



$V_{CC1}$  = Pin 1

$V_{CC2}$  = Pin 16

$V_{EE}$  = Pin 8

$P_D$  = 405 mW typ/pkg (No Load)

$t_{pd}$  = 2.5 ns typ

TRUTH TABLE

Inputs		Outputs	
D <sub>in 1</sub>	D <sub>in 2</sub>	Bus	D <sub>Out</sub>
L	L	V <sub>Bus0</sub>	H
H	L	V <sub>BusH</sub>	H
L	H	V <sub>BusH</sub>	H
H	H	V <sub>BusH</sub>	H
L	L	V <sub>BusH</sub>	L
H	L	V <sub>BusL</sub>	L
L	H	V <sub>BusL</sub>	L
H	H	V <sub>BusL</sub>	L

### Dual Simultaneous Bus Transceiver

The MC10194 is a dual line driver/receiver which is capable of transmitting and receiving full duplex digital signals on a high speed bus line. Because of the current source line driver, two independent messages may be transmitted on one line at the same time.

The MC10194 is designed to work with a wide range of line impedances by connecting a resistor equal to one half the line impedance between the  $R_{E1}$  and  $R_{E2}$  inputs and  $V_{EE}$ . Each driver in the circuit will drive lines down to 75 ohms or the two drivers may be operated in parallel for lines down to 37 ohms. The data inputs and outputs on the MC10194 are fully compatible with other MECL 10,000 circuits.