Optical Switch Evaluation Kit
Circuit Board and Software (MEMS)

(Protected by U.S. patent 6823102 and pending patents)

Product Description
The SW-DR-3 optical switch evaluation kit is comprised of an evaluation board, software, a power supply, and a computer interface cable. The evaluation board integrates standard RS232 port or USB based virtual COM port plus TTL interfaces, allowing the user to easily create flexible and customized control logic configurations. It features real time control and supports Agiltron MEMS Latch™) 1X4 and 1x8 switches, 1x2/2x2 switches will be supported on next version. A user-friendly Windows™ application program is included for multi-purpose switch testing and demonstration.

The standard driver controls one individual switch. Drivers that control multiple switches also are available, please call Sales at (781) 935-1200 for more information.

Features
- RS232 or USB based Virtual COM Port plus TTL Interface
- Real time high speed
- Flexible ports configuration
- User-friendly software
- High reliability

Electrical Specifications

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Min</th>
<th>Normal</th>
<th>Max</th>
<th>Unit</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Control Channels</td>
<td>1</td>
<td>8</td>
<td></td>
<td></td>
<td>12V Supply voltage</td>
</tr>
<tr>
<td>Switching Peak Current</td>
<td>1.5</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sustainable Switching Current</td>
<td>0.4</td>
<td>A</td>
<td></td>
<td></td>
<td>Average switching current, continuous repetition, 12V Supply voltage</td>
</tr>
<tr>
<td>Output Pulse Width</td>
<td>8</td>
<td>15</td>
<td>ms</td>
<td></td>
<td>Driving pulse duration, software adjustable</td>
</tr>
<tr>
<td>Power Supply Voltage</td>
<td>5.0</td>
<td>12.0</td>
<td>16.0*</td>
<td>V</td>
<td>Hot pluggable. &lt;1.5A inrush current</td>
</tr>
<tr>
<td>Power Supply Current (No Switching)</td>
<td>50</td>
<td>mA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RS232</td>
<td>-5.2V</td>
<td>+5.2V</td>
<td></td>
<td>V</td>
<td>Pin 2 and 3 crossover cable</td>
</tr>
</tbody>
</table>

TTL Interface: Compatible with Standard TTL Logic Level
Electrical Connector Type: Male DB9 / USB B-type (VCP)
Board Dimension: (L)60mm x (W)60mm x (H)15mm

*Over this value will damage the device

Applications & Compatibility
- 1x4 MEMS Latch™ Switch
- 1x8 MEMS Latch™ Switch
- 1x2/2x2 MEMS Latch™ Switch (will be supported on next version)

Control Modes
RS232/ VCP Control
For customized software development utilizing Command/Response format interface. Also used with the supplied Windows™-compatible software for switch configuration and programmable run time testing.

TTL Control
Standard TTL logic level with TTL logic timing diagram. TTL emulating DIP switches are available on the circuit board.

15 Presidential Way, Woburn, MA 01801  Tel: (781) 935-1200 Fax: (781) 935-2040 www.agiltron.com
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Swich Type

<table>
<thead>
<tr>
<th>Function</th>
<th>Size (mm)</th>
<th># of Switch</th>
<th>Control Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEMS</td>
<td>1x1=11</td>
<td>1 switch=11</td>
<td>RS232 &amp; TTL=1</td>
</tr>
<tr>
<td></td>
<td>1x2=12</td>
<td>2 switches=22</td>
<td>USB (VCP) &amp; TTL=2</td>
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<tr>
<td></td>
<td>2x1=21</td>
<td>3 switches=33</td>
<td></td>
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<tr>
<td></td>
<td>1x4=14</td>
<td>.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4x1=41</td>
<td>.</td>
<td></td>
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<tr>
<td></td>
<td>1x8=18</td>
<td>.</td>
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<tr>
<td></td>
<td>8x1=81</td>
<td>9 switches=99</td>
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<tr>
<td></td>
<td>Special=00</td>
<td>Special=0</td>
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</table>

Ordering Information
Optical Switch Evaluation Kit
Circuit Board and Software

**Power Connector**

P/N: SC1313-ND
Power Barrel Connector Jack 2.00mm ID (0.079”),
5.50mm OD (0.217”) Through Hole, Right Angle

12V Wall Plug DC Power Supply Interface