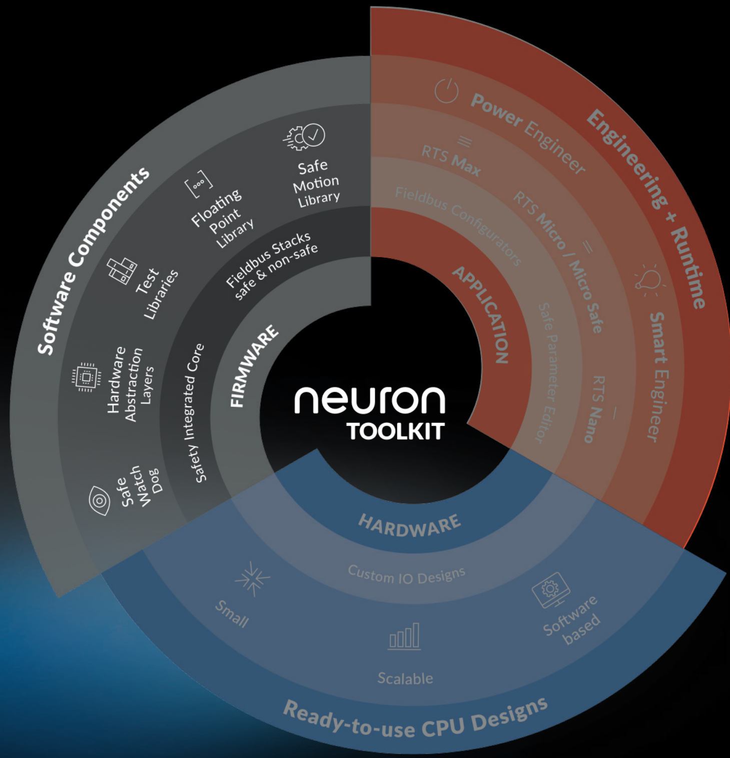
neuron
AUTOMATION

Safe Motion Module



Summary

The Safe Motion module adds safe motion capability to any existing servo drive with hardware safe torque off (STO) capability and supports all safe motion functions in accordance with DIN EN 61800-5-2. It is characterized by an integrated safety PLC runtime that decouples the safety functionality from the firmware. This allows specific safety functions to be created by original device manufacturers (ODMs) using the Neuron engineering tools. Customized safety logic can be developed from standard safety functions plus the safe motion library from the Neuron toolkit.

Main benefits at one glance

This development can be done without the need for re-certification, as long as the certified development and testing process is followed and substantially speeds up changes to the safe motion functionality of the drive.

- Functional Safety
- Faster Time-to-market
- Safe motion control
- Precertified toolkit
- Standalone or integrated into customers Engineeringtool

In addition, the module offers a wide range of hardware and interface options, including a dual-channel HW architecture, various encoder technologies and fieldbus interfaces such as EtherCAT, Profinet, EthernetIP and more.

With the Safe Motion Module, realisation of safe motion solutions and drastically reduced time-to-market become can easily been done

The Safe Motion Module is available in 2 variants:

- Integration directly into the drive
- Placed as an external unit for the safe motion control of multiple drives

Both variants share the same general features and can be customized to meet specific ODM requirements

Our Core: Your Choice.

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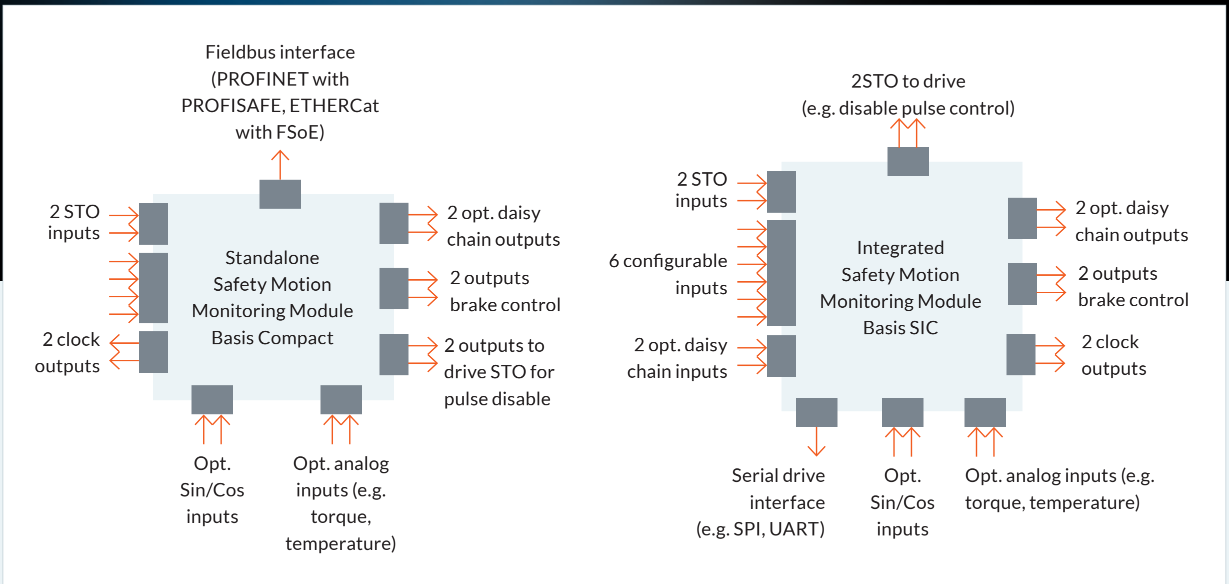
Safe Motion Module

Your Solution Partner for Functional Safety, Engineering Tools & Runtimes

Functional overview



Specifications

- Analog input for safe torque or temperature
- Digital outputs (DIN EN 61131, short-circuit protected, 1A) to control drive enable (STO) and motor holding brake (SBC)
- Optional digital inputs
- Control of multiple axes
- USB interface for parameterization and programming
- Dual channel HW architecture for SIL3 / Ple
- Support for different encoder technologies (Sin/Cos, Resolver, BISS-C Safety, Endat, Hiperface)
- Integrated fieldbus interfaces – protocol selection through SMM parameterization: EtherCAT / FSoE; Profinet / Profisafe; EthernetIP / CIP Safety; CC Link IE TSN / CC Link Safety
- Support for all safe motion functions according to DIN EN 61800-5-2
- Increased flexibility through embedded safety PLC runtime
- Safety functionality decoupled from firmware
- Specific safety technology functions can be created by ODM in standard IEC programming tool
- Create custom safety logic out of standard safety functions
- No recertification required when changing functionality while following certified engineering and test process
- Safety parameterization tool integrated for use by ODM or standalone for use by OEM

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