

DESCRIPTION

The 10191 is a Hex ECL to MST (IBM 370) translator. With a standard 10,000 series logic level on the input, the output responds with an identical MST logic level at the output.

In addition, the translators have a common enable line which drives all six outputs to the low state when an ECL logic "1" level is present on the line.

The 10191 is a companion device to the 10190 which is an MST to ECL translator. With these two devices, a complete, high-speed interface is available to communicate between a standard 10,000 series ECL system and a standard MST system.

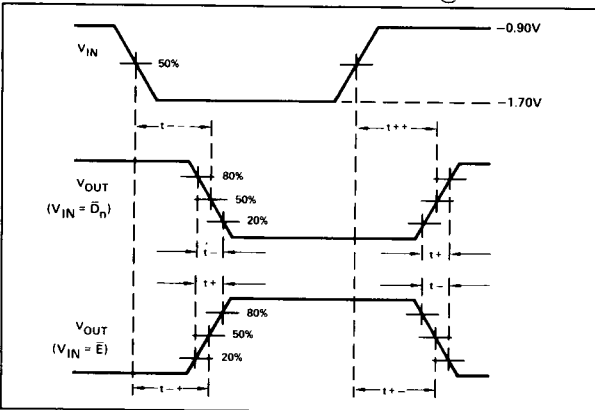
FEATURES

- High speed; propagation delay = 2.2ns TYP
- Six translators per package
- 90 OHM output drive capability
- Common enable input
- High impedance inputs with 50K pulldown resistors
- Open emitter outputs

TRUTH TABLE

\bar{E}	D_n	O_n
0	0	0
0	1	1
1	X	0

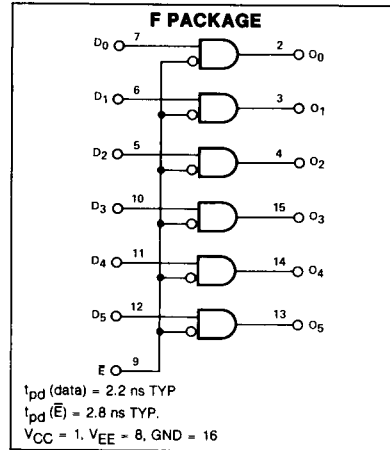
PROPAGATION DELAY WAVEFORMS @ 25°C



NOTES:

1. Each ECL 10,000 series device has been designed to meet the DC specifications shown in the test table, after thermal equilibrium has been established. The circuit is in a test socket or mounted on a printed circuit board and transverse air flow greater than 500 linear fpm is maintained. Voltage levels will shift approximately 4 mV with an air flow of 200 linear fpm. Outputs are terminated through a 90Ω to gnd and a 845Ω to VEE.
2. For AC tests, all input and output cables to the scope are equal lengths of 50-ohm coaxial cable. Wire lengths should be < 1/4 inch from TP_{IN} to input pin and TP_{OUT} to output pin. A 50-ohm termination to ground is located in each scope input. Unused outputs are connected to a 90-ohm resistor to ground and a 845Ω to VEE.
3. Test procedures are shown for only one input or set of input conditions. Other inputs are tested in the same manner.

LOGIC DIAGRAM



SWITCHING TIME TEST CIRCUIT

