MHTL MC660 Series (–30 to –70°C)

Motorola's MHTL integrated circuits are especially designed to meet the requirements of industrial applications because of the outstanding noise immunity. MHTL circuits provide error-free operation in high noise environments far beyond the tolerance of other integrated circuit families. Multifunction packages and broad operating temperature range further tailor this device family to the industrial designer's requirements.

FUNCTIONS AND CHARACTERISTICS (V_{CC} = 15 V ± 1.0 Vdc, T_A = 25°C).

Function	Type① –30 to –75°C	Loading Factor Each Output	Propagation Delay ns typ	Pow. Dis. mW typ/pkg	Case
Expandable Dual 4-Input NAND Gate (active pullup)	MC660	10	110	88/26 2	632
Expandable Dual 4-Input NAND Gate (passive pullup)	MC661	10	125	88/26 2	632
Expandable Dual 4-Input Line Driver (NAND)	MC662	30	140	180/26 2	632
Expandable Dual 4-Input NAND Gate (active pullup)	MC660	10	110	88/26 2	632
Expandable Dual 4-Input NAND Gate (passive pullup)	MC661	10	125	88/26 2	632
Expandable Dual 4-Input Line Driver (NAND)	MC662	30	140	180/26 2	632
Dual J-K Flip-Flop	MC663	9	3.0 MHz 3	200	632
Master-Slave R-S Flip-Flop	MC664	8	3.0 MHz 3	160	632
Triple Level Transistor	MC665	MDTL = 8 MTTL III=5.5 MRTL = 5	40	83 (MDTL) 104 (MRTL)	632
Triple Level Translator	MC666	10	75	105	632
Dual Monostable Multivibrator	MC667	10	140	240	632
Quad 2-Input NAND Gate (passive pullup)	MC668	10	125	176/52 2	632
Dual 4-Input Expander	MC669				632
Triple 3-Input NAND Gate (passive pullup)	MC670	10	125	132/39 2	632
Triple 3-Input NAND Gate (active pullup)	MC671	10	110	132/39 2	632
Quad 2-Input NAND Gate (active pullup)	MC672	10	110	176/52 2	632
Dual 2-Input AND-OR-INVERT Gate (active pullup)	MC673	10	110	160/50 2	632
Dual 2-Input AND-OR-INVERT Gate (passive pullup)	MC674	10	125	160/50 2	632
Dual Pulse Stretcher	MC675	10	150 (pins 1,6) 110 (pins 5,6)	180	632
BCD-To-Decimal Decoder-Driver	MC676			380	620
Hex Inverter With Strobe (active pullup)	MC677	10	110	246/96 2	620
Hex Inverter With Strobe (without output resistors)	MC678	10	125	192/96 2	620
Dual Lamp//Line Driver	MC679,B	125	0.5 μs typ	250/30 2	632
Hex Inverter (active pullup)	MC680	10	110	246/96 2	632
Hex Inverter (open collector)	MC681	10	125	192/96 2	632
Quad Latch	MC682	10	250	375	620
Quad 2-Input Exclusive OR Gate	MC683	10		380	620
Decade Counter	MC684	10	0.5 MHz 3	480	620
Binary Counter	MC685	10	0.5 MHz 3	480	620
4-Bit Shift Register	MC686	10	0.5 MHz 3	480	620
Dual J-K Flip-Flop	MC688	10	2.5 MHz 3	375	620
Hex Inverter (high voltage)	MC689	10	150	173/55 2	632
Hex Inverter (active pullup)	MC690	10	150	173/55 2	632
Hex Inverter/Interface Element	MC691	10	300 (t– –)	500/150 2	632
Dual Interface Element, Line Driver/Receiver	MC696	10@10V V_{CC} 15@25V V_{CC}	750	225/60 2	620
Dual Power AND Gate	MC699	10	650 (pins 1,6) 350 (pins 1,3)	650/350 2	675

1 L suffix denotes Dual In-Line Ceramic Package, P denotes Dual In-Line Plastic Package, (i.e., MC660L = Dual In-Line Ceramic, MC660P = Dual In-Line Plastic Package)

2 Inputs High/Input Low

3 f_{Tog}

Cases