



**SIGNETICS
INTEGRATED CIRCUITS**

8200 Series
8H00 Series

The 8200/8H00 Series MSI circuits are directly compatible with other TTL circuits including 5400/7400 Series devices.

**FUNCTIONS AND
CHARACTERISTICS**

MAXIMUM RATINGS

Rating	Value	Unit
Supply Voltage - V_{CC}	5.0 ± 7.0	V
Input Voltage - V_{in}	5.5	V
Output Voltage - V_{out}	7.0	V
Storage Temperature - T_{stg}	-65 to +175	$^{\circ}C$
Operating Temperature - T_A	-55 to +125	$^{\circ}C$

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

J - 24-LEAD DUAL INLINE

K - 24-LEAD FLAT PACK

TTL

FUNCTION	TYPE/PKG	t_{out}/t_{off} (typ)	TRANSFER RATE (min/MHz)	POWER CONSUMPTION (max)
Dual 5-Bit Buffer Register	8200/J,K	30/25	15	580
Dual 5-Bit Buffer Register	8201/J,K	30/25	15	580
10-Bit Buffer Register	8202/J,K	30/25	15	580
10-Bit Buffer Register	8203/J,K	30/25	15	580
8-Input Digital Multiplexer	8230/E,F	18	—	250
8-Input Digital Multiplexer	8231/E,F	18	—	250
8-Input Digital Multiplexer	8232/E,F	18	—	262
Quad 2-Input Multiplexer	8234/E,F	16/27	—	310
2-Input 4-Bit Digital Multiplexer	8235/E,F	16/27	—	310
Quad Exclusive-OR	8241/C,D	17/11	—	300
Quad Exclusive-NOR	8242/C,D	14/20	—	250
8-Bit Position Scaler	8243/J,K	20	—	500
Binary-to-Octal Decoder	8250/C,D	20/20	—	125
BCD-to-Decimal Decoder	8251/E,F	20/20	—	135
BCD-to-Decimal Decoder	8252/E,F	20/20	—	135
Arithmetic Logic Element	8260/J,K	14	—	400
Fast Carry Extender	8261/C,D	16	—	158

TTL FUNCTIONS AND CHARACTERISTICS (continued)

FUNCTION	TYPE/PKG	t_{on}/t_{off} (typ)	TRANSFER RATE (min/MHz)	POWER CONSUMPTION (max)
8-Bit Parity Generator & Checker	8262/C,D	35/38	—	370
3-Input 4-Bit Digital Multiplexer	8263/J,K	17/25	—	420
3-Input 4-Bit Digital Multiplexer	8264/J,K	17/25	—	475
Quad 2-Input Multiplexer	8266/E,F	20/27	—	275
2-Input 4-Bit Digital Multiplexer	8267/E,F	20/27	—	275
4-Bit Comparator	8269/C,D	40	—	278
4-Bit Shift Register	8270/C,D	25	15	247
4-Bit Shift Register	8271/E,F	25	15	344
10-Bit Shift Register	8273/E,F	27/21	25	567
10-Bit Parallel In/Serial Out Shift Register	8274/E,F	27/21	25	567
Quad Bistable Latch	8275/E,F	16	—	265
Dual 8-Bit Shift Register	8277/E,F	25	15	540
BCD Decade Counter/Storage Element	8280/C,D	15	—	236
4-Bit Binary Counter/Storage Element	8281/C,D	15	—	236
Binary Hexadecimal Up/Down Counter	8284/C,D	—	—	420
BCD Decade Up/Down Counter	8285/C,D	32/25	20	420
Divide-by-Twelve Counter/Storage	8288/C,D	20/25	20	236
Presetable High-Speed Decade Counter	8290/C,D	31/33	40	255
Presetable High-Speed Binary Counter	8291/C,D	31/33	40	255
Presetable Low-Speed Decade Counter	8292/C,D	80	5	69
Presetable Low-Speed Binary Counter	8293/C,D	80	5	69
Dual 4-Input NAND Gate	8H16/C,D	7	—	46
Dual J-K Binary Element	8H20/C,D	10/8	—	90
Dual J-K Binary Element	8H21/C,D	10/8	—	90
Dual J-K Binary Element	8H22/C,D	10/8	—	90
Triple 3-Input NAND Gate	8H70/C,D	7	—	46
Quad 2-Input NAND Gate	8H80/C,D	7	—	46