

048229

HS-C²MOS™ INTEGRATED CIRCUITS

PRODUCT PREVIEW

OCTAL BUS TRANSCEIVER 3-STATE

DESCRIPTION

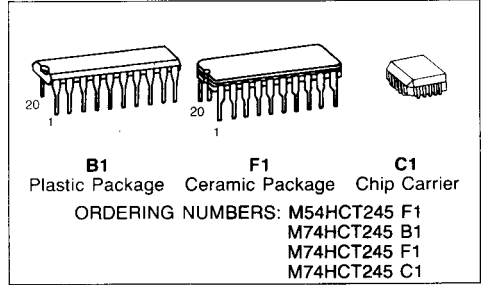
The M54/74HCT245 utilize silicon gate C²MOS technology to achieve operating speed equivalent to LSTTL parts.

Along with the low power dissipation and high noise immunity of standard CMOS integrated circuit, it has a fan-out of 15 LSTTL loads.

This IC¹ is intended for two-way asynchronous communication between data buses, the direction of data transmission being determined by the DIR input.

The enable input (\bar{G}) can be used to disable the device so that the buses are effectively isolated. All inputs are equipped with protection circuits against static discharge or transient excess voltage. This integrated circuit has totally compatible, input and output characteristic, with standard 54/74 LSTTL logic families.

M54HCT/74HCT devices are designed to directly interface HSC²MOS systems with TTL and NMOS components. These devices are also plug in replacements for LSTTL devices giving a reduction of power consumption.



FEATURES

- Low Power Dissipation
 $I_{CC} = 4 \mu A$ (Max.) at $T_A = 25^\circ C$
- High Noise Immunity
 $V_{NIH} = V_{NIL} = 28\% V_{CC}$ (Min.)
- Output Drive Capability
15 LSTTL Loads
- Symmetrical Output Impedance
 $|I_{OH}| = I_{OL} = 6 mA$ (Min.)
- Balanced Propagation Delays
 $t_{PLH} = t_{PHL}$
- Pin and Function compatible with 54/74LS245

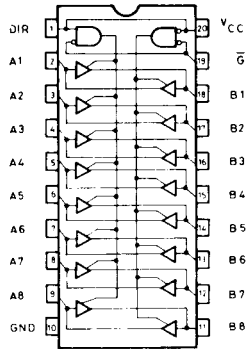
TRUTH TABLE

INPUT		FUNCTION		OUTPUT
\bar{G}	DIR	A BUS	B BUS	
L	L	OUTPUT	INPUT	A = B
L	H	INPUT	OUTPUT	B = A
H	*	Z	Z	Z

*: "H" or "L"

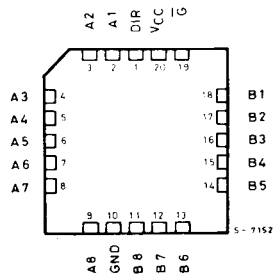
Z: High Impedance

PIN CONNECTIONS (top view)



Dual in line

CHIP CARRIER



NC = No Internal Connection