

# MM54HC4016/MM74HC4016 Quad Analog Switch

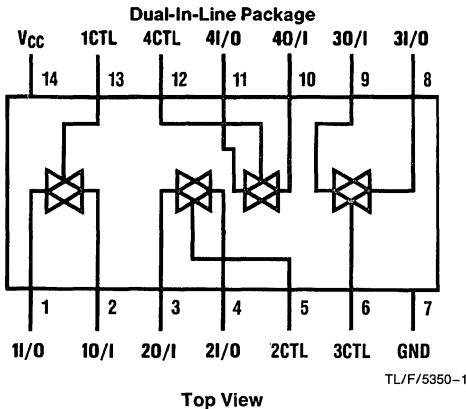
## General Description

These devices are digitally controlled analog switches implemented in advanced silicon-gate CMOS technology. These switches have low "on" resistance and low "off" leakages. They are bidirectional switches, thus any analog input may be used as an output and vice-versa. The '4016 devices allow control of up to 12V (peak) analog signals with digital control signals of the same range. Each switch has its own control input which disables each switch when low. All analog inputs and outputs and digital inputs are protected from electrostatic damage by diodes to  $V_{CC}$  and ground.

## Features

- Typical switch enable time: 15 ns
- Wide analog input voltage range: 0–12V
- Low "on" resistance: 50Ω typ.
- Low quiescent current: 80 μA maximum (74HC)
- Matched switch characteristics
- Individual switch controls

## Connection Diagram



## Truth Table

Input	Switch
CTL	I/O-O/I
L	"OFF"
H	"ON"

See the CMOS Logic Databook  
for complete specifications

**Order Number MM54HC4016\* or MM74HC4016\***

\*Please look into Section 8, Appendix D for availability of various package types.

## Schematic Diagram

