

# STM8A-SafeASIL

## Functionnal Safety Package for STM8A 8-bit Automotive MCUs



**Dramatically reduce time and cost to built STM8AF and STM8AL-based systems certified to ISO 26262 Functional Safety standard**

ISO 26262 provides a standard about functional safety management for automotive applications and includes an Automotive Safety Integrity Level (ASIL) classification representative to automotive application safety risk management requirement. Compliance to the ISO 26262 standard has become a must in automotive applications. ST offers STM8A-SafeASIL, a flexible design support package that stream lines certification of safety-critical systems featuring STM8AF and STM8AL microcontrollers.



### WHY CHOOSE STM8A-SafeASIL ?

- Design your safety-critical system using a cost sensitive STM8A microcontroller, with the help of documentation supporting their use in applications that need to fulfill functional safety requirements as defined by automotive safety integrity level ASIL B of ISO 26262
- Develop your own self-test library with the free-of-charge safety manuals and the detailed specification

## STM8A safety documentation

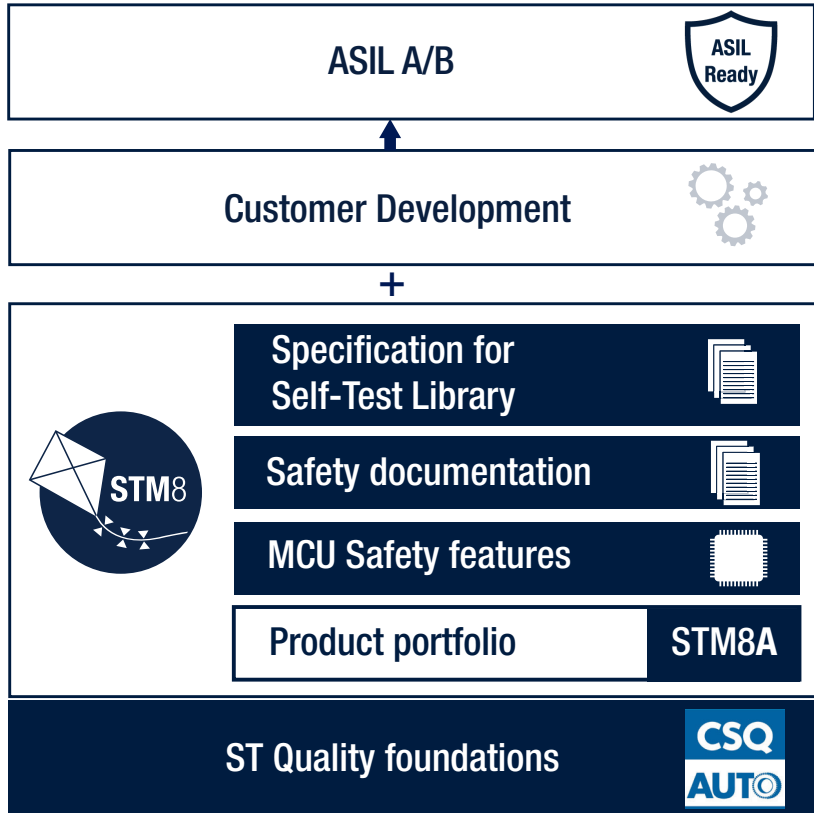
- Safety user manuals are available on ST website: detailed list of safety requirements as defined by the automotive safety integrity level ASIL B of ISO 26262 to support STM8AF (UM1915) and STM8AL (UM2801) use cases
- Technical documentation under NDA agreement (contact your local ST representative):
  - FMEA/FMEDA: detailed list of MCU failure modes and related mitigation measures adopted, static snapshot of ISO 26262 failure rates
  - Specifications for CPU self-test library: full list of detailed safety requirements enabling STM8AF and STM8AL users to realize the CPU Self-test Library required by the Safety Manual



## STM8A-SafeASIL foundations

STM8A-SafeASIL is based on ST Quality Foundations, STM8A product portfolio and STM8A embedded safety features.

### Achieve ASIL A/B with STM8A



## STM8A Portfolio

<p>Automotive</p>	<p>Long-term guarantee</p>	<p>AEC-Q100 Up to 150 °C</p>	<p><b>STM8AF</b> Data EEPROM, 3 and 5 V families, precise RC, LIN, CAN, grade 0</p>	
	<p>Long-term guarantee</p>	<p>AEC-Q100 Up to 125 °C</p>	<p><b>STM8AL</b> Data EEPROM, 1.65 and 3 V families, strong analog, LCD drivers, low-leakage technology</p>	

