# TRIPLE LOAD SWITCH (Si1869DH) - BM008

OPEN SOURCE HARDWARE MODULE



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# **Contact Solutions Cubed, LLC for your custom designs:**

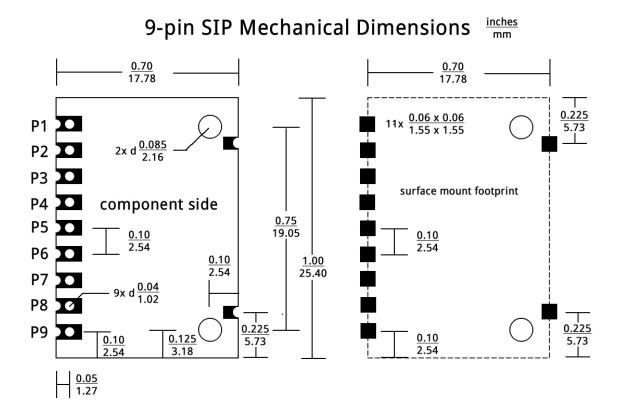
Solutions Cubed is an innovative electronic design firm. We have created successful designs for a myriad of industries including mass produced consumer products, deep-sea robotic components, and encrypted encoders for the banking industry. We love meeting new customers and are interested in hearing about your design needs.

### **Product Description:**

This breakout board carries three Vishay SI1869DH high-side load switches. Individual logic inputs allow you to switch power to three different loads. Use it as a power distribution bus. Or use it to control fans, motors, heaters or other DC loads.

- 1.8V-20V voltage switching
- 1.5V to 8V control input voltage
- Up to 1A per switch (package power dissipation should not be exceeded)
- Logic level control and LED indicator for each switch
- Two separate voltage busses to switch separate power supplies

### **Dimensions:**



# **Specifications:**

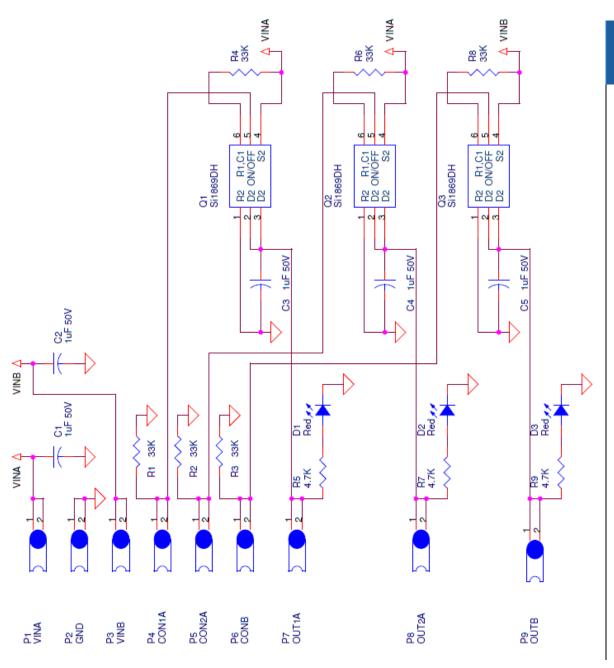
Characteristic	Min	Тур	Max	Unit	Notes
Operating voltage	1.8		20	V	VIN
Operating current			1.2	Α	higher CONxx pin voltages result in lower Rdson and lower power dissipation (higher currents)
Switch on resistance	0.165		0.303	Ω	MOSFET on resistance (Rdson)
Control pin ON voltage	1.5		8	V	
Maximum power dissipation per switch		1		W	
Operating temperature	-55		+150	°C	

### **Pin Functions and Notes**

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#	Name	Maximum	Notes				
		Voltage					
1	VINA	20V	Power input: power input for CON1A and CON2A switches				
2	GND	0V	Ground return for the power supply				
3	VINB	20V	Power input: power input for CONB switche				
4	CON1A	8V	Logic input: logic high connects VINA to OUT1A				
5	CON2A	8V	Logic input: logic high connects VINA to OUT2A				
6	CONB	8V	Logic input: logic high connects VINB to OUTB				
7	OUT1A	NA	Power output: switch output controlled by CON1A, connects to VINA				
			when enabled				
8	OUT2A	NA	Power output: switch output controlled by CON2A, connects to VINA				
			when enabled				
9	OUTB	NA	Power output: switch output controlled by CONB, connects to VINB when				
			enabled				

# **User Notes/Tips**

- For additional information on the SI1869DH visit Vishay's web site and review the datasheet.
- Visit <u>www.solutions-cubed.com</u> for application notes related to this module.



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# DUAL VOLTAGE TRIPLE LOAD SWITCH

