See low-power MCU solutions for industrial sensors.

Monitoring and maintaining process variables at the appropriate levels is extremely critical in industrial automation and process control. A sensor in the industrial environment is either continuously or periodically measuring vital parameters such as temperature, pressure or flow. The primary challenge of sensing in industrial environments is conditioning low signal levels in the presence of high noise and high-surge voltage. Solutions for smart sensors and field transmitters typically demand a rich peripheral set, superior computational performance and low power consumption.

Why partner with TI MCU industrial sensor solutions?

- Broad portfolio of products catering to industrial sensing
- Support of IEC 61508 SIL-2 and SIL-3 safety requirements
- Leading ADC speeds up to 12.5 MSPS and high-resolution PWMs that can enable high precision and accuracy
- Flexible package options
- Analog and digital peripheral integration
- Ultra-low power for power-sensitive applications
- Extended temperature devices for high-temperature requirements

Microcontrollers for your industrial sensor

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<tr>
<th>Function</th>
<th>Microcontroller</th>
<th>Tool</th>
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<td>• FRAM integration for unified non-volatile memory</td>
<td>MSP430F5172</td>
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<td>• Energy harvesting</td>
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<td>• Extended battery life</td>
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<td>MSP432P401R</td>
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<td>MSP430F5529</td>
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<td>• DSP processing for complicated algorithms</td>
<td>Delfino™ F28335</td>
<td>Delfino Peripheral Explorer Kit</td>
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<td>• Automation for real-time control</td>
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<td>• 32-bit ARM® Cortex®-M4 CPUs</td>
<td>TM4C123x Series Device Family</td>
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<td>• Large number of communication interfaces</td>
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Getting Started

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