

SIGNETICS INTEGRATED CIRCUITS
Schottky TTL 54S00-74S00 Series

Rating	Value	Unit
Supply Voltage - V_{CC}	+7.0	V
Input Voltage Range - V_I	-0.5 to +5.5	V
Output Voltage - V_{out}	+5.5	V
Operating Temperature Range	-55 to +125	°C
Storage Temperature Range	-65 to +150	°C

Function	Type/Pkg	Supply Current/typmA	Propagation Delay / typns
Quad 2-Input NAND Gate	54S00/C,D	15	3.0
Quad 2-Input NOR Gate	54S02/C,D	22	3.5
Quad 2-Input NAND Gate	54S03/C,D	13	5.0
Hex Inverter	54S04/C,D	22	3.0
Hex Inverter (Open Collector)	54S05/C,D	20	5.0
Quad 2-Input AND Gate	54S08/C,D	25	5.0
Triple 3-Input NAND Gate	54S10/C,D	12	3.0
Triple 3-Input AND Gate	54S11/C,D	19	5.0
Dual 4-Input NAND Gate	54S20/C,D	8	3.0
Quad 2-Input OR Gate	54S32/C,D	28	4.0
Quad 2-Input NAND Buffer	54S37/C,D	33	4.0
Quad 2-Input NAND Buffer (O.C.)	54S38/C,D	33	6.5
Dual 4-Input NAND Buffer	54S40/C,D	18	6.0
Dual 2-Wide 2-Input AND-OR-INVERT Gate	54S51/C,D	11	3.5
4-2-3-2 Input AND-OR-INVERT Gate	54S64/C,D	8	3.5
Dual D Type Flip-Flop	54S74/C,D	30	—
4-Bit Magnitude Comparator	54S85/E,F	73	12.0
Quad 2-Input Exclusive-OR Gate	54S86/C,D	50	7.0
Dual J-K Edge-Triggered Flip-Flop	54S112/E,F	15	—
Dual J-K Edge-Triggered Flip-Flop	54S113/C,D	15	—
13-Input NAND Gate	54S133/E,F	4	4.0

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12-Input NAND Gate (3-State)	54S134/E,F	10	5.0
Quad Exclusive OR/NOR Gate	54S135/E,F	65	9.0
1-of-8 Decoder/Demultiplexer	54S138/E,F	49	7.0
Dual 1-of-4 Decoder/Demultiplexer	54S139/E,F	60	6.0
Dual 4-Input NAND 40-Ohm Line Driver	54S140/C,D	10	4.0
8-Input Multiplexer	54S151/E,F	45	9.0
Dual 4-Line to 1-Line Multiplexer	54S153/E,F	45	9.0
Quad 2-Input Data Selector/Multiplexer	54S157/E,F	50	7.4
Quad 2-Input Data Selector/Multiplexer (Inverted)	54S158/E,F	40	6.0
4-Bit Up/Down Synchronous Counter	54S168A/E,F	100	—
4-Bit Up/Down Synchronous Counter	54S169A/E,F	100	—
16-Bit Multiple Port Register File	54S172/J,K	160	—
Hex D Type Flip-Flop	54S174/E,F	90	—
Quad D Type Flip-Flop	54S175/E,F	60	—
4-Bit Arithmetic Logic Unit	54S181/J,K	120	11.0
Lookahead Carry Generator	54S182/E,F	69	5.8
64-Bit Random Access Memory (3-State)	54S189/E,F	—	—
4-Bit Bidirectional Universal Shift Register	54S194/E,F	85	—
4-Bit Shift Register	54S195/E,F	70	—
16 x 5 FIFO	54S225/R	80	20.0
Octal Inverter Buffer (3-State)	54S240/R	93	4.5
Octal Buffer (3-State)	54S241/R	112	6.0
Quad Inverting Transceiver (3-State)	54S242/C,D	95	6.0

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Quad Transceiver (3-State)	54S243/C,D	120	7.0
Octal Buffer (3-State)	54S244/R	112	6.0
8-Input Multiplexer (3-State)	54S251/E,F	55	8.0
Dual 4-Input Multiplexer (3-State)	54S253/E,F	48	8.0
Quad 2-Line to 1-Line Data Selector/Multiplexer (3-State)	54S257/E,F	56	6.6
Quad 2-Line to 1-Line Data Selector/Multiplexer (3-State)	54S258/E,F	48	6.0
Dual 5-Input NOR Gate	54S260/C,D	22	4.0
Octal D Flip-Flop	54S273/R	109	—
9-Bit Odd/Even Parity Generator/Checker	54S280/C,D	67	16.0
256-Bit TTL RAM (256x1)	54S301/E,F	80	—
4-Bit Shifter (3-State)	54S350/E,F	71	7.0
Octal Transparent Latch w/3-State Outputs	54S373/R	105	10.0
Octal D Type Flip-Flop w/3-State Outputs	54S374/R	116	8.0
Octal D Type Flip-Flop (3-State)	54S534/R	116	8.0