

DM54153/DM74153(SN54153/SN74153) dual 4:1 multiplexer

general description

The DM54153/DM74153 can be operated as a dual 4:1 or single 4:2 multiplexer, data selector or parallel-to-serial converter. Several devices can be operated in cascade to form N-line-to-1-line and N-line-to-n-line switching subsystems. Features are:

- Common addressing, separate strobes
- Low propagation delays, typically 14 ns for data
- Fanout of 20 in high-level state facilitates connection of used and unused outputs
- Typical power dissipation of 170 mW
- Input clamp diodes

- TTL and DTL compatible.

operation

A 2-bit binary address selects one of four data inputs to be switched to the single output of both halves. Each half, however, has a separate strobe which holds the output of that half low when the strobe is taken to the logical "1" level. Thus, eight data inputs can be switched in a dual 4:1 mode, or four data lines connected to both sides may be switched in a 4:2 mode.

connection diagram

