

Dear Customer,

In today's Automotive applications, ISO26262 has become a critical element of passenger safety, as electric and electronic content has rapidly grown within cars and now mobility solutions to a wider extent. To help customers achieve the desired Automotive Safety Integrity Level (ASIL) certification, Microchip is developing solutions that include:

- Hardware Functional Safety Features including but not limited to:
  - Memory: ECC, CRC
  - System: DMT, WDT/WWDT, POR/BOR, MCLR
  - Clocking: Redundant Oscillator, Fail Safe Clock Monitor (FSCM)
  - CPU: Error Trap Monitors
  - GPIO: ESD Protection, I/O Port Readback
  - For a full feature list, please visit [16-bit Functional Safety](#)
- Automotive-grade silicon (Q100 qualification, up to Grade 0)
- Functional Safety Diagnostic Firmware
- Failure modes, Effects and Diagnostic Analysis (FMEDA) report
- Functional Safety Manual (FSM)
- MPLAB® XC Functional Safety Certified Compilers
- MCAL Drivers for Autosar

The dsPIC33 Family is used for digital power and motor control applications for the Automotive market including DC/DC systems and OnBoard Charges (OBC), sensors (position, pressure) and actuators for which ASIL requirements apply. This dsPIC33 family is supported by FMEDA and FSM collateral.

To access our safety related content such as FMEDA and Functional Safety Manual, both under NDA, please address your request to your [local Microchip Sales contact](#) that will guide you through this process.

For additional details on Microchip's functional safety offering, please visit the [Functional Safety Design Center](#).