



**SIGNETICS
INTEGRATED CIRCUITS**

54H00 Series
74H00 Series

The 54H00/74H00 logic family is high speed TTL III. These transistor-transistor logic circuits were designed for general purpose applications. They have good external noise immunity and high fan-out.

MAXIMUM RATINGS

Rating	Value	Unit
Supply Voltage - V_{CC}	7.0	V
Input Voltage - V_{in}	5.5	V
Output Voltage - V_{out}	5.5	V
Operating Temperature Range	-55 to +125	°C

PACKAGING AVAILABLE

(See page 88):

C - 14-LEAD DUAL INLINE D - 14-LEAD FLAT PACK
E - 16-LEAD DUAL INLINE F - 16-LEAD FLAT PACK

TTL III

**FUNCTIONS AND
CHARACTERISTICS**

FUNCTION	TYPE/PKG	FAN-OUT	SUPPLY VOLTAGE
Quad 2-Input Positive NAND Gate	54H00/C,D	10	5
Quad 2-Input Positive NAND Gate (O.C.)	54H01/C,D	10	5
Quad 2-Input Positive AND Gate	54H08/C,D	10	5
Triple 3-Input Positive NAND Gate	54H10/C,D	10	5
Triple 3-Input Positive AND Gate	54H11/C,D	10	5
Dual 4-Input Positive NAND Gate	54H20/C,D	10	5
Dual 4-Input AND Gate	54H21/C,D	10	5
Dual 4-Input NAND Gate (O.C.)	54H22/C,D	10	5
8-Input Positive NAND Gate	54H30/C,D	10	5
Dual 4-Input Positive NAND Buffer	54H40/C,D	30	5
4-Wide 2-2-2-3 Input AND-OR-INVERT Gate	54H52/C,D	10	5
Expandable 2-2-2-3 Input AND-OR-INVERT Gate	54H53/C,D	10	5
Expandable 2-2-2-3 Input AND-OR-INVERT Gate	54H54/C,D	10	5
Expandable 2-Wide 4-Input AND-OR-INVERT Gate	54H55/C,D	10	5
Dual 4-Input Expander	54H60/C,D	—	4.5-5.5
Triple 3-Input Expander for AND-OR Gates	54H61/C,D	—	5
4-Wide 3-2-2-3 Input Expander for AOI Gates	54H62/C,D	—	4.5-5.5

TTL III FUNCTIONS AND CHARACTERISTICS (continued)

FUNCTION	TYPE/PKG	FAN-OUT	SUPPLY VOLTAGE
J-K Master-Slave Flip-Flop	54H71/C,D	10	5
J-K Master-Slave Flip-Flop	54H72/C,D	10	5
Dual J-K Master-Slave Flip-Flop	54H73/C,D	10	5
Dual Type D Edge-Triggered Flip-Flop	54H74/C,D	10-20	5
Dual J-K Master-Slave Flip-Flop	54H76/E,F	10	5
J-K Edge-Triggered Flip-Flop	54H101/C,D	10	5
J-K Edge-Triggered Flip-Flop with AND Inputs	54H102/C,D	10	5
Dual J-K Edge-Triggered Flip-Flop	54H103/C,D	10	5
Dual J-K Edge-Triggered Flip-Flop	54H106/E,F	10	5
Dual J-K Edge-Triggered Flip-Flop	54H108/C,D	10	5

PACKAGING INFORMATION

Per MIL-M-38510 Package Case Outline

All of Lansdale's products come in one of the following configurations. On each of the product pages in the catalog, there is a package box. The letters in that box correspond to one of the letters below. This is a guide to how the product is available.

LETTER	DESIGNATION	DESCRIPTION
A	F-1	14-LEAD FP (1/4" X 1/4")
B	F-3	14-LEAD FP (3/16" X 1/4")
C*	D-1	14-LEAD DIP (1/4" X 3/4")
D*	F-2	14-LEAD FP (1/4" X 3/8")
E*	D-2	16-LEAD DIP (1/4" X 7/8")
F*	F-5	16-LEAD FP (1/4" X 3/8")
G	A-1	8-LEAD CAN
H*	F-4	10-LEAD FP (1/4" X 1/4")
I*	A-2	10-LEAD CAN
J*	D-3	24-LEAD DIP (1/2" X 1 1/4")
K*	F-6	24-LEAD FP (3/8" X 5/8")
L	D-9	24-LEAD DIP (1/4" X 1 1/4")
M	A-3	12-LEAD CAN
P	D-4	8-LEAD DIP (1/4" X 3/8")
Q	D-5	40-LEAD DIP (9/16" X 2 1/16")
R	D-8	20-LEAD DIP (1/4" X 1 1/16")
S	F-9	20-LEAD FP (1/4" X 1/2")
V	D-6	18-LEAD DIP (1/4" X 15/16")
W	D-7	22-LEAD DIP (3/8" X 1 1/8")

FP (flat pack)
DIP (dual inline)
CAN (metal can)

* LANSDALE STANDARD PACKAGES

CONTACT FACTORY FOR OTHER PACKAGE QUOTES