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 MEMSLatch™) 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.

RS232   USB(VCP)

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

Parameters	Min	Normal	Max	Unit	Notes
Independent Control Channels	1		8		
Switching Peak Current			1.5	A	12V Supply voltage
Sustainable Switching Current			0.4	A	Average switching current, continuous repetition, 12V Supply voltage
Output Pulse Width	8		15	ms	Driving pulse duration, software adjustable
Power Supply Voltage	5.0	12.0	16.0*	V	
Power Supply Current (No Switching)			50	mA	Hot pluggable. <1.5A inrush current
RS232	-5.2V		+5.2V	V	Pin 2 and 3 crossover cable
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 MEMSLatch™ Switch
- 1x8 MEMSLatch™ Switch
- 1x2/2x2 MEMSLatch™ 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.
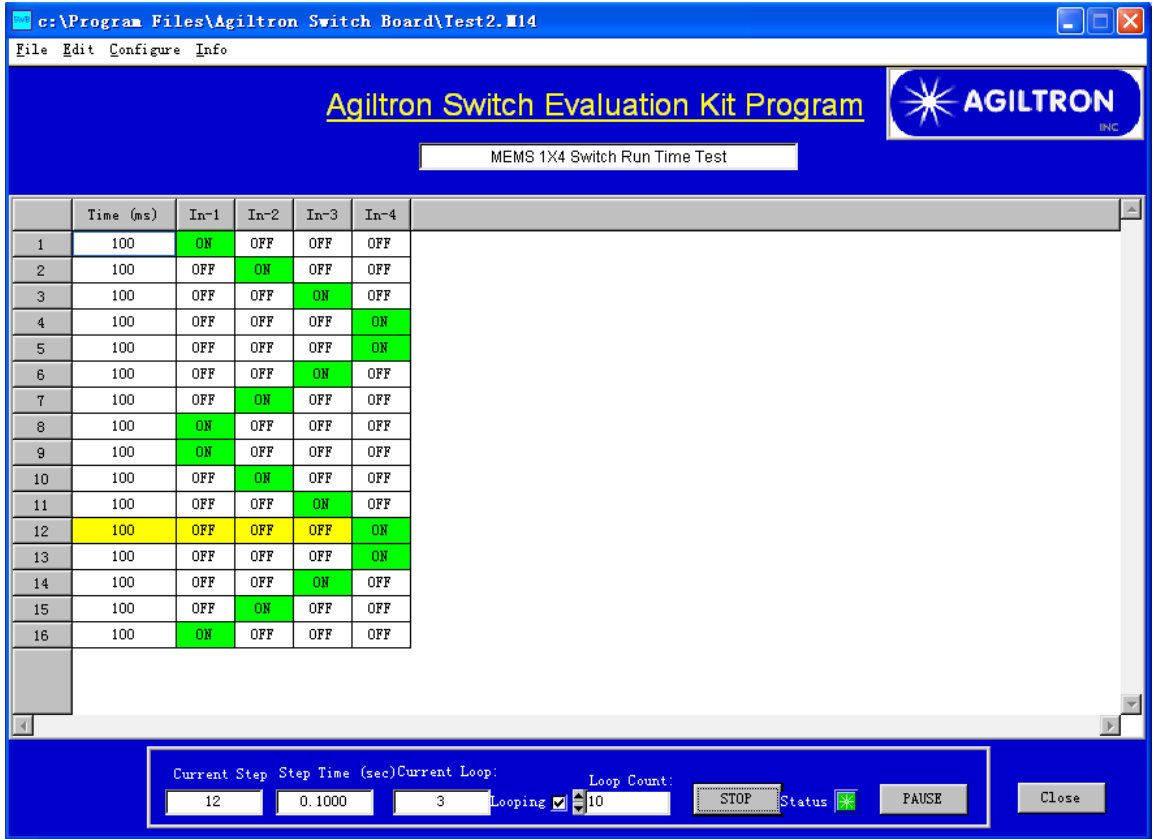
TTL Control   Standard TTL logic level with TTL logic timing diagram. TTL emulating DIP switches are available on the circuit board.

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Graphic Example (1x4)

Ordering Information

SWDR-	4				1				
	Switch Type	Function	Latching or not	Repeat rate	Footprint	# of Switch	Control Mode	DC supply
	MEMS Switch = 4	1x1 = 1a 1x2 = 2a 2x1 = 2b 2x2 = 22 1x4 = 4a 4x1 = 4b 1x12 = 12 1xM = M (M >9) Special=00	Latching = 1 Non-latching =2	20Hz = 1 Special = 0	Standard = 1 Special = 0	1 switch=1 2 switches=2 3 switches=3 N switches=N Special=0	TTL=1 USB =2 RS232 =3 TTL & USB = 4 RS232 & USB = 5 RJ45 = 6 Special=0	12VDC =1 5VDC[1] =2 Special =0

[1]: 5V DC supply may not be available for certain switch. Please have a consultant with sale's manager.

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