

65245 OCTAL BUS TRANSCEIVER WITH 3-STATE OUTPUTS

DESCRIPTION

The 65245 is an octal bus transceiver designed for asynchronous, bi-directional communication between data busses.

The level of the Direction input (DIR) allows data transmission from bus A to bus B or from bus B to bus A. The Enable input (\bar{E}) can be used to provide isolation between the busses.

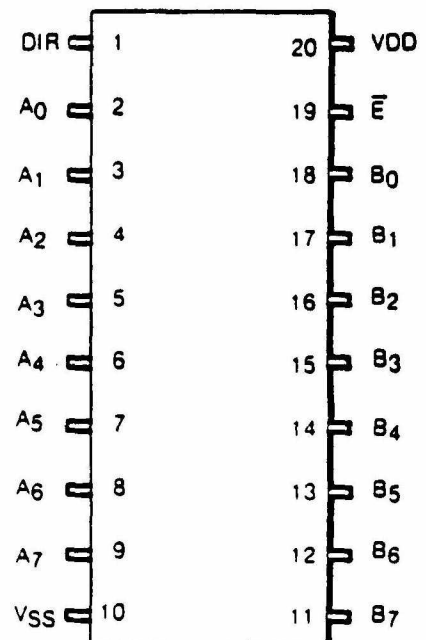
The device is fully TTL and CMOS compatible, and is pin-for-pin compatible with the 74LS245.

TRUTH TABLE

\bar{E}	DIR	OUTPUT
L	L	B data to A bus
L	H	A data to B bus
H	X	Isolation

L = LOW level
H = HIGH level
X = Irrelevant

PIN CONFIGURATION 65245



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
SUPPLY VOLTAGE	V _{CC}	-0.3 to +7.0	Vdc
INPUT VOLTAGE	V _{IN}	-0.3 to +7.0	Vdc
OPERATING TEMPERATURE	T _A	0 to +70	°C
STORAGE TEMPERATURE	T _{STG}	-55 to +150	°C

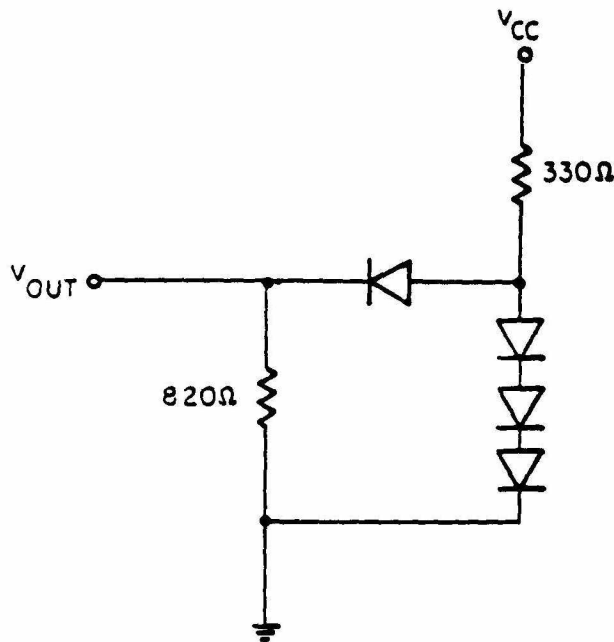
This device contains circuitry to protect the inputs against damage due to high static voltages, however, it is advised that normal precautions be taken to avoid application of any voltage higher than maximum rated voltages to this circuit.

ELECTRICAL CHARACTERISTICS (V_{CC} = 5.0V ± 5%, V_{SS} = 0, T_A = 0° to +70°C)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT
Input High Voltage	V _{IH}	2.0	—	—	Vdc
Input Low Voltage	V _{IL}	—	—	0.8	Vdc
Output High Voltage V _{CC} =MIN, V _{IH} =2.0V I _{OH} = -3mA I _{OH} = -15mA	V _{OH}	2.4 2.0	— —	— —	Vdc
Output Low Voltage V _{CC} =MIN, V _{IL} = 0.8V I _{OL} = 12mA I _{OL} = 24mA	V _{OL}	—	— —	0.4 0.5	Vdc
High-Impedance Output Current E = 2.0V, V _{CC} = MAX V _{out} = 2.7V	I _{OZH}	—	—	50	μA
High-Impedance Output Current E = 2.0V, V _{CC} = MAX V _{out} = 0.4V	I _{OZL}	—	—	-50	μA
High-Level Input Current V _{CC} =MAX, V _{IH} = 2.7V	I _{IH}	—	20	100	nA
Low-Level Input Current V _{CC} = MAX, V _{IL} = 0.4V	I _{IL}	—	20	-100	nA
High-Level Output Current V _{CC} =NOM, V _{out} = 2.4V	I _{OH}	—	—	-15	mA
Low-Level Output Current V _{CC} = NOM, V _{out} = 0.4V	I _{OL}	—	—	24	mA
Power Supply Current Outputs High Outputs Low Outputs Hi-Z	I _{CC}	—	47 44 56	64 100 105	mA

AC CHARACTERISTICS (VCC=5.0V, VSS=0V, TA=+25°C)

CHARACTERISTIC	SYMBOL	CONDITIONS	MIN.	TYP.	MAX.	UNIT
Propagation Delay Data to Output	TPLH	SEE BELOW	—	—	40	ns
	TPHL		—	—	40	ns
Output Enable Time	TPZH		—	—	40	ns
	TPZL		—	—	40	ns
Output Disable Time	TPHZ		—	—	40	ns
	TPLZ		—	—	40	ns



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