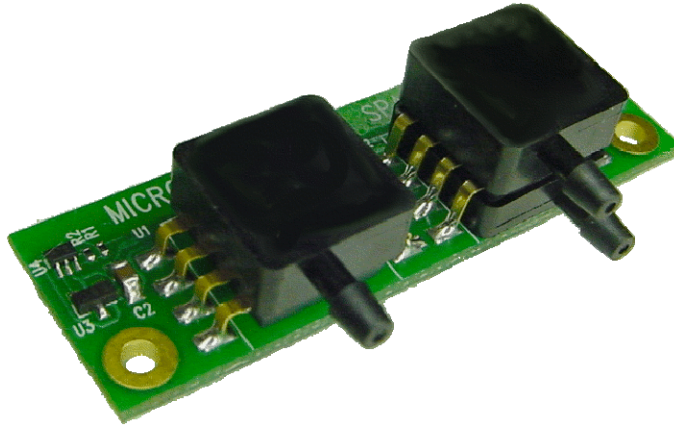


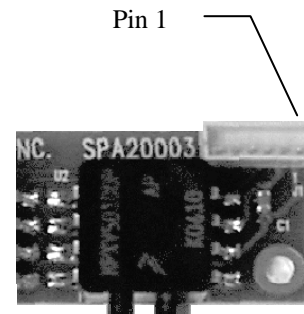


The Microbotics Dual Barometer Board provides altitude and airspeed sensing for air vehicles. A pair of temperature compensated pressure sensors allow absolute and differential pressure sensing. The altitude sensor, Freescale MPXAZ6115A, senses absolute pressure from 15 to 115 kPa (2.2 to 16.7 psi). The airspeed sensor, Freescale MPXV5010DP, senses differential pressure from 0 to 10 kPa (0 to 1.45 psi). A National Semiconductor LM50 is included on board for temperature sensing from -40C to +125C. The interface board requires power from a 5 VDC source. Sensor output is analog, 0.2 to 4.7 VDC. Please see the sensor datasheets for more details.



The interface connector on the barometer board is a 6 pin, 1.5mm, friction lock header (JST Connector part number B6B-ZR). Pin 1 is closest to the edge of the board and is indicated by '1' drawn on the top silk screen. The pins of the connector are assigned as:

Pin	Function
1	Power In (5 VDC)
2	Power Return (Ground)
3	Airspeed signal (from MPX5010)
4	Altitude signal (from MPX4115A)
5	Temperature signal (from LM50)
6	Signal ground



- Board dimensions: 16.5 mm deep by 50.8mm wide (0.65" x 2.0")
- Mounting holes: 2 holes at front edge, 44.5 mm (1.75") pattern, sized for #2 screws.
- Total dimensions: 22.8 mm (0.9") deep from tips of sensors to back of board  
11 mm (0.43") high without mating connector