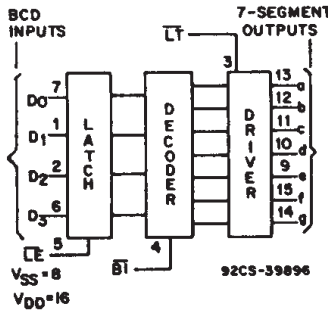
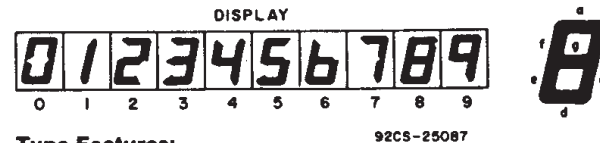


# High-Speed CMOS Logic



FUNCTIONAL DIAGRAM

## BCD-to-7 Segment Latch/Decoder/Drivers



**Type Features:**

- High-output sourcing capability—7.5 mA @ 4.5 V, 10 mA @ 6 V (HC4511)
- Input latches for BCD code storage
- Lamp test and blanking capability

The RCA CD54/74HC4511 and CD54/74HCT4511 are BCD-to-7 segment latch/decoder/drivers having four address inputs (D<sub>0</sub>-D<sub>3</sub>), active "Low" blanking and lamp test inputs, and a latch enable input which, when "High", enables the latches to store the BCD inputs. When Latch Enable is "Low", the latches are disabled, making the outputs transparent to the BCD inputs.

These devices have standard-size output transistors but are capable of sourcing (at standard V<sub>OH</sub> levels) up to 7.5 mA at 4.5 V. The HC types can supply up to 10 mA at 6 V.

The CD54HC/HCT4511 are supplied in 16-lead ceramic dual-in-line packages (F suffix). The CD74HC/HCT4511 are supplied in 16-lead dual-in-line plastic packages (E suffix) and in 16-lead dual-in-line surface-mount plastic packages (M suffix). Both types are also available in chip form (H suffix).

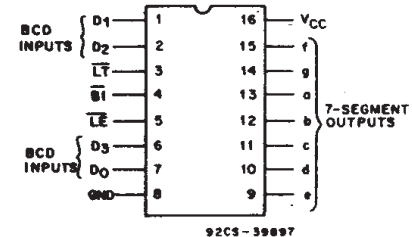
**TRUTH TABLE**

LE	BI	LT	D <sub>3</sub>	D <sub>2</sub>	D <sub>1</sub>	D <sub>0</sub>	a	b	c	d	e	f	g	Display
X	X	L	X	X	X	X	H	H	H	H	H	H	H	8
X	L	H	X	X	X	X	L	L	L	L	L	L	L	Blank
L	H	H	L	L	L	L	H	H	H	H	H	L	L	0
L	H	H	L	L	L	H	L	H	H	L	L	L	L	1
L	H	H	L	L	H	L	H	H	L	H	H	L	H	2
L	H	H	L	L	H	H	H	H	H	L	L	H	H	3
L	H	H	L	H	L	L	L	H	H	L	L	H	H	4
L	H	H	L	H	L	H	H	L	H	H	L	H	H	5
L	H	H	L	H	H	L	L	H	H	H	H	H	H	6
L	H	H	L	H	H	H	H	H	H	L	L	L	L	7
L	H	H	H	L	L	L	H	H	H	H	H	H	H	8
L	H	H	H	L	L	H	H	H	L	L	L	L	H	9
L	H	H	H	L	L	H	L	L	L	L	L	L	L	Blank
L	H	H	H	L	H	H	L	L	L	L	L	L	L	Blank
L	H	H	H	H	L	H	L	L	L	L	L	L	L	Blank
L	H	H	H	H	H	L	L	L	L	L	L	L	L	Blank
L	H	H	H	H	H	H	L	L	L	L	L	L	L	Blank
L	H	H	H	H	H	H	L	L	L	L	L	L	L	Blank
L	H	H	H	H	H	H	L	L	L	L	L	L	L	Blank
H	H	H	X	X	X	X	.	.	.	.	.	.	.	.

X = Don't Care  
 \*Depends on BCD code previously applied when LE = L  
 Note: Display is blank for all illegal input codes (BCD > HLLH).

**Family Features:**

- Fanout (over temperature range):  
 Standard outputs - 10 LSTTL loads  
 Bus driver outputs - 15 LSTTL loads
- Wide operating temperature range:  
 CD74HC/HCT: -40 to +85°C
- Balanced propagation delay and transition times
- Significant power reduction compared to LSTTL logic ICs
- Alternate source is Philips/Signetics
- CD54HC/CD74HC types:  
 2 to 6 V operation  
 High noise immunity:  
 N<sub>IL</sub>=30%, N<sub>IH</sub>=30% of V<sub>CC</sub>; @ V<sub>CC</sub>=5 V
- CD54HCT/CD74HCT types:  
 4.5 to 5.5 V operation  
 Direct LSTTL input logic compatibility  
 V<sub>IL</sub>=0.8 V max., V<sub>IH</sub>=2 V min.  
 CMOS input compatibility  
 I<sub>i</sub> ≤ 1 μA @ V<sub>OL</sub>, V<sub>OH</sub>



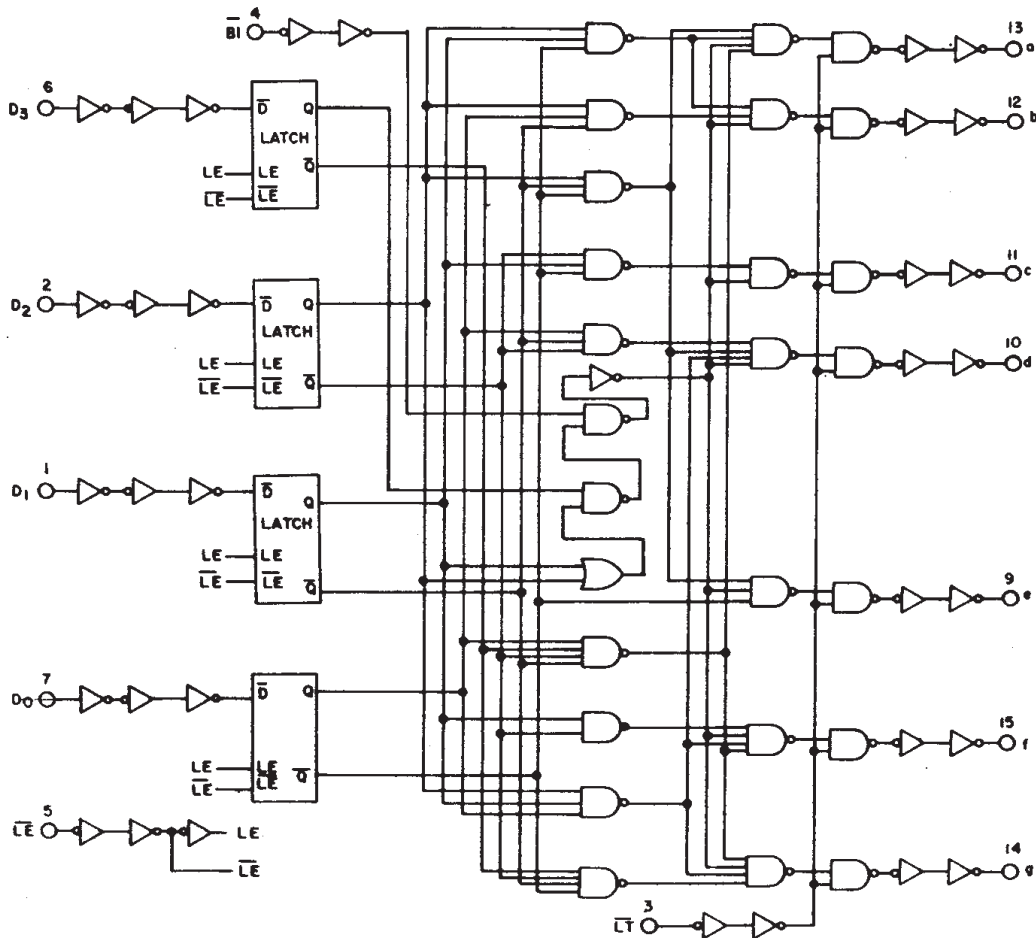
TERMINAL ASSIGNMENT

This data sheet is applicable to the CD54HC4511 and CD74HCT4511. The CD54HCT4511 was not acquired from Harris Semiconductor. See SCHS214 for information on the CD74HCT4511.

# CD54/74HC4511 CD54/74HCT4511

**MAXIMUM RATINGS, Absolute-Maximum Values:**

DC SUPPLY-VOLTAGE, (V <sub>CC</sub> ):	
(Voltages referenced to ground)	-0.5 to +7 V
DC INPUT DIODE CURRENT, I <sub>IK</sub> (FOR V <sub>I</sub> < -0.5 V OR V <sub>I</sub> > V <sub>CC</sub> +0.5 V)	±20 mA
DC OUTPUT DIODE CURRENT, I <sub>OK</sub> (FOR V <sub>O</sub> < -0.5 V OR V <sub>O</sub> > V <sub>CC</sub> +0.5 V)	±20 mA
DC DRAIN CURRENT, PER OUTPUT (I <sub>O</sub> ) (FOR -0.5 V < V <sub>O</sub> < V <sub>CC</sub> +0.5 V)	±25 mA
DC V <sub>CC</sub> OR GROUND CURRENT (I <sub>CC</sub> )	±50 mA
POWER DISSIPATION PER PACKAGE (P <sub>D</sub> ):	
For T <sub>A</sub> = -40 to +60°C (PACKAGE TYPE E)	500 mW
For T <sub>A</sub> = +60 to +85°C (PACKAGE TYPE E)	Derate Linearly at 8 mW/°C to 300 mW
For T <sub>A</sub> = -55 to +100°C (PACKAGE TYPE F,H)	500 mW
For T <sub>A</sub> = +100 to +125°C (PACKAGE TYPE F,H)	Derate Linearly at 8 mW/°C to 300 mW
For T <sub>A</sub> = -40 to +70°C (PACKAGE TYPE M)	400 mW
For T <sub>A</sub> = +70 to +125°C (PACKAGE TYPE M)	Derate Linearly at 6 mW/°C to 70 mW
OPERATING-TEMPERATURE RANGE (T <sub>A</sub> ):	
PACKAGE TYPE F,H	-55 to +125°C
PACKAGE TYPE E,M	-40 to +85°C
STORAGE TEMPERATURE (T <sub>stg</sub> )	
	-65 to +150°C
LEAD TEMPERATURE (DURING SOLDERING):	
At distance 1/16 ± 1/32 in. (1.59 ± 0.79 mm) from case for 10 s max.	+265°C
Unit inserted into a PC Board (min. thickness 1/16 in., 1.59 mm) with solder contacting lead tips only	+300°C



92CL-39898

Fig. 1 - Logic diagram.

# CD54/74HC4511 CD54/74HCT4511

## STATIC ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	CD74HC4511/CD54HC4511										CD74HCT4511/CD54HCT4511								UNITS	
	TEST CONDITIONS			74HC/54HC TYPES			74HC TYPES		54HC TYPES		TEST CONDITIONS		74HCT/54HCT TYPES			74HCT TYPES		54HCT TYPES		
	V <sub>i</sub> V	I <sub>o</sub> mA	V <sub>cc</sub> V	+25°C			-40/ +85°C		-55/ +125°C		V <sub>i</sub> V	V <sub>cc</sub> V	+25°C			-40/ +85°C		-55/ +125°C		
				Min	Typ	Max	Min	Max	Min	Max			Min	Typ	Max	Min	Max	Min		Max
High-Level Input Voltage V <sub>IH</sub>			2	1.5	—	—	1.5	—	1.5	—	—	4.5	2	—	—	2	—	2	—	V
			4.5	3.15	—	—	3.15	—	3.15	—	—	to								
			6	4.2	—	—	4.2	—	4.2	—	—	5.5								
Low-Level Input Voltage V <sub>IL</sub>			2	—	—	0.5	—	0.5	—	0.5	—	4.5	—	—	0.8	—	0.8	—	0.8	V
			4.5	—	—	1.35	—	1.35	—	1.35	—	to								
			6	—	—	1.8	—	1.8	—	1.8	—	5.5								
High-Level Output Voltage V <sub>OH</sub>	V <sub>IL</sub> or V <sub>IH</sub>	-0.02	2	1.9	—	—	1.9	—	1.9	—	V <sub>IL</sub> or V <sub>IH</sub>	4.5	4.4	—	—	4.4	—	4.4	—	V
CMOS Loads			4.5	4.4	—	—	4.4	—	4.4	—										
			6	5.9	—	—	5.9	—	5.9	—										
TTL Loads Non-Standard Output	V <sub>IL</sub> or V <sub>IH</sub>	-7.5	4.5	3.98	—	—	3.84	—	3.7	—	V <sub>IL</sub> or V <sub>IH</sub>	4.5	3.98	—	—	3.84	—	3.7	—	V
			6	5.48	—	—	5.34	—	5.2	—										
Low-Level Output Voltage V <sub>OL</sub>	V <sub>IL</sub> or V <sub>IH</sub>	0.02	2	—	—	0.1	—	0.1	—	0.1	V <sub>IL</sub> or V <sub>IH</sub>	4.5	—	—	0.1	—	0.1	—	0.1	V
CMOS Loads			4.5	—	—	0.1	—	0.1	—	0.1										
			6	—	—	0.1	—	0.1	—	0.1										
TTL Loads Standard Output	V <sub>IL</sub> or V <sub>IH</sub>	4	4.5	—	—	0.26	—	0.33	—	0.4	V <sub>IL</sub> or V <sub>IH</sub>	4.5	—	—	0.26	—	0.33	—	0.4	V
			5.2	6	—	—	0.26	—	0.33	—										
Input Leakage Current I <sub>i</sub>	V <sub>cc</sub> or Gnd		6	—	—	±0.1	—	±1	—	±1	Any Voltage Between V <sub>cc</sub> & Gnd	5.5	—	—	±0.1	—	±1	—	±1	μA
Quiescent Device Current I <sub>cc</sub>	V <sub>cc</sub> or Gnd	0	6	—	—	8	—	80	—	160	V <sub>cc</sub> or Gnd	5.5	—	—	8	—	80	—	160	μA
Additional Quiescent Device Current per input pin: 1 unit load ΔI <sub>cc</sub> *											V <sub>cc</sub> -2.1	4.5 to 5.5	—	100	360	—	450	—	490	μA

\*For dual-supply systems theoretical worst case (V<sub>i</sub> = 2.4 V, V<sub>cc</sub> = 5.5 V) specification is 1.8 mA.

HCT Input Loading Table

Input	Unit Loads*
$\overline{LT}$ , $\overline{LE}$	1.5
$\overline{BI}$ , $\overline{Dn}$	0.3

\*Unit Load is ΔI<sub>cc</sub> limit specified in Static Characteristics Chart, e.g., 360 μA max. @ 25°C.

# CD54/74HC4511 CD54/74HCT4511

## RECOMMENDED OPERATING CONDITIONS

For maximum reliability, nominal operating conditions should be selected so that operation is always within the following ranges:

CHARACTERISTIC	LIMITS		UNITS
	MIN.	MAX.	
Supply-Voltage Range (For $T_A$ =Full Package Temperature Range) $V_{CC}^*$ CD54/74HC Types CD54/74HCT Types	2 4.5	6 5.5	V
DC Input or Output Voltage, $V_i, V_o$	0	$V_{CC}$	V
Operating Temperature, $T_A$ : CD74 Types CD54 Types	-40 -55	+85 +125	°C
Input Rise and Fall Times, $t_r, t_f$ : at 2 V at 4.5 V at 6 V	0 0 0	1000 500 400	ns

\*Unless otherwise specified, all voltages are referenced to Ground.

## SWITCHING CHARACTERISTICS ( $V_{CC}=5$ V, $T_A=25^\circ$ C, Input $t_r, t_f=6$ ns)

CHARACTERISTIC	$C_L$ (pF)	TYPICAL VALUES		UNITS
		HC	HCT	
Propagation Delay: $D_n$ to Output $t_{PLH}$ $t_{PHL}$	15	25	25	ns
$\overline{LE}$ to Output $t_{PLH}$ $t_{PHL}$	15	23	23	
$\overline{BI}$ to Output $t_{PLH}$ $t_{PHL}$	15	18	18	
$\overline{LT}$ to Output $t_{PLH}$ $t_{PHL}$	15	13	13	
Power Dissipation Capacitance* $C_{PD}$	—	114	110	pF

\* $C_{PD}$  is used to determine the dynamic power consumption, per package.

$$P_D = C_{PD} V_{CC}^2 f_i + \sum C_L V_{CC}^2 f_o$$

where  $f_i$  = input frequency  
 $f_o$  = output frequency  
 $C_L$  = output load capacitance  
 $V_{CC}$  = supply voltage.

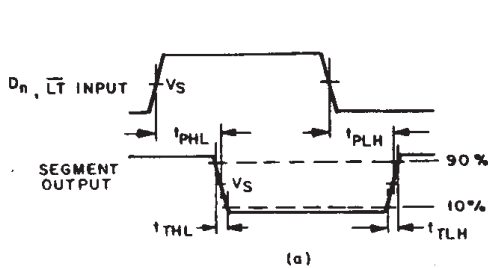
## PRE-REQUISITE FOR SWITCHING FUNCTION

CHARACTERISTIC	TEST CONDITIONS $V_{CC}$ (V)	LIMITS								UNITS				
		25°C				-40°C to +85°C					-55°C to +125°C			
		HC		HCT		74HC		74HCT			54HC		54HCT	
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
Setup Time, $D_n$ to $\overline{LE}$ $t_{SU}$	2	80	—	—	—	100	—	—	—	120	—	—	—	
	4.5	16	—	16	—	20	—	20	—	24	—	24	—	
	6	14	—	—	—	17	—	—	—	20	—	—	—	
Hold Time, $D_n$ to $\overline{LE}$ $t_H$	2	3	—	—	—	3	—	—	—	3	—	—	—	
	4.5	3	—	5	—	3	—	5	—	3	—	5	—	
	6	3	—	—	—	3	—	—	—	3	—	—	—	
Latch Enable Pulse Width, $t_W$	2	80	—	—	—	100	—	—	—	120	—	—	—	
	4.5	16	—	16	—	20	—	20	—	24	—	24	—	
	6	14	—	—	—	17	—	—	—	20	—	—	—	

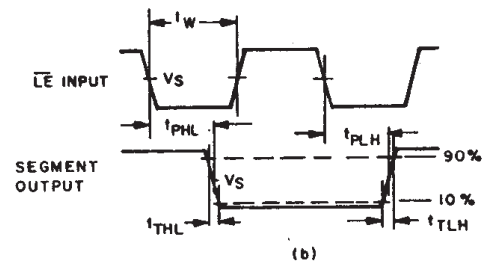
# CD54/74HC4511 CD54/74HCT4511

SWITCHING CHARACTERISTICS ( $C_L=50$  pF, Input  $t_r, t_f=6$  ns)

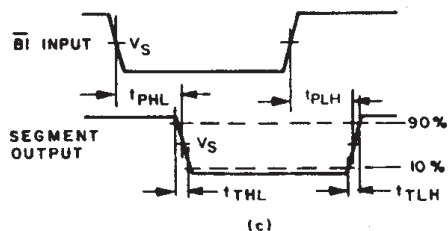
CHARACTERISTIC	$V_{CC}$	LIMITS												UNITS	
		25°C				-40°C to +85°C				-55°C to +125°C					
		HC		HCT		74HC		74HCT		54HC		54HCT			
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.		
Propagation Delay, $D_n$ to Output	$t_{PLH}$	2	—	300	—	—	—	375	—	—	—	450	—	—	ns
	$t_{PHL}$	4.5	—	60	—	60	—	75	—	75	—	90	—	90	
		6	—	51	—	—	—	64	—	—	—	77	—	—	
$\overline{LE}$ to Output	$t_{PLH}$	2	—	270	—	—	—	340	—	—	—	405	—	—	ns
	$t_{PHL}$	4.5	—	54	—	54	—	68	—	68	—	81	—	81	
		6	—	46	—	—	—	58	—	—	—	69	—	—	
$\overline{BI}$ to Output	$t_{PLH}$	2	—	220	—	—	—	275	—	—	—	330	—	—	ns
	$t_{PHL}$	4.5	—	44	—	44	—	55	—	55	—	66	—	66	
		6	—	37	—	—	—	47	—	—	—	56	—	—	
$\overline{LT}$ to Output	$t_{PLH}$	2	—	160	—	—	—	200	—	—	—	240	—	—	ns
	$t_{PHL}$	4.5	—	32	—	33	—	40	—	41	—	48	—	50	
		6	—	27	—	—	—	34	—	—	—	41	—	—	
Transition Time	$t_{THL}$	2	—	75	—	—	—	95	—	—	—	110	—	—	ns
	$t_{TLH}$	4.5	—	15	—	15	—	19	—	19	—	22	—	22	
		6	—	13	—	—	—	16	—	—	—	19	—	—	
Input Capacitance	$C_i$		—	10	—	10	—	10	—	10	—	10	—	10	pF



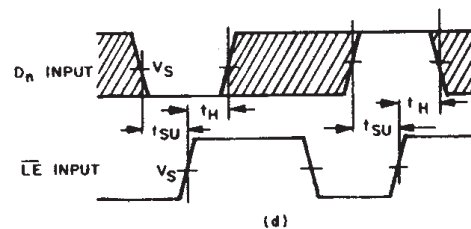
Input ( $D_n, \overline{LT}$ ) to output propagation delays and output transition times



Input ( $\overline{LE}$ ) to output propagation delays and latch enable pulse width



Input ( $\overline{BI}$ ) to output propagation delays.



Note

The shaded areas indicate when the input is permitted to change for predictable output performance.

Waveforms showing the data set-up and hold times for  $D_n$  input to  $\overline{LE}$  input.

	54/74HC	54/74HCT
Input Level	$V_{CC}$	3 V
Switching Voltage, $V_s$	50% $V_{CC}$	1.3 V

92CM-39899

Fig. 2 - AC waveforms.

## **IMPORTANT NOTICE**

Texas Instruments and its subsidiaries (TI) reserve the right to make changes to their products or to discontinue any product or service without notice, and advise customers to obtain the latest version of relevant information to verify, before placing orders, that information being relied on is current and complete. All products are sold subject to the terms and conditions of sale supplied at the time of order acknowledgement, including those pertaining to warranty, patent infringement, and limitation of liability.

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

**CERTAIN APPLICATIONS USING SEMICONDUCTOR PRODUCTS MAY INVOLVE POTENTIAL RISKS OF DEATH, PERSONAL INJURY, OR SEVERE PROPERTY OR ENVIRONMENTAL DAMAGE ("CRITICAL APPLICATIONS"). TI SEMICONDUCTOR PRODUCTS ARE NOT DESIGNED, AUTHORIZED, OR WARRANTED TO BE SUITABLE FOR USE IN LIFE-SUPPORT DEVICES OR SYSTEMS OR OTHER CRITICAL APPLICATIONS. INCLUSION OF TI PRODUCTS IN SUCH APPLICATIONS IS UNDERSTOOD TO BE FULLY AT THE CUSTOMER'S RISK.**

In order to minimize risks associated with the customer's applications, adequate design and operating safeguards must be provided by the customer to minimize inherent or procedural hazards.

TI assumes no liability for applications assistance or customer product design. TI does not warrant or represent that any license, either express or implied, is granted under any patent right, copyright, mask work right, or other intellectual property right of TI covering or relating to any combination, machine, or process in which such semiconductor products or services might be or are used. TI's publication of information regarding any third party's products or services does not constitute TI's approval, warranty or endorsement thereof.

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

## **IMPORTANT NOTICE**

Texas Instruments and its subsidiaries (TI) reserve the right to make changes to their products or to discontinue any product or service without notice, and advise customers to obtain the latest version of relevant information to verify, before placing orders, that information being relied on is current and complete. All products are sold subject to the terms and conditions of sale supplied at the time of order acknowledgement, including those pertaining to warranty, patent infringement, and limitation of liability.

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

**CERTAIN APPLICATIONS USING SEMICONDUCTOR PRODUCTS MAY INVOLVE POTENTIAL RISKS OF DEATH, PERSONAL INJURY, OR SEVERE PROPERTY OR ENVIRONMENTAL DAMAGE ("CRITICAL APPLICATIONS"). TI SEMICONDUCTOR PRODUCTS ARE NOT DESIGNED, AUTHORIZED, OR WARRANTED TO BE SUITABLE FOR USE IN LIFE-SUPPORT DEVICES OR SYSTEMS OR OTHER CRITICAL APPLICATIONS. INCLUSION OF TI PRODUCTS IN SUCH APPLICATIONS IS UNDERSTOOD TO BE FULLY AT THE CUSTOMER'S RISK.**

In order to minimize risks associated with the customer's applications, adequate design and operating safeguards must be provided by the customer to minimize inherent or procedural hazards.

TI assumes no liability for applications assistance or customer product design. TI does not warrant or represent that any license, either express or implied, is granted under any patent right, copyright, mask work right, or other intellectual property right of TI covering or relating to any combination, machine, or process in which such semiconductor products or services might be or are used. TI's publication of information regarding any third party's products or services does not constitute TI's approval, warranty or endorsement thereof.





REAL WORLD SIGNAL PROCESSING™

Search TI

[PRODUCTS](#) ▶ [APPLICATIONS](#) ▶ [SUPPORT](#) ▶ [TI&ME](#) ▶• [Advanced Search](#)**PRODUCT FOLDER** | PRODUCT INFO: [FEATURES](#) | [DESCRIPTION](#) | [DATASHEETS](#) | [PRICING/AVAILABILITY/PKG](#) | [SAMPLES](#)  
| [APPLICATION NOTES](#) | [RELATED DOCUMENTS](#)PRODUCT SUPPORT: [TRAINING](#)**CD74HC4511, High Speed CMOS Logic BCD-to-7 Segment Latch/Decoder/Driver**DEVICE STATUS: **ACTIVE**

PARAMETER NAME	CD54HC4511
Voltage Nodes (V)	6, 5, 2

**FEATURES**[▲ Back to Top](#)

- High-output sourcing capability - 7.5 Ma @ 4.5 v, 10 mA @6 v (HC4511)
- Input latches for BCD code storage
- Lamp test and blanking capability
- Fanout (over temperature range):  
Standard outputs - 10 LSTTL loads  
Bus driver outputs - 15 LSTTL loads
- Wide operating temperature range:  
CD74HC/HCT: -40 to +85°C
- Balanced propagation delay and transition times
- Significant power reduction compared to LSTTL logic ICs
- Alternate source is Philips/Sigmetics
- CD54HC/CD74HC types:  
2 TO 6 V operation  
High noise immunity:  $N_{IL} = 30\%$ ,  $N_{IH} = 30\%$  of  $V_{CC}$ ; @  $V_{CC} = 5 V$
- CD54HCT/CD74HCT types:  
4.5 TO 5.5 V operation  
Direct LSTTL input logic compatibility -  $V_{IL} = 0.8 V$  max.,  $V_{IH} = 2 V$  min.  
CMOS input compatibility -  $I_I \leq 1 \mu A$  @  $V_{OL}$ ,  $V_{OH}$

**DESCRIPTION**[▲ Back to Top](#)

The RCA CD54/74HC4511 and CD54/74HCT4511 are BCD-to-7 segment latch/decoder/drivers having four address inputs ( $D_0$ - $D_3$ ), active "Low" blanking and lamp test inputs, and a latch enable input which, when "High", enables the latches to store the BCD inputs. When Latch Enable is "Low", the latches are disabled, making the outputs transparent to the BCD inputs.

These devices have standard-size output transistors but are capable of sourcing (at standard  $V_{OH}$  levels) up to 7.5 mA at 4.5 V. The HC types can supply up to 10 mA at 6 V.

The CD54HC/HCT4511 are supplied in 16-lead ceramic dual-in-line packages (F suffix). The CD74HC/HCT4511 are supplied in 16-lead dual-in-line plastic packages (E suffix) and in 16-lead dual-in-line surface-mount plastic packages (M suffix). Both types are also available in chip form (H suffix).

**TECHNICAL RESOURCES**[▲ Back to Top](#)

To view the following documents, [Acrobat Reader 4.0](#) is required.

To download a document to your hard drive, right-click on the link and choose 'Save'.

**DATASHEET**[▲ Back to Top](#)

Full datasheet in Acrobat PDF: [cd74hc4511.pdf](#) (183 KB) (Updated: 12/02/1998)

**APPLICATION NOTES**[▲Back to Top](#)View Application Reports for [Digital Logic](#)

- [CMOS Power Consumption and CPD Calculation \(Rev. B\)](#) (SCAA035B - Updated: 06/01/1997)
- [Designing With Logic \(Rev. C\)](#) (SDYA009C - Updated: 06/01/1997)
- [Evaluation of Nickel/Palladium/Gold-Finished Surface-Mount Integrated Circuits](#) (SZZA026 - Updated: 06/20/2001)
- [HCMOS Design Considerations](#) (SCLA007 - Updated: 04/01/1996)
- [Implications of Slow or Floating CMOS Inputs \(Rev. C\)](#) (SCBA004C - Updated: 02/01/1998)
- [Input and Output Characteristics of Digital Integrated Circuits](#) (SDYA010 - Updated: 10/01/1996)
- [Live Insertion](#) (SDYA012 - Updated: 10/01/1996)
- [SN54/74HCT CMOS Logic Family Applications and Restrictions](#) (SCLA011 - Updated: 05/01/1996)
- [Selecting the Right Texas Instruments Signal Switch](#) (SZZA030 - Updated: 09/07/2001)
- [Using High Speed CMOS and Advanced CMOS in Systems With Multiple Vcc](#) (SCLA008 - Updated: 04/01/1996)

**RELATED DOCUMENTS**[▲Back to Top](#)

- [Advanced Bus Interface Logic Selection Guide](#) (SCYT126, 448 KB - Updated: 01/09/2001)
- [Documentation Rules \(SAP\) And Ordering Information \(Rev. B\)](#) (SZZU001B, 13 KB - Updated: 05/06/1999)
- [Logic Selection Guide First Half 2002 \(Rev. Q\)](#) (SDYU001Q, 3368 KB - Updated: 12/17/2001)
- [MicroStar Junior BGA Design Summary](#) (SCET004, 167 KB - Updated: 07/28/2000)
- [More Power In Less Space - Technical Article \(Rev. A\)](#) (SCAU001A, 850 KB - Updated: 03/01/1996)
- [Overview of IEEE Std 91-1984, Explanation of Logic Symbols Training Booklet \(Rev. A\)](#) (SDYZ001A, 138 KB - Updated: 07/01/1996)

**SAMPLES**[▲Back to Top](#)

ORDERABLE DEVICE	PACKAGE	PINS	TEMP (°C)	STATUS	SAMPLES
CD74HC4511M	<a href="#">D</a>	16	-55 TO 125	ACTIVE	<a href="#">Request Samples</a>

**PRICING/AVAILABILITY/PKG**[▲Back to Top](#)

ORDERABLE DEVICE	PACKAGE	PINS	TEMP (°C)	STATUS	BUDGETARY PRICE US\$/UNIT QTY= 1000+	PACK QTY	PRICING/AVAILABILITY/PKG
CD74HC4511E	<a href="#">N</a>	16	-55 TO 125	ACTIVE	0.41	25	<a href="#">Check stock or order</a>
CD74HC4511M	<a href="#">D</a>	16	-55 TO 125	ACTIVE	0.41	40	<a href="#">Check stock or order</a>
CD74HC4511PWR	<a href="#">PW</a>	16	-55 TO 125	ACTIVE	0.41	2000	<a href="#">Check stock or order</a>

Table Data Updated on: 5/5/2002

[Products](#) | [Applications](#) | [Support](#) | [TI&ME](#)

TEXAS INSTRUMENTS

© Copyright 1995-2002 Texas Instruments Incorporated. All rights reserved.

[Trademarks](#) | [Privacy Policy](#) | [Terms of Use](#)