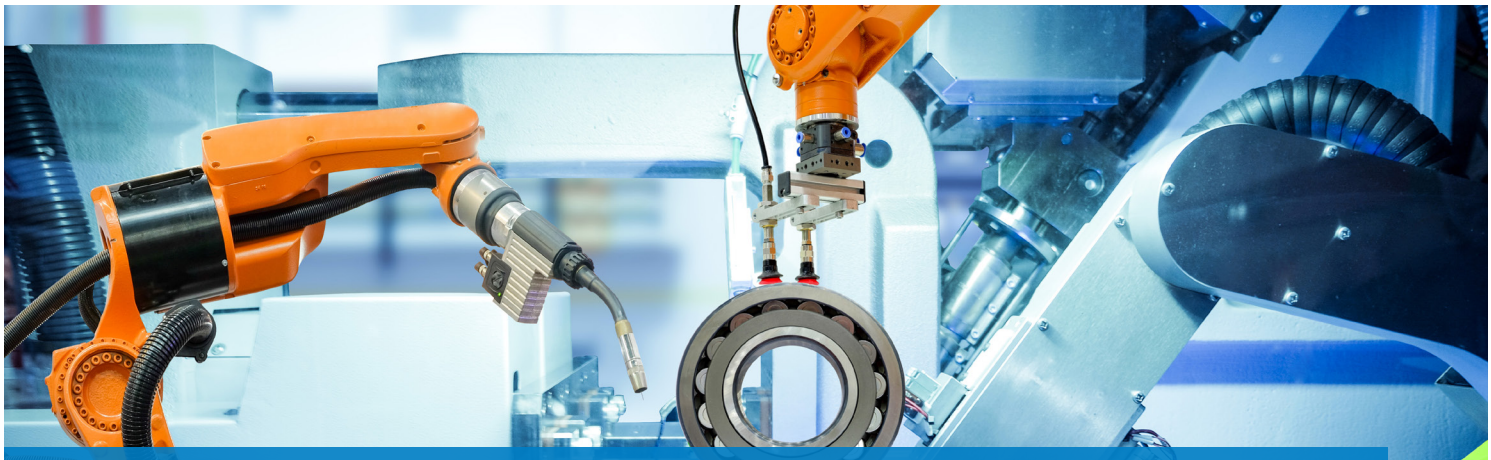
NTSafetySolutions

Creating safety.
With passion.

NewTec



SAFETY PLATFORM

NTSafeFlex STM32: MicroController based evaluation board with additional Software Library for functional safety solutions up to SIL 3 and PLe, Cat4

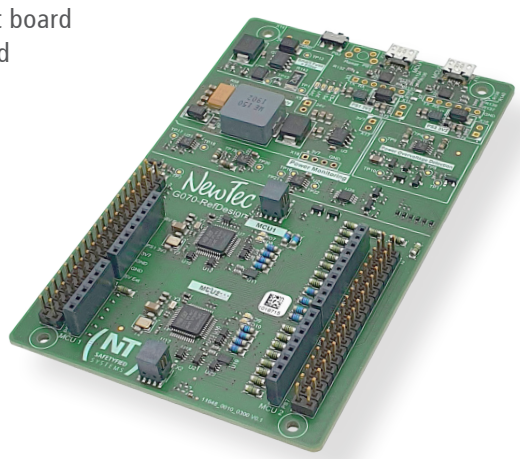
The NTSafeFlex STM32 consists of an dual STM32-based evaluation board. With two small MicroControllers together with a Software Safety Library in safety related systems. A considerable reduction in costs for development and certification is achieved and the time to market is reduced noticeably.

The concept of the NTSafeFlex STM32 has already been utilized in several safety projects. It assists you to reduce risks, design costs, design time, process overhead. It improves your platform development, flexibility, modularity and safety integrity level (SIL).

Typical fields of application are e.g. safety control logic, motor supervision and general safety applications with low performance standards.

The NTSafeFlex STM32 development board implements proven architecture and design principles to fulfill all the requirements of the following safety standards:

IEC 61508 standard up to SIL 3
ISO 13849 standard up to Pl e Cat. 4



Typical applications

Industrial
Robotic
Medical
Energy Management
etc.

Customer Benefits

- Time to market
- Proven in use
- Cost reduction
- Easy to adopt and customize

Authorized Partner
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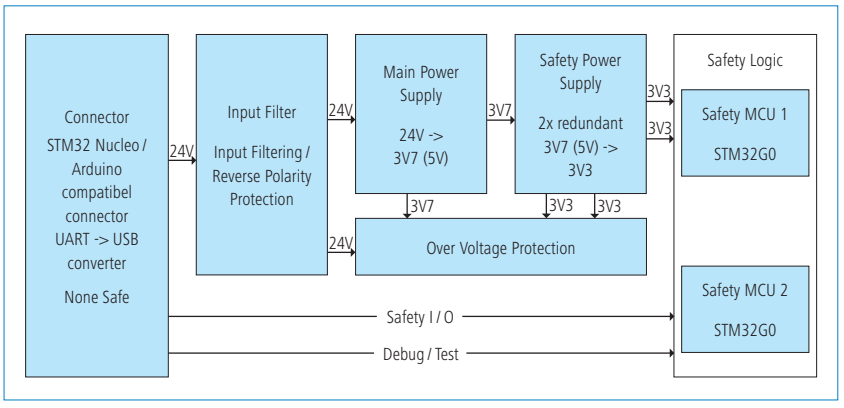
Hardware Reference Design

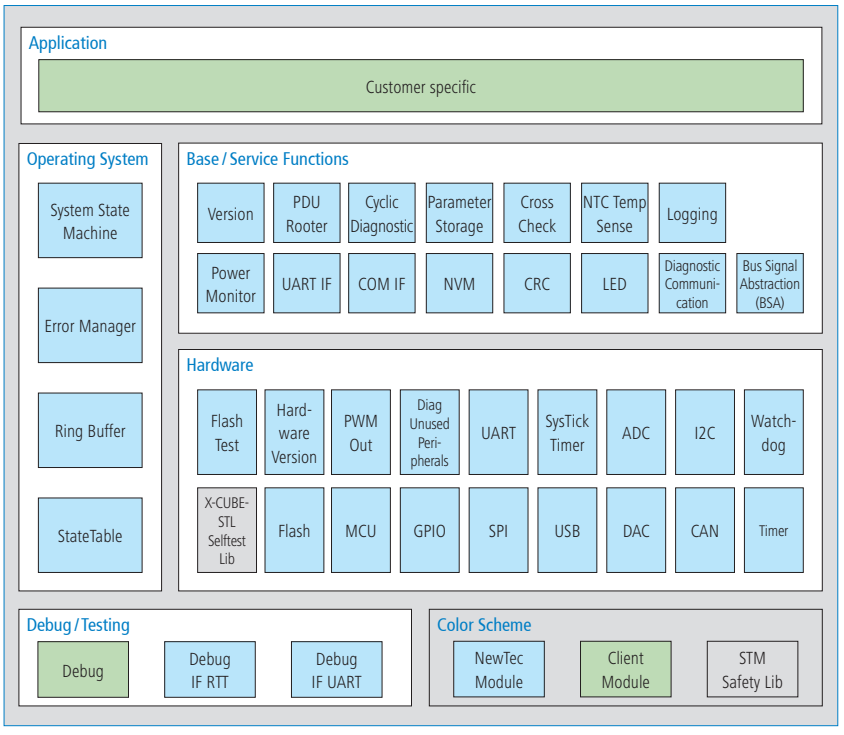


Key Features

1oo2 architecture
HFT = 1 (IEC 61508)
Two STM32G070
SIL3 ready
24V Input

- Compatible with all STM32G0xx controllers in 48 Pin LQFP package
- Power-Monitoring
- Arduino & STM Nucleo compatible connector
- 17 IOs available for customer use (I2C / SPI / GPIOs)
- Debug UART on UART -> USB converter (also available for customer application use)

Software Safety Library



Key Features

The NewTec Software Safety Library supports all major software components needed in a safety development:

- Hardware
- Base / Service Functions
- Debug / Testing and
- Operating System

Benefits:

- SIL3 ready
- Configurable & Ready to use Hardware Abstraction
- Ready to use & Template Software Components
- Components for Safety Measures and supporting Software components
- MISRA compliant
- Unit Tests & Requirements for ready to use components
- Fulfilling requirements from STM32G Safety Manual

Support

With the Nucleo / Arduino compatible connector, this solution can be directly used in many user setups implemented on an extension board. Sample extension boards are available.

So you can use the NTSafeFlex STM32 for your own safety development to design and realize systems, for instance:

- Safe system shutdown
- Safe motor supervision, ...

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