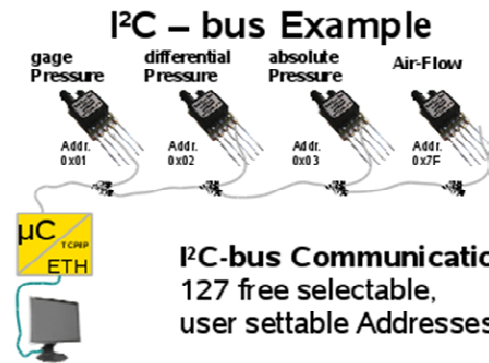
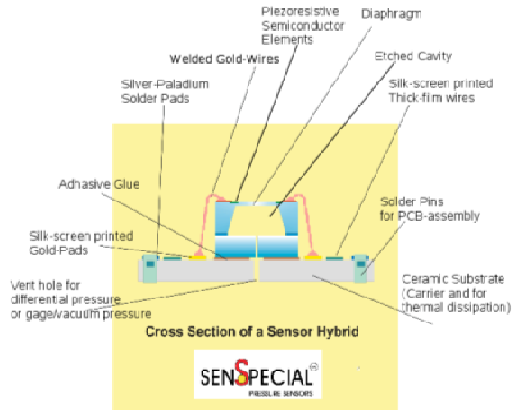


SensDev GmbH

SENSDEV GmbH

SensDev GmbH, based in Chemnitz, Germany, is a Silicon Pressure Sensor supplier. Ranges are 0.6mbar to 25bar, 10 μ L/s to 1000m³/h. Applications include Medical respirators & inhalers, Automation Systems and Test Equipments.

Silicon Pressure Sensor Product Range



SCPB Series

- Both Analogue & 15 bit digital output in single package Amplified analogue and 15 bit digital serial output (via I²C or SPI)
- Measuring range of ± 0.25 mbar to 0.40 bar
- Temperature compensated (-40C to +125C)
- Wide supply voltage range from 3.3V to 40V
- Fast response times of 0.56ms to 20ms (factory selectable)
- All filter capacitors are on-board
- Various cable lengths / types are available on request.
- State of the art 600nm semiconductor technology
- Non corrosive, non ionic pressure media using either 5mm diameter PA black or 3mm diameter metal pressure tubes
- Available in Differential, Gage/ Relative/ Vacuum and Absolute pressure types (barometric available from 700 to 1100mBar).
- Flexibility of design including the fitting of cables and connectors
- Automotive approved (SCPE -55C to 150C with 4kV filtering available)
- Saving of power, board space & components by utilising I²C
- 127 user settable I²C bus addresses
- 2.0 mm dia metal pressure ports
- Stainless steel housings available with quick-fit and/or 1/4" or other thread, cable or wires
- Each unit has its own traceable serial number on its EEPROM and label
- All sensors can be Parylene coated making them hydrophobic
- Output filter shifting average user settable from 1 to 128 samples for one output
- For security: failure handling will error code output on I²C bus



SCPB F-Type sensor

- Internal Voltage controlled output of analogue 0 to 3V, 0 to 4V, 0 to 5V or individually calibrated Voltage and 15 bit I²C bus in parallel
- The F-Type works within a wide supply voltage range of 3.3V to 40V, 4.5V to 40V or 6V to 40V.

SCPB-R-Type sensor

- Low supply Voltages of 2.7 to 5.5V and deliver a ratiometric output signal.
- The standard range is 0 to 5V but individual calibration ranges are available.

SCPB I²C sensor

- Communicates as a slave digitally via an I²C-bus interface and deliver (within less than 1ms) continual serial 15bit pressure data after powering up the sensor.
- It answers on I²C-bus Master requests.
- Slave addresses are individually programmable.

SCPI Series

- Same as SCPB but with added charge-pump for a supply voltage range from 0.9 to 5.6V

SenSpecial™ SCPE sensor

- (0 to 14 bar) general design is for use with non corrosive, non ionic pressure media.
- For automotive applications (-40 to 125C) the signal conditioning ASIC has certified approvals.
- Provide an internal voltage referenced 0 to 5V, 0.1 to 4.9V or individual calibrated Voltage output.

SCPE-Type F sensor

- The unstabilised supply voltage for sensor ranges from 7V to 40V.
- The offset is precisely adjusted and needs no external potentiometer.
- Temperature range -55°C to 150°C
- High EMI Protection: ±4kV



SCPE-Type R sensor

- Works with a 5V +/- 10% supply and delivers an internal referenced output signal.
- The standard output is 4.9V but individual calibration ranges can be provided.
- Temperature range -55°C to 150°C
- High EMI Protection: ±4kV

SCPE's I²C sensor

- Has an I²C-bus Two Wire Interface (TWI) and delivers continuous serial 15bit resolution data from power on or waits as a slave for an I2C Master's request.
- Temperature range -55°C to 150°C
- High EMI Protection: ±4kV

SCPX-series sensor (-45 to 125C)

- Piezoresistive pressure sensors using state of the art silicon MEMs chips mounted on ceramic and protected with a plastic lid.
- A choice of polyamide housings assist to find the best solution for assembling and equipment design.
- Designed for the lowest cost and smallest outline.
- The standard SCPX has a plastic lid for OEM applications; for applications requiring applying pressure via a plastic pipe the SCPX - F is available.
- The general design is for use with non corrosive, non ionic pressure media. Several gases especially in medical applications can be released if needed. SILGEL coating or other protection methods are available on request.

SXPX series sensor (-45 to 125C)

- The SXPX series offers a complete covered nylon housing. Several tube versions for easy pressure fittings are available. The general design is for use with non corrosive, non ionic pressure media.
- Several gases especially in medical applications can be released if needed. SILGEL coating or other protection methods are available on request.
- Pulsed supply is possible at settling times of some microseconds. Also the response time of <100 s allows the use at fast pneumatic control systems as well as at medical equipment.

SCPK Series Sensor

- Differential Pressure Sensors
- Pressure ranges ±25Pa ... 1MPa, I²C-bus Digital Output 14bit
- Features: Temperature compensated -25 ...85°C, Zero and Span Calibrated, Internal referenced output, Supply Voltage range 3.0 – 3.6V, Accuracy including all errors 1.25%

SensDev offers a range of support:

- Arduino Sketch & RaspBerry Pi code
- Changes to the I²C address, pressure signal filter settings, energy consumption and sample rate of shifting averaging
- The ability to switch between three pressure ranges with the same sensor
- Failure analysis if a sensor fails in the field.

Broadband Technology 2000 Ltd Product Areas				
Semiconductors Mixed Signal IC's Powerline Communications RF Interface Mixed Signal Active Filter	Wireless/M2M Antennae GSM, GPRS & 3G Modems 3G Routers 3G & GPRS Gateways 4G/LTE GPS Tracking Units RF Cables Connectors	Sensors MEMS Accelerometers MEMS Magnetic Sensors MEMS Gyroscopes MEMS Pressure Sensors RF Microwave Amplifiers Attenuators Switches	Power Super Capacitors Power Modules Solid State Batteries Interconnect Magnetics Cable Assembly Connectors	Internet of Things Powerline Communications Narrow & Broadband