1. Introduction

The objective of this electronic driving board is to demonstrate the full functionality of the 1x4 MEMS switch. The interface for this board is TTL. A wall-plug power supply is accompanied by the board. For system level applications, we provide a turn-key solution with various interface options.

2. Board Layout

Top View
3. **TTL Connection**

The connector is J6 (3M Manufacturer part number: 150230-6002-RB).
1. TTL in logic “0”, or “1”, depends on the truth table.
2. NC
3. TTL in logic “0”, or “1”, depends on the truth table.
4. NC
5. TTL in logic “0”, or “1”, depends on the truth table.
6. NC
7. NC
8. NC
9. NC
10. NC
11. NC
12. NC
13. NC
14. NC
15. NC
16. NC
17. GND Power supply (-)
18. +5V in Power supply (+)
19. GND
20. NC
21. GND
22. NC
23. GND
24. NC
25. GND
26. NC
27. GND
28. NC
29. GND
30. NC

Note: NC --- No connect
GND --- connect to ground
+5V --- +5V DC +/- 0.1V input
TTL in --- TTL signal input pins. Logic “0” is <= 0.8V and logic “1” is >= 2.8V
J7 is totally NC.

4. Truth Table

This truth table is only for Agiltron MEMS 1x4 Non-Latching Switch.

<table>
<thead>
<tr>
<th>Optical Path</th>
<th>Pin 1</th>
<th>Pin 3</th>
<th>Pin 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input to output1</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Input to output2</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>----------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Input to output3</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Input to output4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: + ---- logic “1”  
- --- logic “0”

Pin1, 3, 5 are for J6 connector

1) Pin of the board: