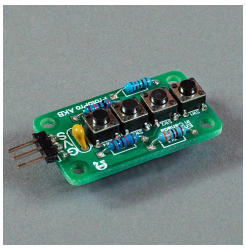
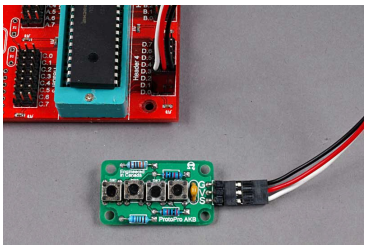
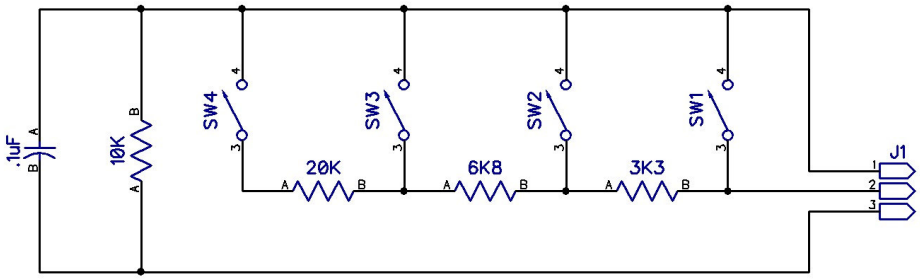
ProtoPro AKB Data Sheet



Usage



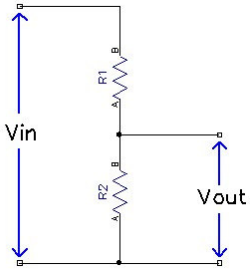
OMS ProptoPro AKB sensor module was designed to provide a simple means to attach 4 switches to a single analog MCU input. It is essentially a 4-value voltage divider such that each switch produces a different percentage of the supply voltage on the Signal output. It has a standard SVG (Signal, Voltage, Ground) module interface and is normally connected via a 3-wire Dupont female-to-female cable or 3 female-to-female jumpers directly to an analog capable input on the MCU development board.



ProtoPro AKB schematic

Referring to the above schematic, the connections to J1 are; Pin 1 – Signal, Pin 2 – Voltage and Pin 3 – Ground.

Output (S) as a percentage of supply voltage (V) (+/- 10%)



Switch	Divider Values	Signal Out
SW1	R1=0, R2=10K	~100% of V
SW2	R1=3.3K, R2=10K	~75% of V
SW3	R1=10.1, R2=10K	~50% of V
SW4	R1=30.1, R2=10K	~25% of V

The values are calculated using the standard voltage divider formula Vout=R2/(R1+R2)*Vin

Specifications

Electrical	Supply Voltage:	0V – 25V
Physical	Length:	36mm
	Width:	21mm
	Height:	9mm
	Weight:	~ 4g
	Operating Temp.	0°C – 85°C

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