

**High Speed CMOS Logic  
8-Input NAND Gate**
**Features**

- Buffered Inputs
- Typical Propagation Delay: 10ns at  $V_{CC} = 5V$ ,  $C_L = 15pF$ ,  $T_A = 25^\circ C$
- Fanout (Over Temperature Range)
  - Standard Outputs . . . . . 10 LSTTL Loads
  - Bus Driver Outputs . . . . . 15 LSTTL Loads
- Wide Operating Temperature Range . . .  $-55^\circ C$  to  $125^\circ C$
- Balanced Propagation Delay and Transition Times
- Significant Power Reduction Compared to LSTTL Logic ICs
- HC Types
  - 2V to 6V Operation
  - High Noise Immunity:  $N_{IL} = 30\%$ ,  $N_{IH} = 30\%$  of  $V_{CC}$  at  $V_{CC} = 5V$
- HCT Types
  - 4.5V to 5.5V Operation
  - Direct LSTTL Input Logic Compatibility,  $V_{IL} = 0.8V$  (Max),  $V_{IH} = 2V$  (Min)
  - CMOS Input Compatibility,  $I_I \leq 1\mu A$  at  $V_{OL}$ ,  $V_{OH}$

**Description**

The 'HC30 and 'HCT30 each contain an 8-input NAND gate in one package. They provide the system designer with the direct implementation of the positive logic 8-input NAND function. Logic gates utilize silicon gate CMOS technology to achieve operating speeds similar to LSTTL gates with the low power consumption of standard CMOS integrated circuits. All devices have the ability to drive 10 LSTTL loads. The HCT logic family is functionally pin compatible with the standard LS logic family.

**Ordering Information**

PART NUMBER	TEMP. RANGE (°C)	PACKAGE
CD54HC30F3A	-55 to 125	14 Ld CERDIP
CD54HCT30F3A	-55 to 125	14 Ld CERDIP
CD74HC30E	-55 to 125	14 Ld PDIP
CD74HC30M	-55 to 125	14 Ld SOIC
CD74HC30MT	-55 to 125	14 Ld SOIC
CD74HC30M96	-55 to 125	14 Ld SOIC
CD74HC30NSR	-55 to 125	14 Ld SOP
CD74HC30PW	-55 to 125	14 Ld TSSOP
CD74HC30PWR	-55 to 125	14 Ld TSSOP
CD74HC30PWT	-55 to 125	14 Ld TSSOP
CD74HCT30E	-55 to 125	14 Ld PDIP
CD74HCT30M	-55 to 125	14 Ld SOIC
CD74HCT30MT	-55 to 125	14 Ld SOIC
CD74HCT30M96	-55 to 125	14 Ld SOIC

**Pinout**

CD54HC30, CD54HCT30 (CERDIP)  
 CD74HC30 (PDIP, SOIC, SOP, TSSOP)  
 CD74HCT30 (PDIP, SOIC)  
 TOP VIEW



NOTE: When ordering, use the entire part number. The suffixes 96 and R denote tape and reel. The suffix T denotes a small-quantity reel of 250.

**Functional Diagram**

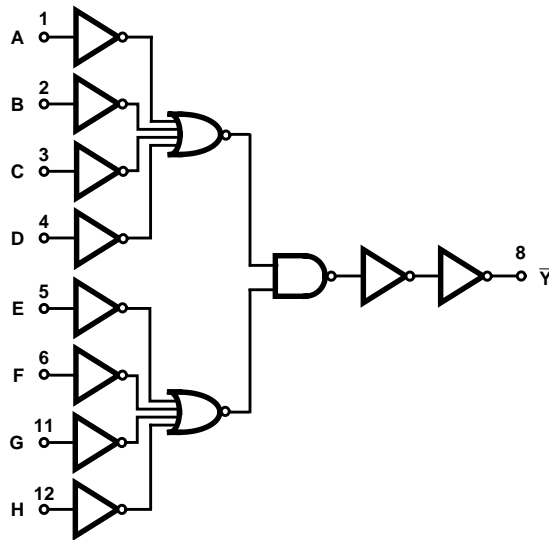


TRUTH TABLE

INPUTS								OUTPUT
A	B	C	D	E	F	G	H	
L	X	X	X	X	X	X	X	H
X	L	X	X	X	X	X	X	H
X	X	L	X	X	X	X	X	H
X	X	X	L	X	X	X	X	H
X	X	X	X	L	X	X	X	H
X	X	X	X	X	L	X	X	H
X	X	X	X	X	X	L	X	H
X	X	X	X	X	X	X	L	H
H	H	H	H	H	H	H	H	L

NOTE: H = HIGH Voltage Level, L = LOW Voltage Level, X = Irrelevant

**Logic Symbol**



# CD54/74HC30, CD54/74HCT30

## Absolute Maximum Ratings

DC Supply Voltage, $V_{CC}$ .....	-0.5V to 7V
DC Input Diode Current, $I_{IK}$	
For $V_I < -0.5V$ or $V_I > V_{CC} + 0.5V$ .....	$\pm 20mA$
DC Output Diode Current, $I_{OK}$	
For $V_O < -0.5V$ or $V_O > V_{CC} + 0.5V$ .....	$\pm 20mA$
DC Output Source or Sink Current per Output Pin, $I_O$	
For $V_O > -0.5V$ or $V_O < V_{CC} + 0.5V$ .....	$\pm 25mA$
DC $V_{CC}$ or Ground Current, $I_{CC}$ or $I_{GND}$ .....	$\pm 50mA$

## Operating Conditions

Temperature Range ( $T_A$ ) .....	-55°C to 125°C
Supply Voltage Range, $V_{CC}$	
HC Types .....	.2V to 6V
HCT Types .....	4.5V to 5.5V
DC Input or Output Voltage, $V_I, V_O$ .....	0V to $V_{CC}$
Input Rise and Fall Time	
2V .....	1000ns (Max)
4.5V .....	500ns (Max)
6V .....	400ns (Max)

## Thermal Information

Package Thermal Impedance, $\theta_{JA}$ (see Note 1)	
E (PDIP) Package .....	80°C/W
M (SOIC) Package .....	86°C/W
NS (SOP) Package .....	76°C/W
PW (TSSOP) Package .....	113°C/W
Maximum Junction Temperature (Hermetic Package or Die) . . .	175°C
Maximum Junction Temperature (Plastic Package) .....	150°C
Maximum Storage Temperature Range .....	-65°C to 150°C
Maximum Lead Temperature (Soldering 10s) .....	300°C
(SOIC - Lead Tips Only)	

*CAUTION: Stresses above those listed in "Absolute Maximum Ratings" may cause permanent damage to the device. This is a stress only rating and operation of the device at these or any other conditions above those indicated in the operational sections of this specification is not implied.*

### NOTE:

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

## DC Electrical Specifications

PARAMETER	SYMBOL	TEST CONDITIONS		$V_{CC}$ (V)	25°C			-40°C TO +85°C		-55°C TO 125°C		UNITS
		$V_I$ (V)	$I_O$ (mA)		MIN	TYP	MAX	MIN	MAX	MIN	MAX	
<b>HC TYPES</b>												
High Level Input Voltage	$V_{IH}$	-	-	2	1.5	-	-	1.5	-	1.5	-	V
				4.5	3.15	-	-	3.15	-	3.15	-	V
				6	4.2	-	-	4.2	-	4.2	-	V
Low Level Input Voltage	$V_{IL}$	-	-	2	-	-	0.5	-	0.5	-	0.5	V
				4.5	-	-	1.35	-	1.35	-	1.35	V
				6	-	-	1.8	-	1.8	-	1.8	V
High Level Output Voltage CMOS Loads	$V_{OH}$	$V_{IH}$ or $V_{IL}$	-0.02	2	1.9	-	-	1.9	-	1.9	-	V
			-0.02	4.5	4.4	-	-	4.4	-	4.4	-	V
			-0.02	6	5.9	-	-	5.9	-	5.9	-	V
High Level Output Voltage TTL Loads	$V_{OH}$	$V_{IH}$ or $V_{IL}$	-	-	-	-	-	-	-	-	-	V
			-4	4.5	3.98	-	-	3.84	-	3.7	-	V
			-5.2	6	5.48	-	-	5.34	-	5.2	-	V
Low Level Output Voltage CMOS Loads	$V_{OL}$	$V_{IH}$ or $V_{IL}$	0.02	2	-	-	0.1	-	0.1	-	0.1	V
			0.02	4.5	-	-	0.1	-	0.1	-	0.1	V
			0.02	6	-	-	0.1	-	0.1	-	0.1	V
Low Level Output Voltage TTL Loads	$V_{OL}$	$V_{IH}$ or $V_{IL}$	-	-	-	-	-	-	-	-	-	V
			4	4.5	-	-	0.26	-	0.33	-	0.4	V
			5.2	6	-	-	0.26	-	0.33	-	0.4	V
Input Leakage Current	$I_I$	$V_{CC}$ or GND	-	6	-	-	$\pm 0.1$	-	$\pm 1$	-	$\pm 1$	$\mu A$

## CD54/74HC30, CD54/74HCT30

### DC Electrical Specifications (Continued)

PARAMETER	SYMBOL	TEST CONDITIONS		V <sub>CC</sub> (V)	25°C			-40°C TO +85°C		-55°C TO 125°C		UNITS
		V <sub>I</sub> (V)	I <sub>O</sub> (mA)		MIN	TYP	MAX	MIN	MAX	MIN	MAX	
Quiescent Device Current	I <sub>CC</sub>	V <sub>CC</sub> or GND	0	6	-	-	2	-	20	-	40	μA
<b>HCT TYPES</b>												
High Level Input Voltage	V <sub>IH</sub>	-	-	4.5 to 5.5	2	-	-	2	-	2	-	V
Low Level Input Voltage	V <sub>IL</sub>	-	-	4.5 to 5.5	-	-	0.8	-	0.8	-	0.8	V
High Level Output Voltage CMOS Loads	V <sub>OH</sub>	V <sub>IH</sub> or V <sub>IL</sub>	-0.02	4.5	4.4	-	-	4.4	-	4.4	-	V
High Level Output Voltage TTL Loads			-4	4.5	3.98	-	-	3.84	-	3.7	-	V
Low Level Output Voltage CMOS Loads	V <sub>OL</sub>	V <sub>IH</sub> or V <sub>IL</sub>	-0.02	4.5	-	-	0.1	-	0.1	-	0.1	V
Low Level Output Voltage TTL Loads			4	4.5	-	-	0.26	-	0.33	-	0.4	V
Input Leakage Current	I <sub>I</sub>	V <sub>CC</sub> and GND	-	5.5	-	-	±0.1	-	±1	-	±1	μA
Quiescent Device Current	I <sub>CC</sub>	V <sub>CC</sub> or GND	0	5.5	-	-	2	-	20	-	40	μA
Additional Quiescent Device Current Per Input Pin: 1 Unit Load (Note 2)	ΔI <sub>CC</sub>	V <sub>CC</sub> -2.1	-	4.5 to 5.5	-	100	360	-	450	-	490	μA

NOTE:

2. For dual-supply systems theoretical worst case (V<sub>I</sub> = 2.4V, V<sub>CC</sub> = 5.5V) specification is 1.8mA.

### HCT Input Loading Table

INPUT	UNIT LOADS
All	0.6

NOTE: Unit Load is ΔI<sub>CC</sub> limit specified in DC Electrical Specifications table, e.g. 360μA max at 25°C.

### Switching Specifications Input t<sub>r</sub>, t<sub>f</sub> = 6ns

PARAMETER	SYMBOL	TEST CONDITIONS	V <sub>CC</sub> (V)	25°C			-40°C TO 85°C		-55°C TO 125°C		UNITS	
				MIN	TYP	MAX	MIN	MAX	MIN	MAX		
<b>HC TYPES</b>												
Propagation Delay, Input to Output (Figure 1)	t <sub>pLH</sub> , t <sub>pHL</sub>	C <sub>L</sub> = 50pF	2	-	-	130	-	165	-	195	ns	
			4.5	-	-	26	-	33	-	39	ns	
			6	-	-	22	-	28	-	33	ns	
Propagation Delay, Data Input to Output Y	t <sub>pLH</sub> , t <sub>pHL</sub>	C <sub>L</sub> = 15pF	5	-	10	-	-	-	-	ns		

## CD54/74HC30, CD54/74HCT30

### Switching Specifications Input $t_r, t_f = 6\text{ ns}$ (Continued)

PARAMETER	SYMBOL	TEST CONDITIONS	$V_{CC}$ (V)	25°C			-40°C TO 85°C		-55°C TO 125°C		UNITS
				MIN	TYP	MAX	MIN	MAX	MIN	MAX	
Transition Times (Figure 1)	$t_{TLH}, t_{THL}$	$C_L = 50\text{ pF}$	2	-	-	75	-	95	-	110	ns
			4.5	-	-	15	-	19	-	22	ns
			6	-	-	13	-	16	-	19	ns
Input Capacitance	$C_I$	-	-	-	10	-	10	-	10	pF	
Power Dissipation Capacitance (Notes 3, 4)	$C_{PD}$	-	5	-	25	-	-	-	-	pF	
<b>HCT TYPES</b>											
Propagation Delay, Input to Output (Figure 2)	$t_{RHL}, t_{PHL}$	$C_L = 50\text{ pF}$	4.5	-	-	28	-	35	-	42	ns
Propagation Delay, Data Input to Output Y	$t_{PLH}, t_{PHL}$	$C_L = 15\text{ pF}$	5	-	11	-	-	-	-	-	ns
Transition Times (Figure 2)	$t_{TLH}, t_{THL}$	$C_L = 50\text{ pF}$	4.5	-	-	15	-	19	-	22	ns
Input Capacitance	$C_I$	-	-	-	10	-	10	-	10	pF	
Power Dissipation Capacitance (Notes 3, 4)	$C_{PD}$	-	5	-	26	-	-	-	-	pF	

**NOTES:**

3.  $C_{PD}$  is used to determine the dynamic power consumption, per gate.
4.  $P_D = V_{CC}^2 f_i (C_{PD} + C_L)$  where  $f_i$  = Input Frequency,  $C_L$  = Output Load Capacitance,  $V_{CC}$  = Supply Voltage.

### Test Circuits and Waveforms



**FIGURE 1. HC AND HCU TRANSITION TIMES AND PROPAGATION DELAY TIMES, COMBINATION LOGIC**



**FIGURE 2. HCT TRANSITION TIMES AND PROPAGATION DELAY TIMES, COMBINATION LOGIC**

**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>
5962-8974601CA	ACTIVE	CDIP	J	14	1	TBD	Call TI	Level-NC-NC-NC
8404001CA	ACTIVE	CDIP	J	14	1	TBD	Call TI	Level-NC-NC-NC
CD54HC30F	ACTIVE	CDIP	J	14	1	TBD	Call TI	Level-NC-NC-NC
CD54HC30F3A	ACTIVE	CDIP	J	14	1	TBD	Call TI	Level-NC-NC-NC
CD54HCT30F3A	ACTIVE	CDIP	J	14	1	TBD	Call TI	Level-NC-NC-NC
CD74HC30E	ACTIVE	PDIP	N	14	25	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC
CD74HC30EE4	ACTIVE	PDIP	N	14	25	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC
CD74HC30M	ACTIVE	SOIC	D	14	50	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
CD74HC30M96	ACTIVE	SOIC	D	14	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
CD74HC30M96E4	ACTIVE	SOIC	D	14	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
CD74HC30ME4	ACTIVE	SOIC	D	14	50	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
CD74HC30MT	ACTIVE	SOIC	D	14	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
CD74HC30MTE4	ACTIVE	SOIC	D	14	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
CD74HC30NSR	ACTIVE	SO	NS	14	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
CD74HC30NSRE4	ACTIVE	SO	NS	14	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
CD74HC30PW	ACTIVE	TSSOP	PW	14	90	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
CD74HC30PWE4	ACTIVE	TSSOP	PW	14	90	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
CD74HC30PWR	ACTIVE	TSSOP	PW	14	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
CD74HC30PWRE4	ACTIVE	TSSOP	PW	14	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
CD74HC30PWT	ACTIVE	TSSOP	PW	14	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
CD74HC30PWTE4	ACTIVE	TSSOP	PW	14	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
CD74HCT30E	ACTIVE	PDIP	N	14	25	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC
CD74HCT30EE4	ACTIVE	PDIP	N	14	25	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC
CD74HCT30M	ACTIVE	SOIC	D	14	50	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
CD74HCT30M96	ACTIVE	SOIC	D	14	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
CD74HCT30M96E4	ACTIVE	SOIC	D	14	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
CD74HCT30ME4	ACTIVE	SOIC	D	14	50	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM

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>
CD74HCT30MT	ACTIVE	SOIC	D	14	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM
CD74HCT30MTE4	ACTIVE	SOIC	D	14	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM

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



N (R-PDIP-T\*\*)

PLASTIC DUAL-IN-LINE PACKAGE

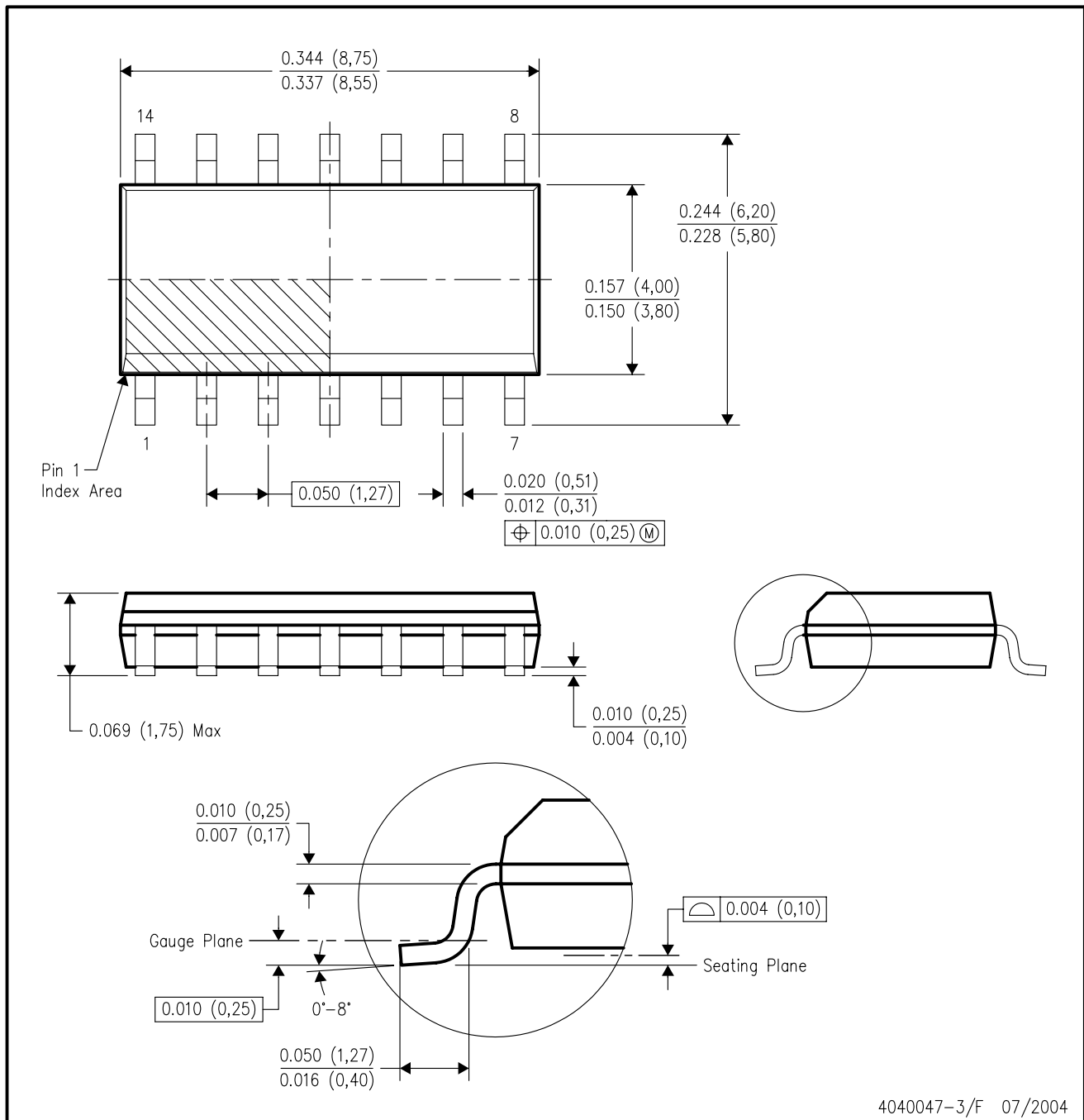
16 PINS SHOWN



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

D (R-PDSO-G14)

PLASTIC SMALL-OUTLINE PACKAGE



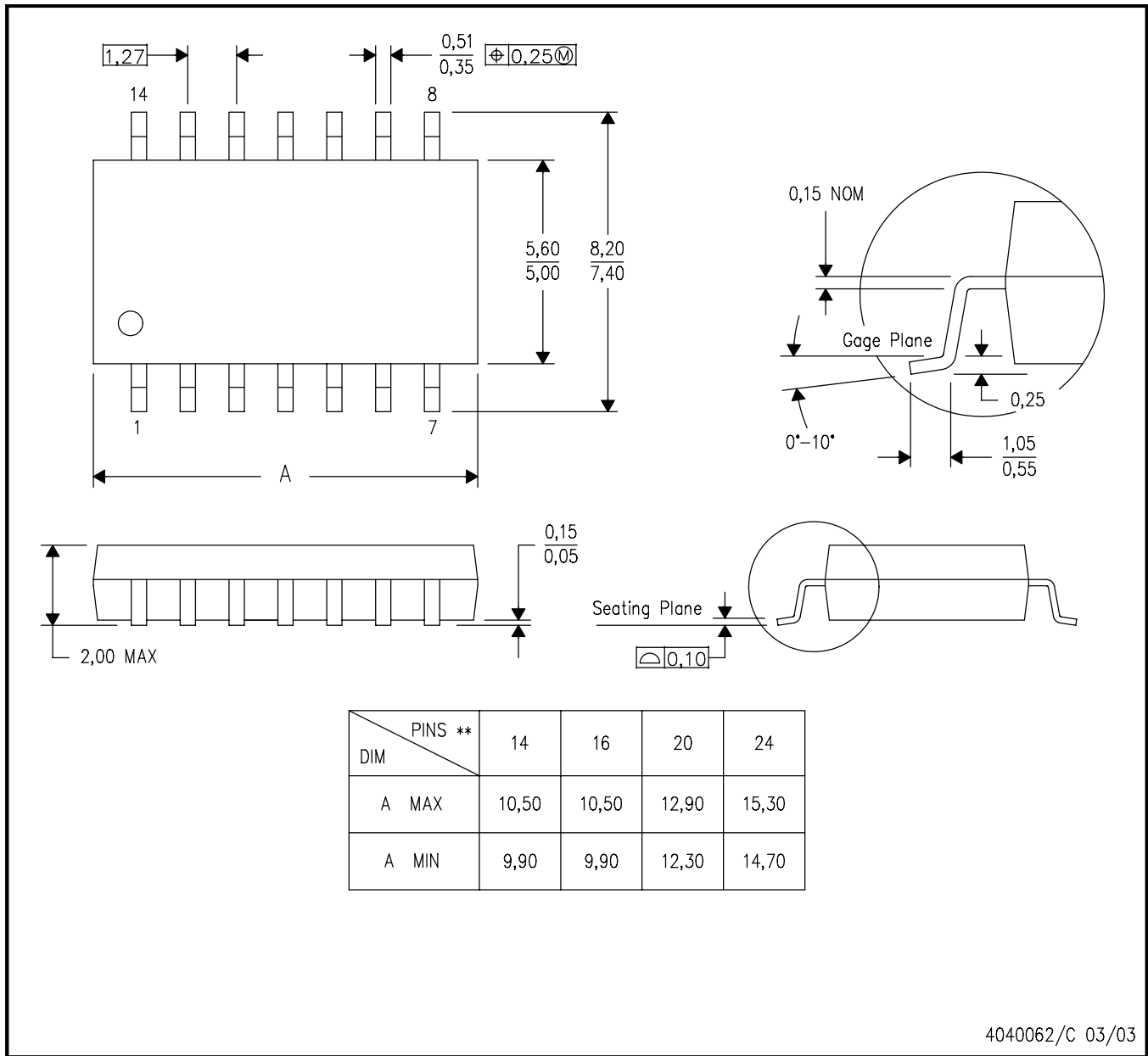
- NOTES:
- A. All linear dimensions are in inches (millimeters).
  - B. This drawing is subject to change without notice.
  - C. Body dimensions do not include mold flash or protrusion not to exceed 0.006 (0,15).
  - D. Falls within JEDEC MS-012 variation AB.

# MECHANICAL DATA

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

PLASTIC SMALL-OUTLINE PACKAGE

14-PINS SHOWN

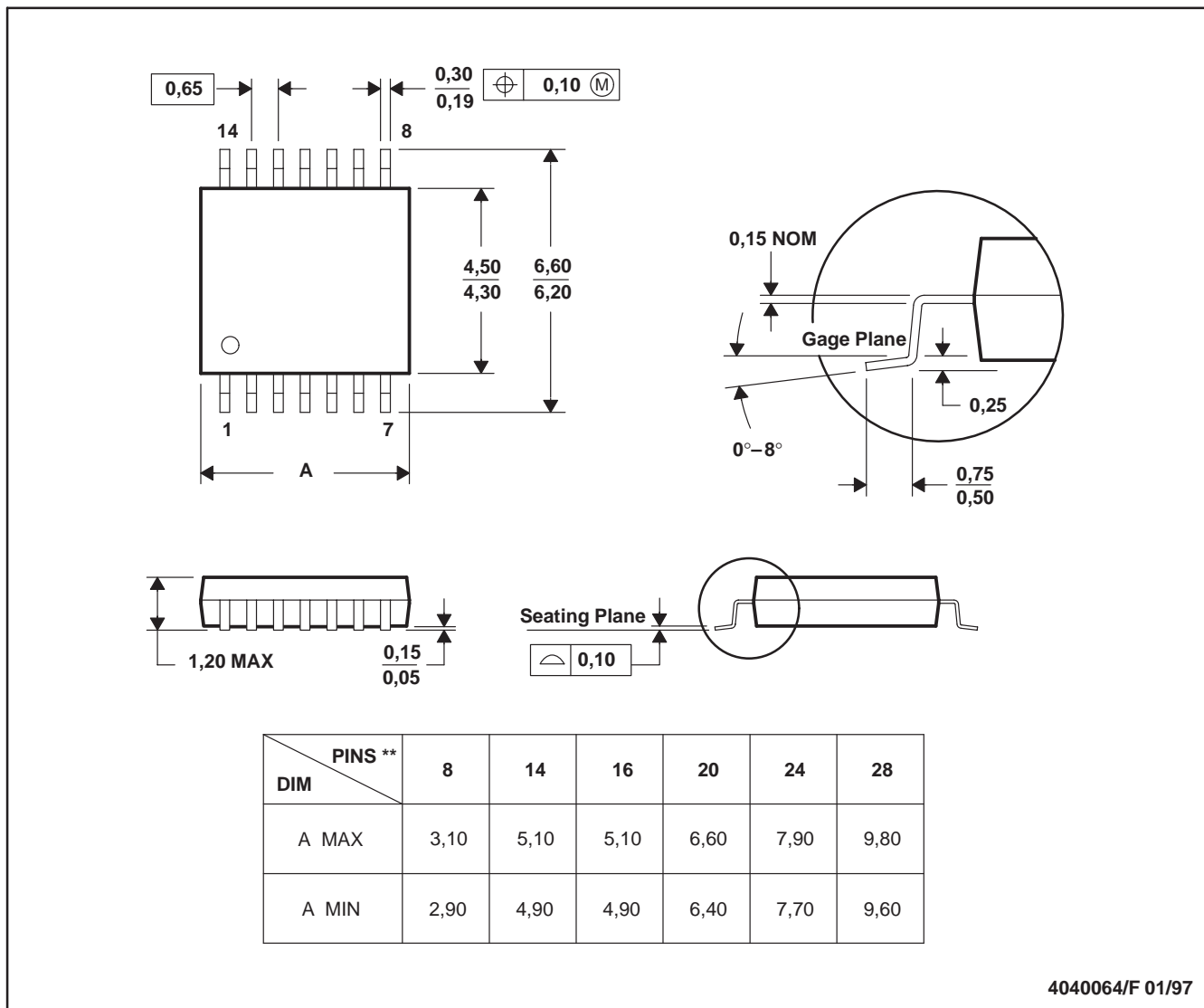


- NOTES:
- A. All linear dimensions are in millimeters.
  - B. This drawing is subject to change without notice.
  - C. Body dimensions do not include mold flash or protrusion, not to exceed 0,15.

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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# CD54HCT30, Status: ACTIVE

High Speed CMOS Logic 8-Input NAND Gate



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<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
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### Refine Your Selection

- Logic: NAND Gates

### Support

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

## Datasheet



[Download Datasheet](#) **CD54/74HC30, CD54/74HCT30 (Rev. D)** (cd54hct30.pdf, 351 KB)  
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	<b>CD54HCT30</b>
<b>Voltage Nodes(V)</b>	5
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## Product Information

Features  Save this to your personal library

### Buffered Inputs

Typical Propagation Delay: 10ns at  $V_{CC} = 5V$ ,  $C_L = 15pF$ ,  $T_A = 25^\circ C$

Fanout (Over Temperature Range)

- Standard Outputs . . . . . 10 LSTTL Loads
- Bus Driver Outputs . . . . . 15 LSTTL Loads

Wide Operating Temperature Range . . .  $-55^\circ C$  to  $125^\circ C$

Balanced Propagation Delay and Transition Times

Significant Power Reduction Compared to LSTTL Logic ICs

### HC Types

- 2V to 6V Operation
- High Noise Immunity:  $N_{IL} = 30\%$ ,  $N_{IH} = 30\%$  of  $V_{CC}$  at  $V_{CC} = 5V$

### HCT Types

- 4.5V to 5.5V Operation
- Direct LSTTL Input Logic Compatibility,  $V_{IL} = 0.8V$  (Max),  $V_{IH} = 2V$  (Min)
- CMOS Input Compatibility,  $I_i = 1\mu A$  at  $V_{OL}$ ,  $V_{OH}$

## Description

The 'HC30 and 'HCT30 each contain an 8-input NAND gate in one package. They provide the system designer with the direct implementation of the positive logic 8-input NAND function. Logic gates utilize silicon gate CMOS technology to achieve operating speeds similar to LSTTL gates with the low power consumption of standard CMOS integrated circuits. All devices have the ability to drive 10 LSTTL loads. The HCT logic family is functionally pin compatible with the standard LS logic family.

## 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	Standard Pack Quantity	Footprints	Samples
5962-8974601CA	ACTIVE	-55 to 125		3.08   1KU	CDIP (J)   14	1	<input type="checkbox"/>	Request Military Samples
CD54HCT30F3A	ACTIVE	-55 to 125	5962-8974601CA	3.08   1KU	CDIP (J)   14	1	<input type="checkbox"/>	Request Military Samples

Inventory							
TI Inventory Status				Reported Distributor Inventory			
5962-8974601CA As of 9:50 AM GMT, 25 Nov 2005				As of 9:50 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>
	881*	5739   19 Dec >10k   28 Dec	8 Weeks	Americas	Avnet	86	<input type="text"/>
CD54HCT30F3A As of 9:50 AM GMT, 25 Nov 2005				As of 9:50 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>
	881*	5739   19 Dec >10k   28 Dec	8 Weeks	None Reported <a href="#">View Distributors</a>			

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

Product Content						MTBF/FIT Rate
Device	Eco Plan*	Lead/Ball Finish	MSL Rating/Peak Reflow	Details	Details	
5962-8974601CA	TBD	Call TI	Level-NC-NC-NC	<a href="#">View</a>	<a href="#">View</a>	
CD54HCT30F3A	TBD	Call TI	Level-NC-NC-NC	<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

Datasheets	Keep track of what's new
<b>CD54/74HC30, CD54/74HCT30 (Rev. D)</b> (cd54hct30.pdf, 351 KB) 21 Aug 2003 <a href="#">Download</a>	
<b>Application Notes</b>	
<b>Semiconductor Packing Material Electrostatic Discharge (ESD) Protection</b> (szza047.htm, 9 KB) 08 Jul 2004 <a href="#">Abstract</a>	
<b>Shelf-Life Evaluation of Lead-Free Component Finishes</b> (szza046.htm, 9 KB) 24 May 2004 <a href="#">Abstract</a>	
<b>Understanding and Interpreting Standard-Logic Data Sheets (Rev. B)</b> (szza036b.htm, 8 KB) 28 May 2003 <a href="#">Abstract</a>	
<b>TI IBIS File Creation, Validation, and Distribution Processes</b> (szza034.htm, 9 KB) 29 Aug 2002 <a href="#">Abstract</a>	
<b>Implications of Slow or Floating CMOS Inputs (Rev. C)</b> (scba004c.htm, 9 KB) 01 Feb 1998 <a href="#">Abstract</a>	
<b>CMOS Power Consumption and CPD Calculation (Rev. B)</b> (scaa035b.htm, 9 KB) 01 Jun 1997 <a href="#">Abstract</a>	
<b>Designing With Logic (Rev. C)</b> (sdya009c.htm, 9 KB) 01 Jun 1997 <a href="#">Abstract</a>	
<b>SN54/74HCT CMOS Logic Family Applications and Restrictions</b> (scla011.htm, 9 KB) 01 May 1996 <a href="#">Abstract</a>	
<b>Using High Speed CMOS and Advanced CMOS in Systems With Multiple Vcc</b> (scla008.htm, 9 KB) 01 Apr 1996 <a href="#">Abstract</a> <a href="#">View Application Notes for NAND GATES</a>	
<b>User Guides</b>	
<b>Signal Switch Data Book (Rev. A)</b> (scdd003a.pdf, 19732 KB) 14 Nov 2003 <a href="#">Download</a>	
<b>LOGIC Pocket Data Book</b> (scyd013.pdf, 4835 KB) 05 Dec 2002 <a href="#">Download</a>	
<b>More Literature</b>	

**Logic Selection Guide 2005 (Rev. X)** (sdyu001x.pdf, 6909 KB)

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**Military Semiconductors Selection Guide 2004-2005 (Rev. D)** (sgyc003d.pdf, 964 KB)

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**Logic Cross-Reference (Rev. A)** (scyb017a.pdf, 2938 KB)

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