

# MLX90830

Absolute Pressure Sensor with Analog Output  
Datasheet



## 1. Features and Benefits

- Triphibian® technology
- +/-0.5% full scale lifetime accuracy
- Ratiometric analog output
- Fast response time (min 0.4ms)
- System in a package: MEMS, analog front-end circuitry, 16-bit microcontroller, voltage regulators and analog ratiometric back-end
- Automotive temperature range (-40°C to 150°C)
- Robust in gas and liquid media, compliant with chemical refrigerants
- Qualified according to AEC-Q100 and AEC-Q103-002
- Configurable diagnostic features like internal broken connection, over voltage, under voltage etc.
- Factory calibrated and fully programmable through the connector with the PTC04 programming tool for customized calibration curves
- Extended over (+40V) and reverse (-40V) voltage capabilities (supply & output)
- ASIL compliant developed as an ASIL A SEooC as per ISO 26262



## 2. Application Examples

- Absolute pressures from 2bar to 70bar with gas and/or liquid media
- Thermal Management of Electric Vehicles
  - Standalone sensors
  - Embedded sensors in expansion valves
  - Embedded sensors in e-compressors
  - Embedded sensors in pumps
- HVAC-R systems
- Data Center cooling monitoring
- Automotive coolant monitoring

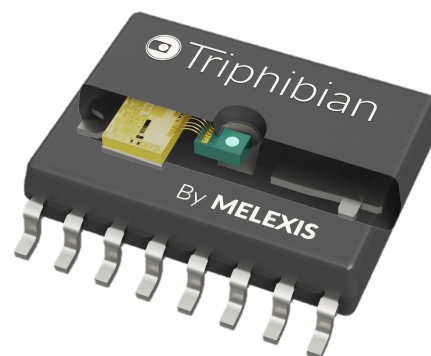


Figure 1: MLX90830

## MLX90830

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### 3. Ordering information

| Product Code | Temperature Code | Package Code | Option Code | Packing Form Code |
|--------------|------------------|--------------|-------------|-------------------|
| MLX90830     | L                | XZ           | BAH-001     | RE                |
| MLX90830     | L                | XZ           | BAF-002     | RE                |
| MLX90830     | L                | XZ           | BAH-004     | RE                |
| MLX90830     | L                | XZ           | BAG-005     | RE                |

#### Legend:

Temperature Code: L (-40°C to 150°C)

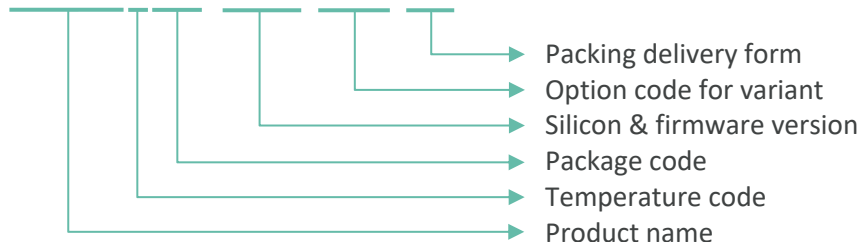
Package Code: XZ = SOIC16 WB cavity facing up package

Option Code: BAH-001 = 0 to 10.342bar (= 150PSI) absolute pressure / 0.5 to 4.5V analog output  
BAF-002 = 0 to 34.474bar (= 500PSI) absolute pressure / 0.5 to 4.5V analog output  
BAH-004 = 0 to 20bar (= 290PSI) absolute pressure / 0.5 to 4.5V analog output  
BAG-005 = 0 to 4bar (= 58PSI) absolute pressure / 0.5 to 4.5V analog output

Packing Form: RE = Reel

Ordering example: MLX90830-LXZ-BAH-001-RE

### MLX90830LXZ-BAH-001-RE



## 4. Package Diagram

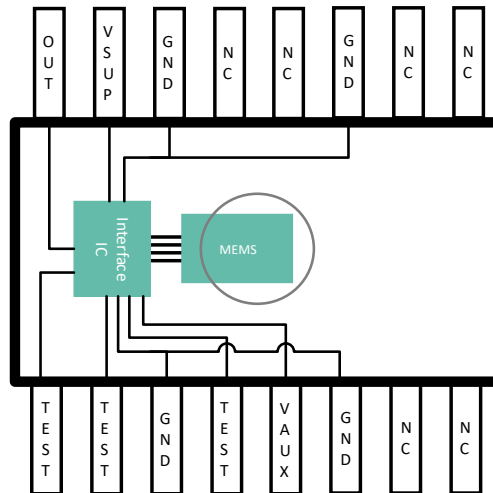


Figure 2: Internal wiring of MLX90830. Top view.

## 5. General Description

The MLX90830 is a packaged, factory calibrated, absolute pressure sensor measuring spans from 2 to 70 bar. It outputs an analog 'ratiometric' output; the ratio of the output voltage divided by the supply voltage has a linear relationship to the pressure.

The MLX90830 consists of a MEMS pressure sensor element and an interface chip (CMOS technology). This optimized solution exhibits excellent EMC performance. The DSP based signal interface provides outstanding initial accuracy. A smart package and die assembly concept enable high output stability over life, even in stringent automotive temperature and stress conditions.

The MEMS pressure sensor element uses the Triphibian® technology; a suspended cantilever design that is inherently more robust than rear-side exposed solutions, which still experience a pressure differential between the glass pedestal side and the wire bonding side. The pressure equalization principle is also valid for frozen media.

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## 6. Glossary of terms

| Term                    | Description                                                                   |
|-------------------------|-------------------------------------------------------------------------------|
| ADC                     | Analog to Digital Converter                                                   |
| ASIL                    | Automotive Safety Integrity Level                                             |
| Bar                     | Pressure unit (1bar = 100kPa)                                                 |
| DSP                     | Digital Signal Processor                                                      |
| EMC                     | Electro Magnetic Compatibility                                                |
| ESD                     | Electrostatic discharge                                                       |
| FS                      | Output Full Scale = O2 – O1                                                   |
| GND                     | Ground connection                                                             |
| <b>Lower fault band</b> | Output voltage below normal output range to indicate a diagnostic             |
| NC                      | Not Connected                                                                 |
| NVM                     | Nonvolatile memory                                                            |
| OV                      | Over Voltage                                                                  |
| PCB                     | Printed Circuit Board                                                         |
| POR                     | Power-on Reset                                                                |
| PTC04                   | Melexis Programming Tool, hardware to program the device in lab or production |
| RV                      | Reverse Voltage                                                               |
| SEooC                   | Safety Element out of Context                                                 |
| T <sub>A</sub>          | Ambient temperature                                                           |
| TEST                    | Test pin                                                                      |
| <b>Upper Fault Band</b> | Output voltage above normal output range to indicate a diagnostic             |
| UV                      | Under Voltage                                                                 |
| Vaux                    | Pin to connect an auxiliary capacitor                                         |
| Vsup                    | Supply pin                                                                    |

*Table 1: Glossary of terms*

## 7. Absolute Maximum Ratings

| Parameter                             | Symbol         | Value      | Units | Comment     |
|---------------------------------------|----------------|------------|-------|-------------|
| Supply Voltage (overvoltage)          | OV             | 40         | V     | Max 2 hours |
| Reverse Voltage Protection            | RV             | -40        | V     |             |
| Positive output voltage               |                | 40         | V     |             |
| Reverse output voltage <sup>(1)</sup> |                | -40        | V     |             |
| Operating Ambient Temperature Range   | T <sub>A</sub> | -40 to 150 | °C    |             |
| Storage Temperature Range             |                | -40 to 150 | °C    |             |
| Programming Ambient Temperature Range |                | -40 to 125 | °C    |             |
| Proof pressure                        |                | 3x P2      | Bar   |             |
| Burst pressure                        |                | 5x P2      | Bar   |             |

*Table 2: Absolute maximum ratings*

Exceeding the absolute maximum ratings may cause permanent damage. Exposure to absolute-maximum-rated conditions for extended periods may affect device reliability. Maximum duration of over voltage and reverse voltage conditions is 2 hours.

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*1 Absolute maximum DC negative output at floating supply or supply shorted to output. Maximum DC negative output at operating supply: -5.5V.*

## 8. Pin Definitions and Descriptions

| Pin number | Description   | Pin number | Description   |
|------------|---------------|------------|---------------|
| 1          | Not connected | 16         | Not connected |
| 2          | Not connected | 15         | Not connected |
| 3          | Ground        | 14         | Ground        |
| 4          | Not connected | 13         | VAUX          |
| 5          | Not connected | 12         | TEST          |
| 6          | Ground        | 11         | Ground        |
| 7          | VSup          | 10         | TEST          |
| 8          | Analog OUT    | 9          | TEST          |

Table 3: Pin out definitions and descriptions

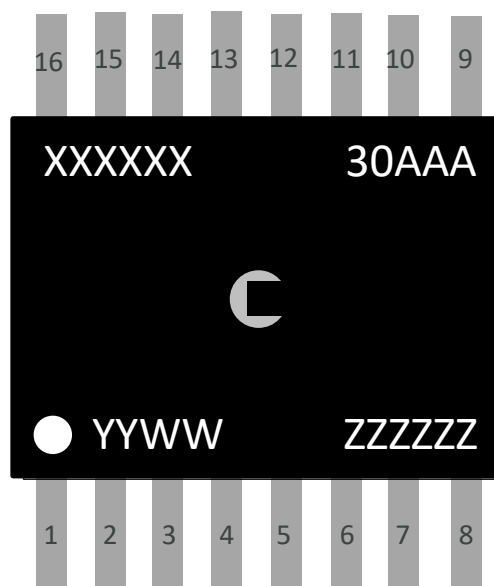


Figure 3: Package marking (Top view)

| Symbol | Function / Description            |
|--------|-----------------------------------|
| XXXXXX | ASIC lot number                   |
| ZZZZZZ | Sub-lot number                    |
| YY     | Year of assembly                  |
| WW     | Calendar week of assembly         |
| AAA    | MEMS and ASIC traceability letter |

Table 4: Package marking definition

## 9. General Electrical Specifications

DC Operating Parameters  $T_A = -40^{\circ}\text{C}$  to  $150^{\circ}\text{C}$

| Parameter                                     | Symbol  | Remarks                                                                                               | Min  | Typ <sup>(2)</sup> | Max  | Units  |
|-----------------------------------------------|---------|-------------------------------------------------------------------------------------------------------|------|--------------------|------|--------|
| Nominal supply voltage                        | Vdd     |                                                                                                       | 4.5  | 5                  | 5.5  | V      |
| Nominal supply current                        | Idd     | No output load                                                                                        |      | 9.5                | 12   | mA     |
| Current consumption at supply overvoltage     | IDD_OV  |                                                                                                       |      |                    | 20   | mA     |
| Current consumption at supply reverse voltage | IDD_RV  |                                                                                                       |      |                    | 20   | mA     |
| Output short-circuit current                  | IOUT_SH |                                                                                                       |      |                    | 20   | mA     |
| Capacitive load on output                     | Cload   |                                                                                                       | 47   |                    | 220  | nF     |
| Resistive load on output                      | Rload   | Pull up                                                                                               | 3    |                    | 425  | kOhm   |
|                                               |         | Pull down                                                                                             | 3    |                    | 470  | kOhm   |
| Output current                                | IOUT    |                                                                                                       |      |                    | 2    | mA     |
| Under voltage detection range                 |         | Programmable. In default configuration set to 4.2V.                                                   | 4.15 |                    | 4.8  | V      |
| Over voltage detection range                  |         | Programmable. In default configuration set to 5.55V.                                                  | 5.2  |                    | 5.75 | V      |
| Under voltage detection tolerance             |         |                                                                                                       | -50  |                    | 50   | mV     |
| Over voltage detection tolerance              |         |                                                                                                       | -50  |                    | 50   | mV     |
| Power up time                                 |         | Time from reaching minimum allowed supply voltage of 4.5V till having the output within specification |      |                    | 4    | ms     |
| Default response time <sup>(3)</sup>          |         | According to default configuration.                                                                   |      |                    | 1    | ms     |
| Fastest response time <sup>(3)</sup>          |         |                                                                                                       |      |                    | 0.4  | ms     |
| Refresh rate                                  |         | Time between two consecutive updates on the output                                                    |      |                    | 75   | μs     |
| Operating output voltage range                |         | Output range where the linearity is in spec with any resistive load inside the specified range        | 4    |                    | 96   | %Vdd   |
| Upper Fault Band                              |         |                                                                                                       | 97   |                    | 100  | %Vdd   |
| Lower Fault Band                              |         |                                                                                                       | 0    |                    | 3    | %Vdd   |
| Pressure output noise                         |         | Default configuration                                                                                 |      |                    | 2    | mV rms |

Table 5: Electrical specifications

<sup>2</sup> Typical values are defined at  $T_A = +25^{\circ}\text{C}$  and  $V_{DD} = 5\text{V}$ .

<sup>3</sup> Response time is defined as the time elapsed from input pressure step to the output reaching 90% of settled output.



## 10. Detailed General Description

The MLX90830 consists of a pressure sensor element and a DSP-based interface chip.

The pressure sensor element consists of a diaphragm realized in the silicon chip by wafer bonding on an etched cavity with built in reference vacuum. The diaphragm reacts to a change in absolute pressure. The internal strain increases, in particular at the border of the diaphragm. Here, the piezo-resistive elements have been implanted into the silicon diaphragm forming a Wheatstone bridge, which act as a transducer. The pressure sensor element can operate in gas and liquid media or a mix of both.

The sensor uses Triphibian® technology: a suspended cantilever design of the sensor provides pressure spike immunity up to 2000 bar/msec and static burst level up to 210 bar. The MLX90830's design is inherently more robust than rear-side exposed solutions, which still experience a pressure differential between the glass pedestal side and the wire bonding side. The pressure equalization principle is also valid for frozen media.

The analog front-end of the interface chip applies filtering and converts the analog signal to a digital value. The DSP performs the compensations over temperature. Furthermore, the digital circuit provides some filtering, the possibility to linearize the pressure signal and also implements the clamping function. This chip has an analog output proportional to the pressure and supply voltage. A broken wire detection block ensures the analog output goes to one of the fault bands in case of a broken supply or ground connection.

Extensive protection of the supply lines and output allows the MLX90830 to handle extreme overvoltage conditions and makes it resistant to severe external disturbances. Several diagnostic functions (over-voltage, under-voltage, overpressure, under pressure detections) have been implemented on the MLX90830 and can be enabled by programming EEPROM settings. Figure 4 shows the MLX90830 block diagram.

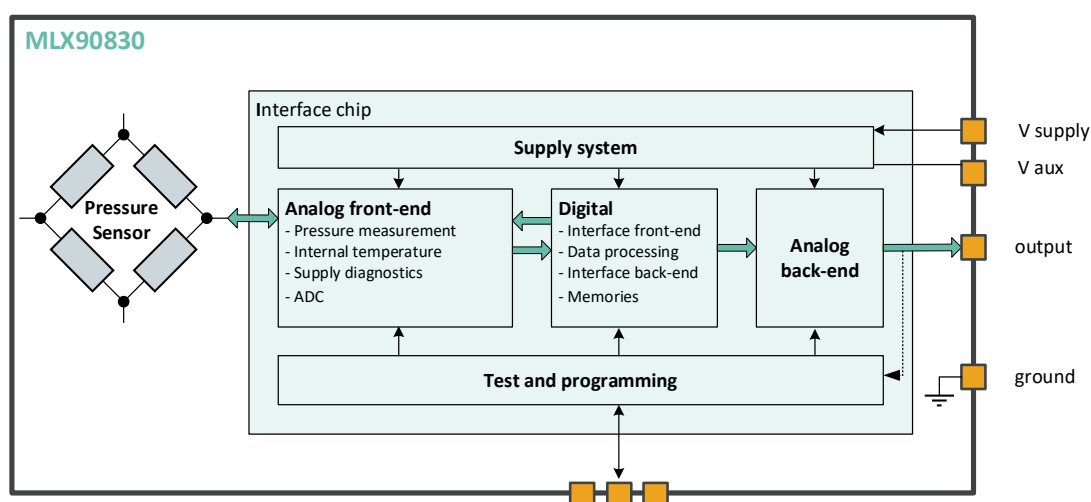


Figure 4: MLX90830 block diagram

## 11. Default programmed settings

The MLX90830 is calibrated at the final manufacturing test steps. During the calibration, settings are stored in the on-chip EEPROM to define the pressure transfer curve.

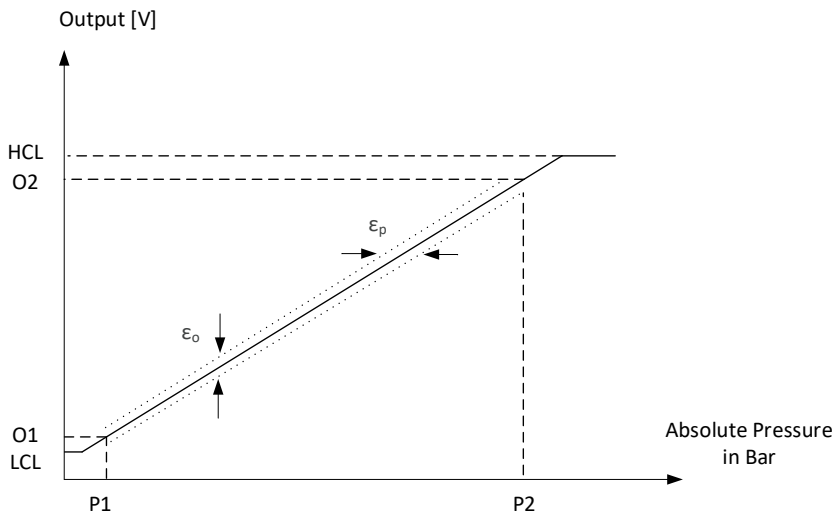


Figure 5: Pressure transfer function and accuracy at room temperature

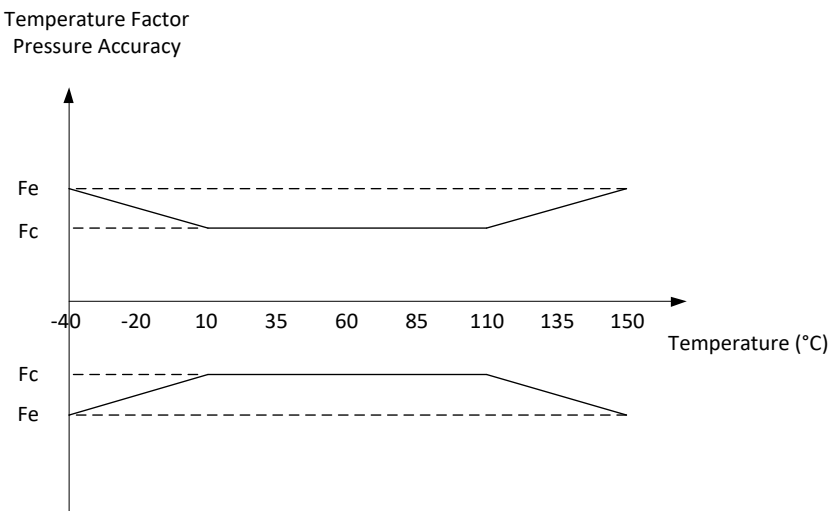


Figure 6: Pressure accuracy temperature factor

### 11.1. MLX90830-LXZ-BAH-001

| Transfer Curve Parameter             | Symbol       | Remarks                                                                   | Value       |     |           | Unit      |
|--------------------------------------|--------------|---------------------------------------------------------------------------|-------------|-----|-----------|-----------|
| Pressure 1                           | P1           | See Figure 5: Pressure transfer function and accuracy at room temperature | 0           |     |           | Bar       |
| Pressure 2                           | P2           |                                                                           | 10.342      |     |           | Bar       |
| Output 1                             | O1           |                                                                           | 0.5         |     |           | V         |
| Output 2                             | O2           |                                                                           | 4.5         |     |           | V         |
| Low clamping level                   | LCL          |                                                                           | 0.3         |     |           | V         |
| High clamping level                  | HCL          |                                                                           | 4.7         |     |           | V         |
| Pressure Accuracy Parameter          | Symbol       | Remarks                                                                   | Min         | Typ | Max       | Unit      |
| Output accuracy                      | $\epsilon_o$ | Overall accuracy expressed as output value (FS range from 0.5 to 4.5V)    | -20<br>-0.5 |     | 20<br>0.5 | mV<br>%FS |
| Pressure accuracy                    | $\epsilon_p$ | Overall accuracy expressed as pressure value                              | -52         |     | 52        | mBar      |
| Center temperature accuracy factor   | Fc           | See Figure 6: Pressure accuracy temperature factor                        |             |     | 1         |           |
| Extended temperature accuracy factor | Fe           |                                                                           |             |     | 1.25      |           |

Table 6: BAH-001 Default configuration

### 11.2. MLX90830-LXZ-BAF-002

| Transfer Curve Parameter             | Symbol       | Remarks                                                                   | Value       |     |           | Unit      |
|--------------------------------------|--------------|---------------------------------------------------------------------------|-------------|-----|-----------|-----------|
| Pressure 1                           | P1           | See Figure 5: Pressure transfer function and accuracy at room temperature | 0           |     |           | Bar       |
| Pressure 2                           | P2           |                                                                           | 34.474      |     |           | Bar       |
| Output 1                             | O1           |                                                                           | 0.5         |     |           | V         |
| Output 2                             | O2           |                                                                           | 4.5         |     |           | V         |
| Low clamping level                   | LCL          |                                                                           | 0.3         |     |           | V         |
| High clamping level                  | HCL          |                                                                           | 4.7         |     |           | V         |
| Pressure Accuracy Parameter          | Symbol       | Remarks                                                                   | Min         | Typ | Max       | Unit      |
| Output accuracy                      | $\epsilon_o$ | Overall accuracy expressed as output value (FS range from 0.5 to 4.5V)    | -20<br>-0.5 |     | 20<br>0.5 | mV<br>%FS |
| Pressure accuracy                    | $\epsilon_p$ | Overall accuracy expressed as pressure value                              | -172        |     | 172       | mBar      |
| Center temperature accuracy factor   | Fc           | See Figure 6: Pressure accuracy temperature factor                        |             |     | 1         |           |
| Extended temperature accuracy factor | Fe           |                                                                           |             |     | 1.25      |           |

Table 7: BAF-002 Default configuration

### 11.3. MLX90830-LXZ-BAH-004

| Transfer Curve Parameter             | Symbol       | Remarks                                                                   | Value       |     | Unit      |           |
|--------------------------------------|--------------|---------------------------------------------------------------------------|-------------|-----|-----------|-----------|
| Pressure 1                           | P1           | See Figure 5: Pressure transfer function and accuracy at room temperature | 0           |     | Bar       |           |
| Pressure 2                           | P2           |                                                                           | 20          |     | Bar       |           |
| Output 1                             | O1           |                                                                           | 0.5         |     | V         |           |
| Output 2                             | O2           |                                                                           | 4.5         |     | V         |           |
| Low clamping level                   | LCL          |                                                                           | 0.3         |     | V         |           |
| High clamping level                  | HCL          |                                                                           | 4.7         |     | V         |           |
| Pressure Accuracy Parameter          | Symbol       | Remarks                                                                   | Min         | Typ | Max       | Unit      |
| Output accuracy                      | $\epsilon_o$ | Overall accuracy expressed as output value (FS range from 0.5 to 4.5V)    | -20<br>-0.5 |     | 20<br>0.5 | mV<br>%FS |
| Pressure accuracy                    | $\epsilon_p$ | Overall accuracy expressed as pressure value                              | -100        |     | 100       | mBar      |
| Center temperature accuracy factor   | Fc           | See Figure 6: Pressure accuracy temperature factor                        |             |     | 1         | -         |
| Extended temperature accuracy factor | Fe           |                                                                           |             |     | 1.25      | -         |

Table 8: BAH-004 Default configuration

### 11.4. MLX90830-LXZ-BAG-005

| Transfer Curve Parameter             | Symbol       | Remarks                                                                   | Value     |     | Unit    |           |
|--------------------------------------|--------------|---------------------------------------------------------------------------|-----------|-----|---------|-----------|
| Pressure 1                           | P1           | See Figure 5: Pressure transfer function and accuracy at room temperature | 0         |     | Bar     |           |
| Pressure 2                           | P2           |                                                                           | 4         |     | Bar     |           |
| Output 1                             | O1           |                                                                           | 0.5       |     | V       |           |
| Output 2                             | O2           |                                                                           | 4.5       |     | V       |           |
| Low clamping level                   | LCL          |                                                                           | 0.3       |     | V       |           |
| High clamping level                  | HCL          |                                                                           | 4.7       |     | V       |           |
| Pressure Accuracy Parameter          | Symbol       | Remarks                                                                   | Min       | Typ | Max     | Unit      |
| Output accuracy                      | $\epsilon_o$ | Overall accuracy expressed as output value (FS range from 0.5 to 4.5V)    | -40<br>-1 |     | 40<br>1 | mV<br>%FS |
| Pressure accuracy                    | $\epsilon_p$ | Overall accuracy expressed as pressure value                              | -40       |     | 40      | mBar      |
| Center temperature accuracy factor   | Fc           | See Figure 6: Pressure accuracy temperature factor                        |           |     | 1       | -         |
| Extended temperature accuracy factor | Fe           |                                                                           |           |     | 1.5     | -         |

Table 9: BAG-005 Default configuration

## 11.5. Overview of Pressure spans coverage by reconfiguration

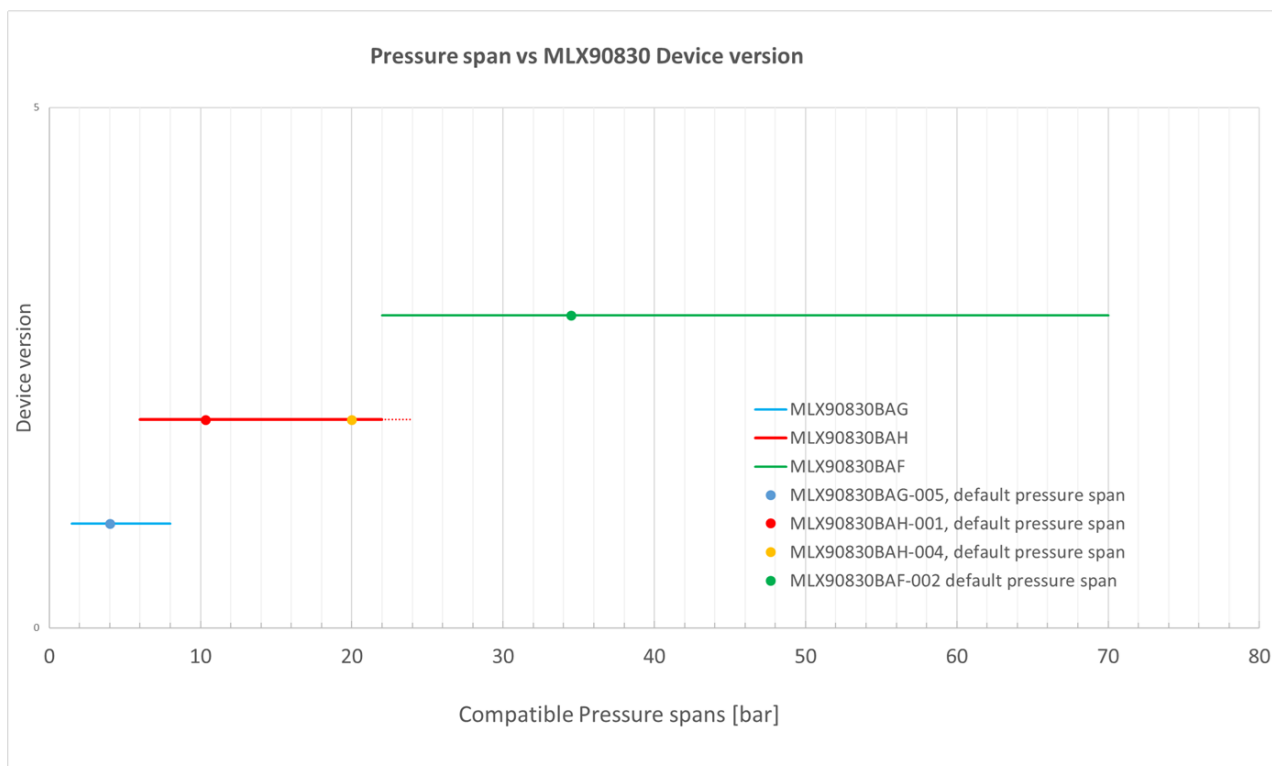


Figure 7: Pressure spans vs device version

### Notes:

- for MLX90830BAG, maximum qualified operating pressure: 8 bars
- for MLX90830BAH, maximum qualified operating pressure: 22 bars
- for MLX90830BAF, maximum qualified operating pressure: 70 bars

## 11.6. Diagnostics

The MLX90830 has built in diagnostics which can flag fault conditions. This is done by having an output set to 0V or 5V, this is beyond the upper and lower clamp levels of a valid output signal. There are two groups. The first is the broken connection diagnostic which triggers when the device is connected incorrectly. The second group consists of the internal diagnostics, these are used to flag abnormal states during operation.

## 11.7. Broken Connection Diagnostics

Table 10 shows the output behavior of the MLX90830 if a connection is broken or incorrect.

| GND          | VDD          | Analog out           | Effect on output                                               | Action after wrong connection |
|--------------|--------------|----------------------|----------------------------------------------------------------|-------------------------------|
| 0V           | 5V           | Pull-down or Pull-up | Normal operation                                               | Normal operation              |
| Disconnected | 5V           | Pull-down or Pull-up | Lower Fault Band for Pull-down<br>Upper Fault Band for Pull-up | Normal operation              |
| 0V           | Disconnected | Pull-down or Pull-up | Low Fault Band for Pull-down<br>Upper Fault Band for Pull-up   | Normal operation              |
| 0V           | 5V           | Disconnected         | Low Fault Band for Pull-down<br>Upper Fault Band for Pull-up   | Normal operation              |
| 0V           | 5V           | 0V                   | Low Fault Band                                                 | Normal operation              |
| 0V           | 5V           | 5V                   | Upper Fault Band                                               | Normal operation              |

Table 10: Broken connections

## 11.8. Internal Diagnostics

The MLX90830 has several internal checks which monitor the status of the device. These checks or diagnostic sources can be enabled or disabled based on the sensor module requirements. It's possible to separately define some sources to appear as a Low Fault Band error and others as a High Fault Band. Table 11 shows the available diagnostic sources which can be programmed to result in either a high fault band output or low fault band output.

| Bit | Error condition                 | Default settings |
|-----|---------------------------------|------------------|
| 0   | Supply voltage too high         | Disabled         |
| 1   | Supply voltage too low          | Disabled         |
| 2   | Internal error                  | Lower Fault Band |
| 3   | Broken pressure membrane        | Lower Fault Band |
| 4   | Pressure parameter error        | Lower Fault Band |
| 5   | Pressure output error           | Lower Fault Band |
| 6   | Internal regulator out of range | Disabled         |

Table 11: Diagnostic sources

## 12. Digital

The digital is built around a 16-bit microcontroller. It contains besides the processor also ROM, RAM and EEPROM and a set of user and system IO registers. Temperature compensation of the pressure signal and pressure linearization is handled by the microcontroller. For the pressure compensation there are EEPROM parameters allocated to be able to cover a large variety of calibration approaches.

Both for gain and offset of the pressure signal, there is a separate temperature dependency which is programmable up to a third order compensation. This is reflected in EEPROM parameters for the offset (O0, O1, O2 and O3) and for the gain (G0, G1, G2 and G3).

If required, the linearity of the pressure signal can also be compensated with a first order temperature dependency through EEPROM parameters L0 and L1.

## 13. Application Information

Below recommendations for external components are providing basic EMC/ESD protection. Depending on the module design and the EMC/ESD requirements, alternative configurations can be necessary.

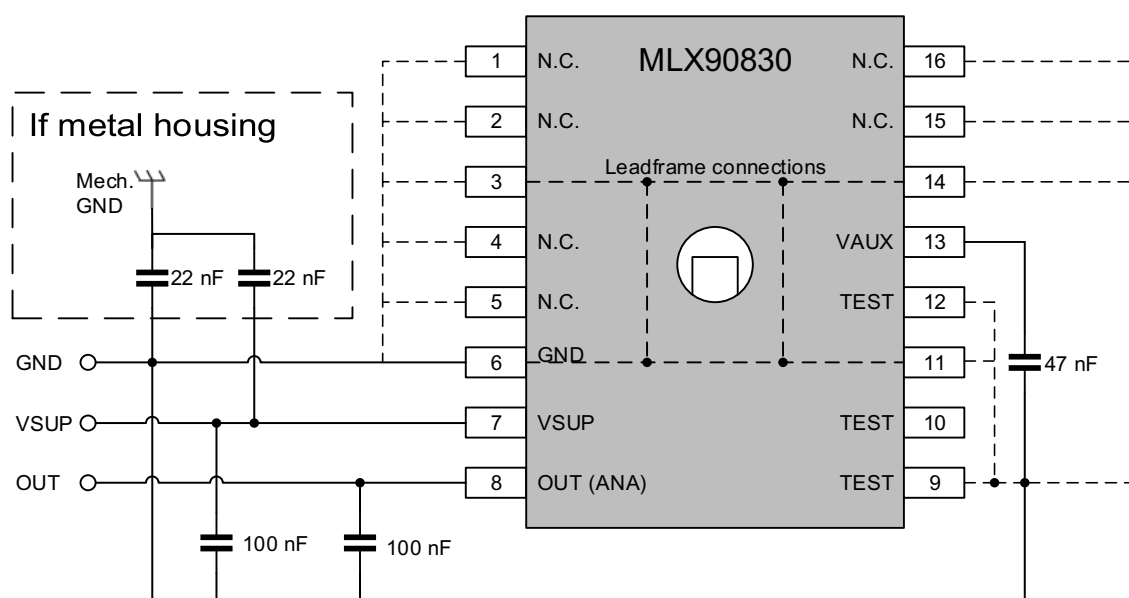


Figure 8: Application schematic (top view). The dark lines are needed connections, the grey lines are recommended connections for better EMC.

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Absolute Pressure Sensor with Analog Output  
Datasheet



## 14. Package Information, IC handling and assembly

### 14.1. Package information

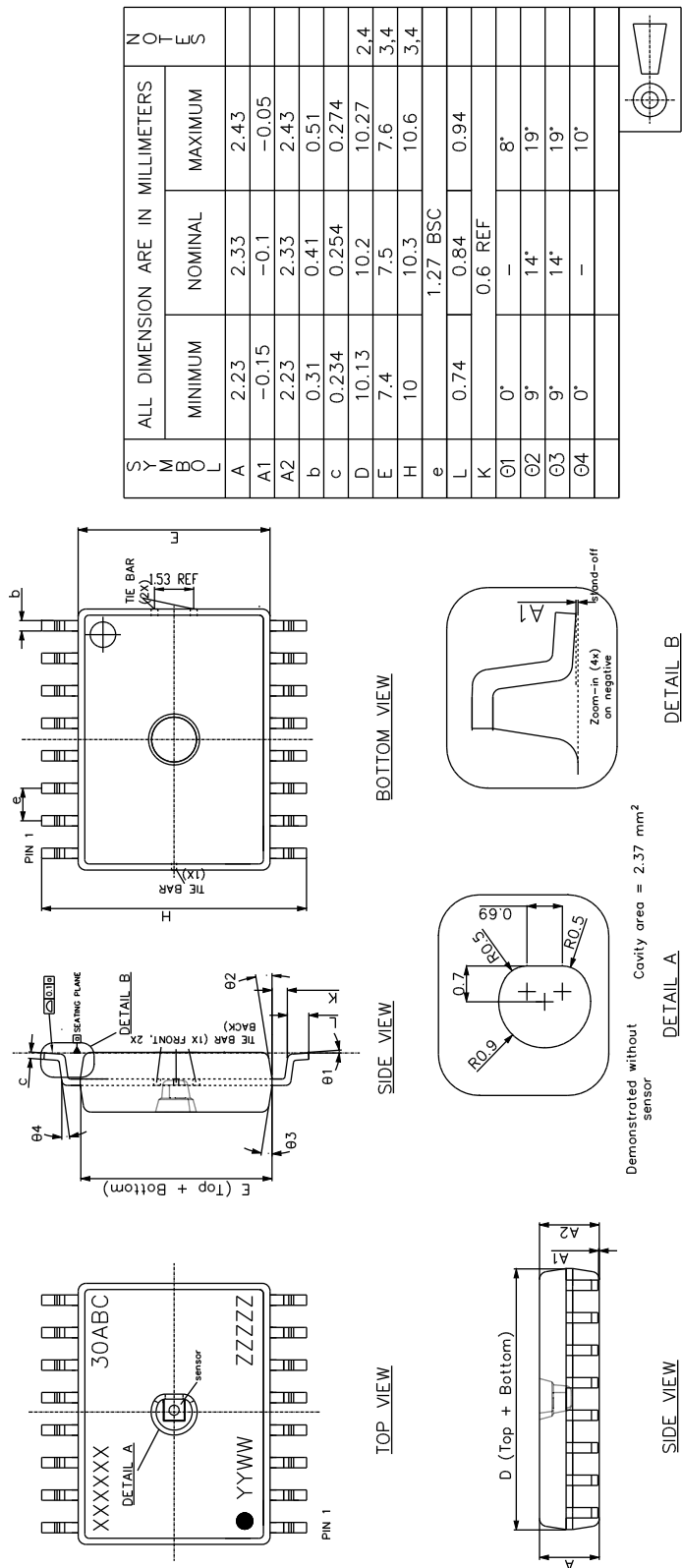


Figure 9: MLX90830 package drawing

- NOTES
1. Package outline and dimensions are based on JEDEC MS-013, variant AA.
  2. Dimension does not include mold flash, protrusion or gate burrs. Mold flash, protrusions and gate burrs shall not exceed 0.15 mm per end.
  3. Dimension does not include interlead flash or protrusion. Interlead flash or protrusion shall not exceed 0.25 mm per side.
  4. The package top may be smaller than the package bottom. Both dimensions are determined at the outer most extremes of the plastic body, exclusive of mold flash, tie bar burrs, gate burrs and interlead flash, but including any mismatch between top and bottom of the plastic body
  5. Plating of the leads:  
Ni: 0.25 – 1.27 µm  
Pd: 0.005 – 0.02 µm  
Au-Ag: 0.005 – 0.064 µm



## 14.2. Storage and handling of plastic encapsulated ICs

Plastic encapsulated ICs shall be stored and handled according to their MSL categorization level (specified in the packing label) as per J-STD-033.

Electronic semiconductor products are sensitive to Electro Static Discharge (ESD). The component assembly shall be handled in EPA (Electrostatic Protected Area) as per ANSI S20.20

For more information refer to Melexis [\*Guidelines for storage and handling of plastic encapsulated ICs\*](#)<sup>(4)</sup>

## 14.3. Assembly of encapsulated ICs

It is highly recommended to avoid the use of any flux cleaner with this open-cavity product. We recommend utilizing a No-Clean soldering process to ensure optimal performance and reliability. Please refer to [\*Soldering and Welding\*](#)<sup>5</sup>. For further guidance in case any other solder is needed, please consult Melexis directly for additional recommendations.

For Surface Mounted Devices (SMD, as defined according to JEDEC norms), the only applicable soldering method is reflow.

For Through Hole Devices (THD), the applicable soldering methods are reflow, wave, selective wave and robot point-to-point. THD lead pre-forming (cutting and/or bending) is applicable under strict compliance with Melexis [\*Guidelines for lead forming of SIP Hall Sensors\*](#)<sup>(4)</sup>.

Melexis products soldering on PCB should be conducted according to the requirements of IPC/JEDEC and J-STD-001. Solder quality acceptance should follow the requirements of IPC-A-610.

For PCB-less assembly refer to the relevant application notes<sup>(4)</sup> or contact Melexis.

Electrical resistance welding or laser welding can be applied to Melexis products in THD and specific PCB-less packages following the [\*Guidelines for welding of PCB-less devices\*](#)<sup>(4)</sup>.

Environmental protection of customer assembly with Melexis products for harsh media application, is applicable by means of coating, potting or overmolding considering restrictions listed in the relevant application notes<sup>(4)</sup>

For other specific process, contact Melexis via [www.melexis.com/technical-inquiry](http://www.melexis.com/technical-inquiry)

## 14.4. Environment and sustainability

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<sup>4</sup> [www.melexis.com/ic-handling-and-assembly](http://www.melexis.com/ic-handling-and-assembly)

<sup>5</sup> [www.melexis.com/en/tech-info/ic-handling-and-assembly/soldering-and-welding](http://www.melexis.com/en/tech-info/ic-handling-and-assembly/soldering-and-welding)

## MLX90830

Absolute Pressure Sensor with Analog Output  
Datasheet



## 15. Revision history

| Revision | Date       | Change history                                                               |
|----------|------------|------------------------------------------------------------------------------|
| 001      | 17-01-2024 | Creation of document                                                         |
| 002      | 20-12-2024 | Update of package code                                                       |
| 003      | 30-06-2026 | Add 2 new device versions with pressure ranges respectively of 4 and 20 bars |

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