MM54HC4066/MM74HC4066 Quad Analog Switch

General Description
These devices are digitally controlled analog switches utilizing 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. Also the 4066 switches contain linearization circuitry which lowers the "on" resistance and increases switch linearity. The 4066 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 VCC and ground.

Features
- Typical switch enable time: 15 ns
- Wide analog input voltage range: 0–12V
- Low "on" resistance: 30 typ. (4066)
- Low quiescent current: 80 µA maximum (74HC)
- Matched switch characteristics
- Individual switch controls

Connection Diagram

![Connection Diagram](image)

Truth Table

<table>
<thead>
<tr>
<th>Input</th>
<th>Switch</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTL</td>
<td>I/O–Q/I</td>
</tr>
<tr>
<td>L</td>
<td>&quot;OFF&quot;</td>
</tr>
<tr>
<td>H</td>
<td>&quot;ON&quot;</td>
</tr>
</tbody>
</table>

See the CMOS Logic Databook for Complete Specifications

Schematic Diagram

![Schematic Diagram](image)