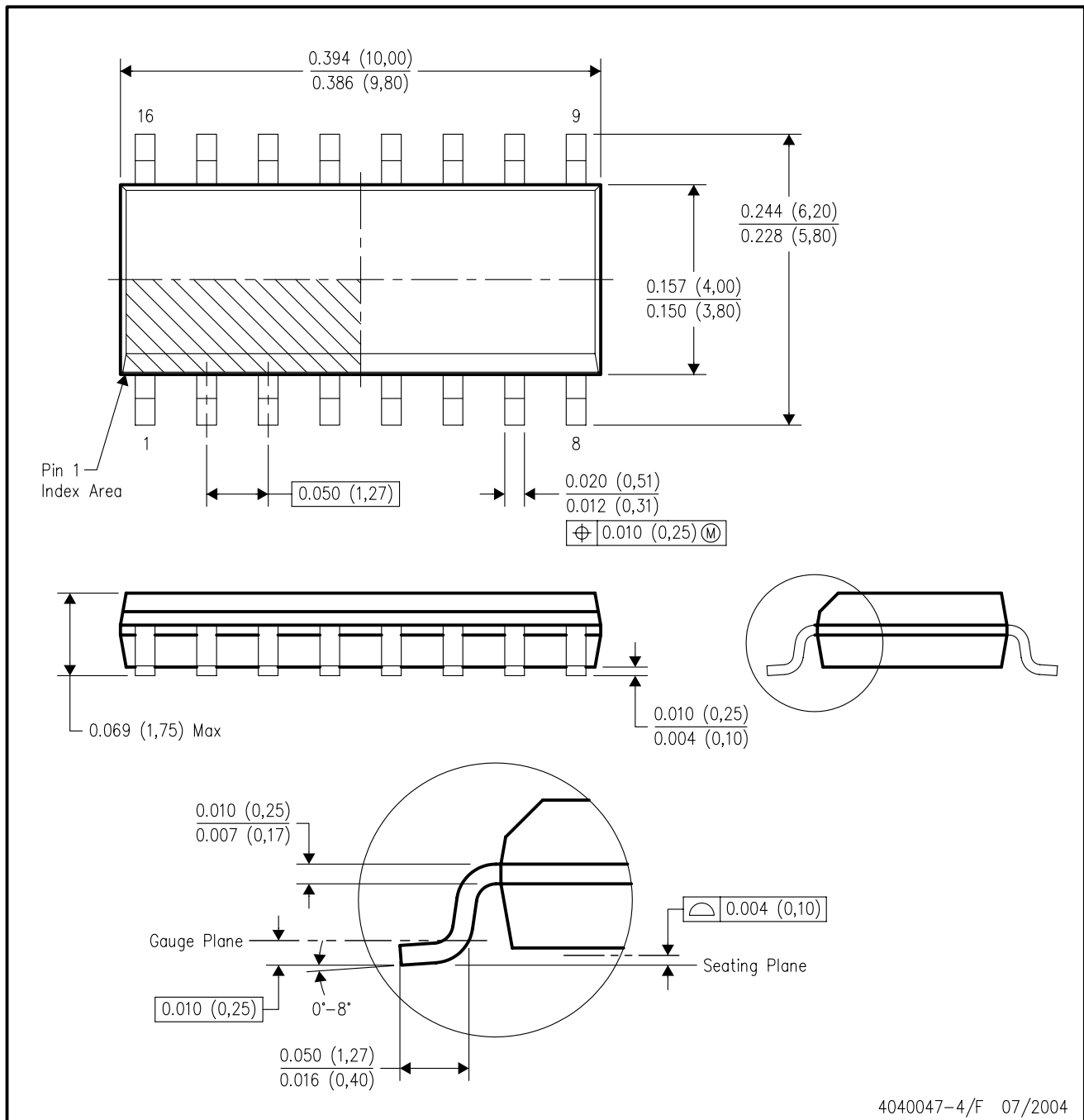


4073251/E 08/00

- 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 per side.  
 D. Falls within JEDEC: 24/48 Pins – MO-153  
 14/16/20/56 Pins – MO-194

D (R-PDSO-G16)

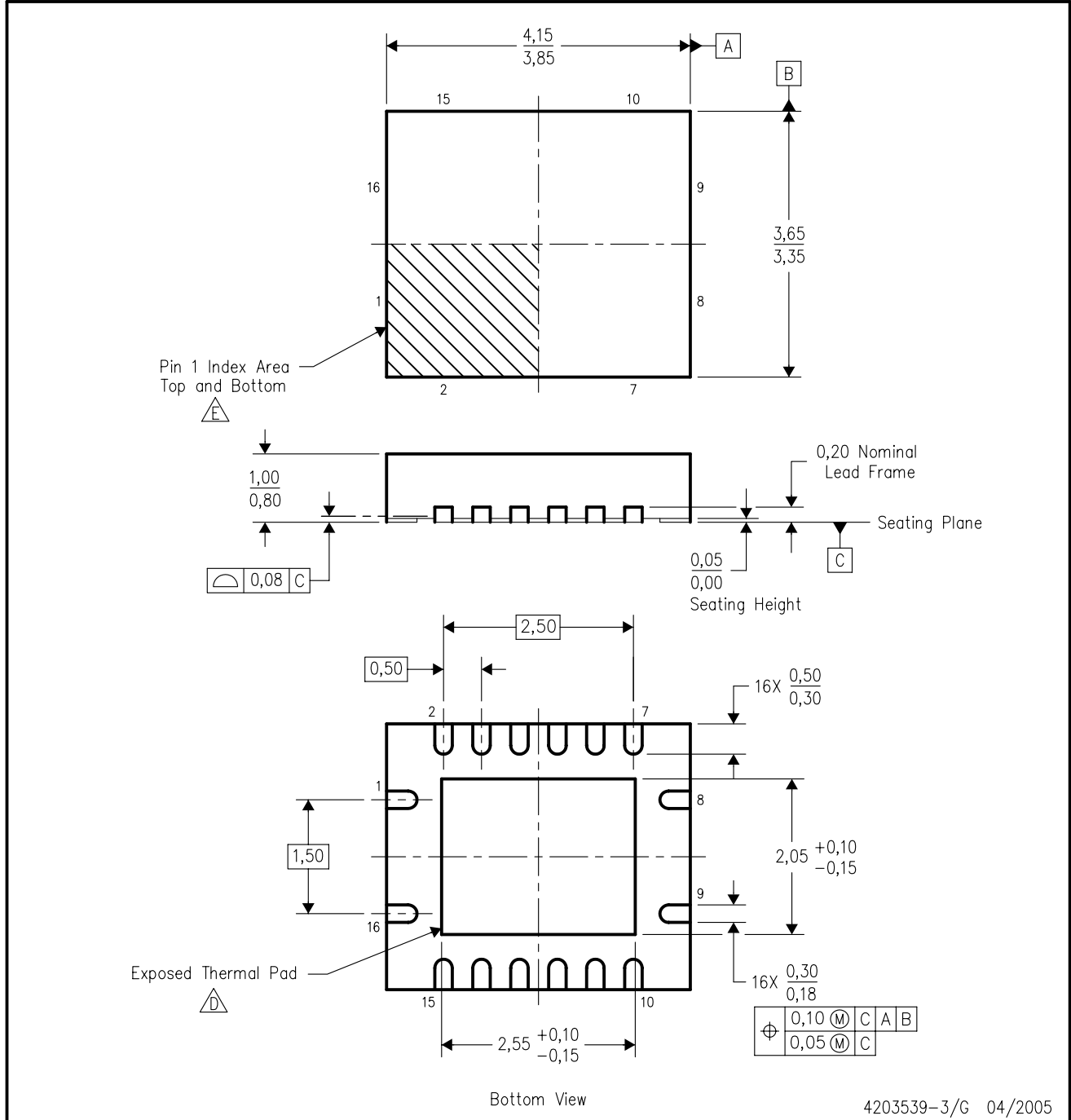
PLASTIC SMALL-OUTLINE PACKAGE





- 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.

RGY (R-PQFP-N16)

PLASTIC QUAD FLATPACK



4203539-3/G 04/2005

- NOTES:
- A. All linear dimensions are in millimeters. Dimensioning and tolerancing per ASME Y14.5M-1994.
  - B. This drawing is subject to change without notice.
  - C. QFN (Quad Flatpack No-Lead) package configuration.
  -  The package thermal pad must be soldered to the board for thermal and mechanical performance.
  -  Pin 1 identifiers are located on both top and bottom of the package and within the zone indicated. The Pin 1 identifiers are either a molded, marked, or metal feature.
  - F. Package complies to JEDEC MO-241 variation BB.

# 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.

DB (R-PDSO-G\*\*)

PLASTIC SMALL-OUTLINE

28 PINS SHOWN

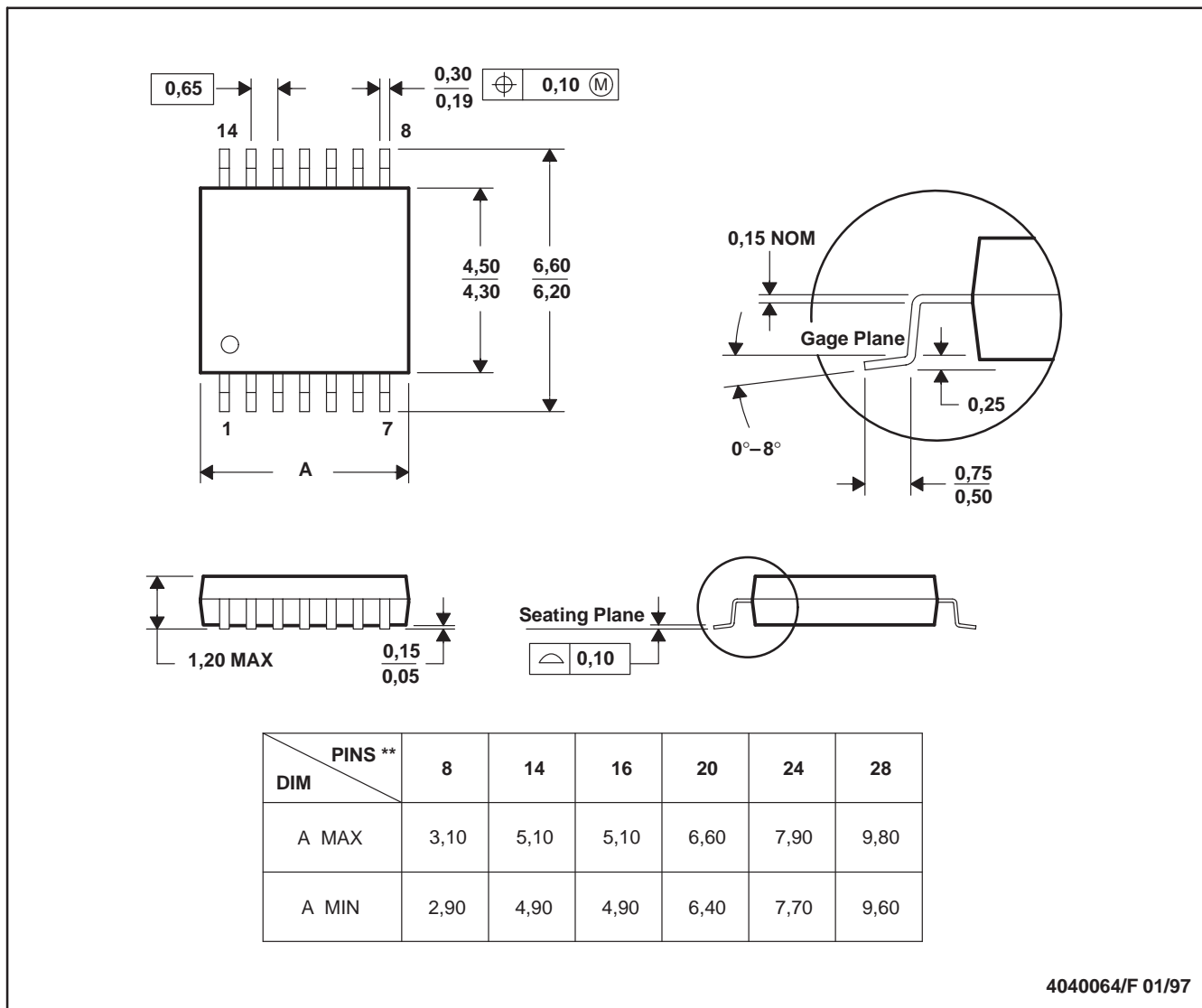


- NOTES: A. All linear dimensions are in millimeters.  
 B. This drawing is subject to change without notice.  
 C. Body dimensions do not include mold flash or protrusion not to exceed 0,15.  
 D. Falls within JEDEC MO-150

PW (R-PDSO-G\*\*)

PLASTIC SMALL-OUTLINE PACKAGE

14 PINS SHOWN



4040064/F 01/97

- 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-153

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View RoHS Compliant Devices

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## SN74LV138AT, Status: ACTIVE

3-Line To 8-Line Decoder/Demultiplexers



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<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



### Refine Your Selection

- Logic: Decoders/Demu

### Support

- KnowledgeBase
- Contact Technical Support
- TI Cross Reference
- Training
- Part Marking Lookup
- Part Number Nomenclature

### Datasheet



Download Datasheet **SN74LV138AT** (sn74lv138at.pdf, 372 KB)  
24 Aug 2005 [Download](#)

### Product Information

Features Save this to your personal library

- Inputs Are TTL-Voltage Compatible
- 4.5-V to 5.5-V V<sub>CC</sub> Operation
- Max t<sub>pd</sub> of 7.6 ns at 5 V
- Typical V<sub>OLP</sub> (Output Ground Bounce) < 0.8 V at V<sub>CC</sub> = 5 V, T<sub>A</sub> = 25°C
- Typical V<sub>OHV</sub> (Output V<sub>OH</sub> Undershoot) >> 2.3 V at V<sub>CC</sub> = 5 V, T<sub>A</sub> = 25°C
- Support Mixed-Mode Voltage Operation on All Ports
- I<sub>off</sub> Supports Partial-Power Down Mode Operation
- Latch-Up Performance Exceeds 250 mA Per JESD 17
- ESD Protection Exceeds JESD 22
  - 2000-V Human-Body Model (A114-A)
  - 200-V Machine Model (A115-A)
  - 1000-V Charged-Device Model (C101)

### DESCRIPTION/ORDERING INFORMATION

The SN74LV138AT is a 3-line to 8-line decoder/demultiplexer, designed for high-performance memory-decoding or data-routing applications requiring very short propagation delay times. In high-performance memory systems, this decoder can be used to minimize the effects of system decoding. When employed with high-speed memories utilizing a fast enable circuit, the delay times of the decoder and the enable time of the memory usually are less than the typical access time of the memory. This means that the effective system delay introduced by the decoder is negligible.

The conditions at the binary-select inputs (A, B, C) and the three enable inputs (G1, G2A, G2B) select one of eight output lines. The two active-low (G2A, G2B) and one active-high (G1) enable inputs reduce the need for external gates or inverters when expanding. A 24-line decoder can be implemented without external inverters and a 32-line decoder requires only one inverter. An enable input can be used as a data input for demultiplexing applications.

This device is fully specified for partial-power-down application using I<sub>off</sub>. The I<sub>off</sub> circuitry disables the outputs, preventing damaging current backflow through the device when it is powered down.



**Pricing/Packaging/CAD Design Tools/Samples**

			Price	Packaging			CAD Design Tools	Samples
Device	Status	Temp (°C)	Budget Price (\$US)   QTY	Industry Standard (TI Pkg)   Pins	Top Side Marking	Standard Pack Quantity	Footprints	Samples
SN74LV138ATD	ACTIVE	-40 to 125	0.35   1KU	SOIC (D)   16	View	40	<input type="checkbox"/>	Purchase Samples
SN74LV138ATDBR	ACTIVE	-40 to 125	0.35   1KU	SSOP (DB)   16	View	2000	<input type="checkbox"/>	Request Free Samples
SN74LV138ATDBRE4	ACTIVE	-40 to 125	0.35   1KU	SSOP (DB)   16	View	2000	<input type="checkbox"/>	Request Free Samples
SN74LV138ATDE4	ACTIVE	-40 to 125	0.35   1KU	SOIC (D)   16	View	40	<input type="checkbox"/>	Purchase Samples
SN74LV138ATDGVR	ACTIVE	-40 to 125	0.35   1KU	TVSOP (DGV)   16		2000	<input type="checkbox"/>	Request Free Samples
SN74LV138ATDGVRE4	ACTIVE	-40 to 125	0.35   1KU	TVSOP (DGV)   16		2000	<input type="checkbox"/>	Request Free Samples
SN74LV138ATDR	ACTIVE	-40 to 125	0.35   1KU	SOIC (D)   16	View	2500	<input type="checkbox"/>	Request Free Samples
SN74LV138ATDRE4	ACTIVE	-40 to 125	0.35   1KU	SOIC (D)   16	View	2500	<input type="checkbox"/>	Request Free Samples
SN74LV138ATNSR	ACTIVE	-40 to 125	0.35   1KU	SO (NS)   16	View	2000	<input type="checkbox"/>	Request Free Samples
SN74LV138ATNSRE4	ACTIVE	-40 to 125	0.35   1KU	SO (NS)   16	View	2000	<input type="checkbox"/>	Request Free Samples
SN74LV138ATPW	ACTIVE	-40 to 125	0.35   1KU	TSSOP (PW)   16	View	90	<input type="checkbox"/>	Purchase Samples
SN74LV138ATPWR	ACTIVE	-40 to 125	0.35   1KU	TSSOP (PW)   16	View	2000	<input type="checkbox"/>	Request Free Samples
SN74LV138ATPWT	ACTIVE	-40 to 125	0.68   1KU	TSSOP (PW)   16	View	250	<input type="checkbox"/>	Purchase Samples
SN74LV138ATRGYR	ACTIVE	-40 to 125	0.35   1KU	QFN (RGY)   16		1000		Request Free Samples

**Inventory**

	TI Inventory Status			Reported Distributor Inventory			
<b>SN74LV138ATD</b>	As of 9:03 AM GMT, 25 Nov 2005			As of 9:03 AM GMT, 25 Nov 2005			
	<b>In Stock</b>	<b>In Progress QTY   Date</b>	<b>Lead Time</b>	<b>Region</b>	<b>Company</b>	<b>In Stock</b>	<b>Purchase</b>
	0*	2160   8 Dec	10 Weeks	None Reported <a href="#">View Distributors</a>			
		>10k   12 Dec					
<b>SN74LV138ATDBR</b>	As of 9:03 AM GMT, 25 Nov 2005			As of 9:03 AM GMT, 25 Nov 2005			
	<b>In Stock</b>	<b>In Progress QTY   Date</b>	<b>Lead Time</b>	<b>Region</b>	<b>Company</b>	<b>In Stock</b>	<b>Purchase</b>
	0*	2000   8 Dec	8 Weeks	Americas	DigiKey	>1k	<input type="text"/>
		>10k   1 Mar					
<b>SN74LV138ATDBRE4</b>	As of 9:03 AM GMT, 25 Nov 2005			As of 9:03 AM GMT, 25 Nov 2005			
	<b>In Stock</b>	<b>In Progress QTY   Date</b>	<b>Lead Time</b>	<b>Region</b>	<b>Company</b>	<b>In Stock</b>	<b>Purchase</b>
	0*	2000   8 Dec	8 Weeks	None Reported <a href="#">View Distributors</a>			
		>10k   1 Mar					
<b>SN74LV138ATDE4</b>	As of 9:03 AM GMT, 25 Nov 2005			As of 9:03 AM GMT, 25 Nov 2005			
	<b>In Stock</b>	<b>In Progress QTY   Date</b>	<b>Lead Time</b>	<b>Region</b>	<b>Company</b>	<b>In Stock</b>	<b>Purchase</b>

View all Distributors

Choose a Region



	0*	2160   8 Dec	10 Weeks	None Reported <a href="#">View Distributors</a>			
		>10k   12 Dec					
<b>SN74LV138ATDGVR</b>	As of 9:03 AM GMT, 25 Nov 2005			As of 9:03 AM GMT, 25 Nov 2005			
	<b>In Stock</b>	<b>In Progress QTY   Date</b>	<b>Lead Time</b>	<b>Region</b>	<b>Company</b>	<b>In Stock</b>	<b>Purchase</b>
	0*	749   23 Dec	10 Weeks	Americas	DigiKey	>1k	<input type="text"/>
		760   30 Dec					
		663   3 Feb					
		47   10 Feb					
		815   24 Feb					
<b>SN74LV138ATDGVRE4</b>	As of 9:03 AM GMT, 25 Nov 2005			As of 9:03 AM GMT, 25 Nov 2005			
	<b>In Stock</b>	<b>In Progress QTY   Date</b>	<b>Lead Time</b>	<b>Region</b>	<b>Company</b>	<b>In Stock</b>	<b>Purchase</b>
	0*	749   23 Dec	10 Weeks	None Reported <a href="#">View Distributors</a>			
		760   30 Dec					
		663   3 Feb					
		47   10 Feb					
		815   24 Feb					
<b>SN74LV138ATDR</b>	As of 9:03 AM GMT, 25 Nov 2005			As of 9:03 AM GMT, 25 Nov 2005			
	<b>In Stock</b>	<b>In Progress QTY   Date</b>	<b>Lead Time</b>	<b>Region</b>	<b>Company</b>	<b>In Stock</b>	<b>Purchase</b>
	0*	>10k   12 Dec	10 Weeks	Americas	DigiKey	>1k	<input type="text"/>
<b>SN74LV138ATDRE4</b>	As of 9:03 AM GMT, 25 Nov 2005			As of 9:03 AM GMT, 25 Nov 2005			
	<b>In Stock</b>	<b>In Progress QTY   Date</b>	<b>Lead Time</b>	<b>Region</b>	<b>Company</b>	<b>In Stock</b>	<b>Purchase</b>
	0*	>10k   12 Dec	10 Weeks	None Reported <a href="#">View Distributors</a>			
<b>SN74LV138ATNSR</b>	As of 9:03 AM GMT, 25 Nov 2005			As of 9:03 AM GMT, 25 Nov 2005			
	<b>In Stock</b>	<b>In Progress QTY   Date</b>	<b>Lead Time</b>	<b>Region</b>	<b>Company</b>	<b>In Stock</b>	<b>Purchase</b>
	0*	2000   8 Dec	10 Weeks	Americas	DigiKey	>1k	<input type="text"/>
<b>SN74LV138ATNSRE4</b>	As of 9:03 AM GMT, 25 Nov 2005			As of 9:03 AM GMT, 25 Nov 2005			
	<b>In Stock</b>	<b>In Progress QTY   Date</b>	<b>Lead Time</b>	<b>Region</b>	<b>Company</b>	<b>In Stock</b>	<b>Purchase</b>
	0*	2000   8 Dec	10 Weeks	None Reported <a href="#">View Distributors</a>			
<b>SN74LV138ATPW</b>	As of 9:03 AM GMT, 25 Nov 2005			As of 9:03 AM GMT, 25 Nov 2005			
	<b>In Stock</b>	<b>In Progress QTY   Date</b>	<b>Lead Time</b>	<b>Region</b>	<b>Company</b>	<b>In Stock</b>	<b>Purchase</b>
	0*		16 Weeks	None Reported <a href="#">View Distributors</a>			
<b>SN74LV138ATPWR</b>	As of 9:03 AM GMT, 25 Nov 2005			As of 9:03 AM GMT, 25 Nov 2005			
	<b>In Stock</b>	<b>In Progress QTY   Date</b>	<b>Lead Time</b>	<b>Region</b>	<b>Company</b>	<b>In Stock</b>	<b>Purchase</b>
	0*		16 Weeks	Americas	DigiKey	>1k	<input type="text"/>
<b>SN74LV138ATPWT</b>	As of 9:03 AM GMT, 25 Nov 2005			As of 9:03 AM GMT, 25 Nov 2005			
	<b>In Stock</b>	<b>In Progress QTY   Date</b>	<b>Lead Time</b>	<b>Region</b>	<b>Company</b>	<b>In Stock</b>	<b>Purchase</b>
	0*		16 Weeks	None Reported <a href="#">View Distributors</a>			
<b>SN74LV138ATRGYR</b>	As of 9:03 AM GMT, 25 Nov 2005			As of 9:03 AM GMT, 25 Nov 2005			
	<b>In Stock</b>	<b>In Progress QTY   Date</b>	<b>Lead Time</b>	<b>Region</b>	<b>Company</b>	<b>In Stock</b>	<b>Purchase</b>

	0*	5000   8 Dec	8 Weeks	Americas	DigiKey	950	
		>10k   11 Jan					

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

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

### Quality & Lead (Pb)-Free Data

Device	Product Content			MTBF/FIT Rate	
	Eco Plan*	Lead/Ball Finish	MSL Rating/Peak Reflow	Details	Details
SN74LV138ATD <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	<a href="#">View</a>	<a href="#">View</a>
SN74LV138ATDBR <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	<a href="#">View</a>	<a href="#">View</a>
SN74LV138ATDBRE4 <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	<a href="#">View</a>	<a href="#">View</a>
SN74LV138ATDE4 <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	<a href="#">View</a>	<a href="#">View</a>
SN74LV138ATDGVR <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	<a href="#">View</a>	<a href="#">View</a>
SN74LV138ATDGVRE4 <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	<a href="#">View</a>	<a href="#">View</a>
SN74LV138ATDR <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	<a href="#">View</a>	<a href="#">View</a>
SN74LV138ATDRE4 <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	<a href="#">View</a>	<a href="#">View</a>
SN74LV138ATNSR <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	<a href="#">View</a>	<a href="#">View</a>
SN74LV138ATNSRE4 <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	<a href="#">View</a>	<a href="#">View</a>
SN74LV138ATPW <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	<a href="#">View</a>	<a href="#">View</a>
SN74LV138ATPWR <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	<a href="#">View</a>	<a href="#">View</a>
SN74LV138ATPWT <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	<a href="#">View</a>	<a href="#">View</a>
SN74LV138ATRGYR <input type="checkbox"/>	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1YEAR	<a href="#">View</a>	<a href="#">View</a>

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

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

### Technical Documents

<input type="checkbox"/> <b>Datasheets</b>	<a href="#">Keep track of what's new</a>
<b>SN74LV138AT</b> (sn74lv138at.pdf, 372 KB) 24 Aug 2005 <a href="#">Download</a>	
<input type="checkbox"/> <b>Application Notes</b>	
<a href="#">View Application Notes for DECODERS/DEMULTIPLEXERS</a>	
<input type="checkbox"/> <b>More Literature</b>	
<a href="#">View More Literature for DECODERS/DEMULTIPLEXERS</a>	



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