

**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.

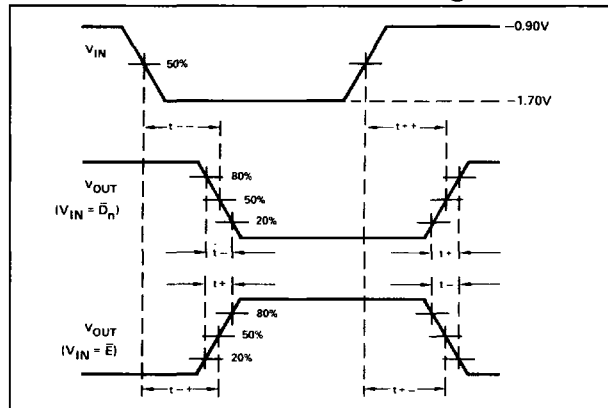
**FEATURES**

- 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 <sub>n</sub>	O <sub>n</sub>
0	0	0
0	1	1
1	X	0

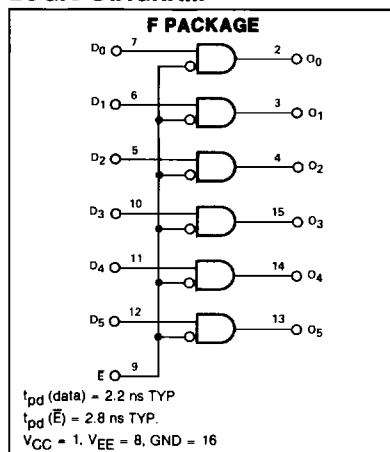
**PROPAGATION DELAY WAVEFORMS @ 25°C**



**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 V<sub>EE</sub>.
2. For AC tests, all input and output cables are equal lengths of 50-ohm coaxial cable. Wire lengths should be < 1/4 inch from TP<sub>IN</sub> to input pin and TP<sub>OUT</sub> 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 V<sub>EE</sub>.
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**

