Library Safe Drive Functions

Design Package for a significantly faster time-to-market!

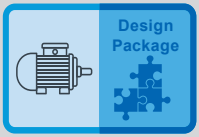
hardware development | software development | industrial communication | functional safety | explosion-proof

Hardwareentwicklung | Softwareentwicklung | Industrielle Kommunikation | Funktionale Sicherheit | Explosionsschutz

…where ideas
turn into success!

Faster Time-to-Market through Development Services + Design Packages!*

With proven in use circuits and software components manufacturers of drives, sensors, actuators, or I/O modules can accelerate and simplify the development of their products obviously – at reduced costs and risks.



Design Package: Library Safe Drive Functions

Our software library simplifies the development of safety drives in accordance with IEC 61800-5-2.

MESCO has put together many safety-related drive functions in one software library. It can be universally deployed and thus allows drive manufacturers to significantly reduce their development costs and shorten development times.

Typical applications

- Frequency converters
- Servomotors
- Linear drives

Your advantages

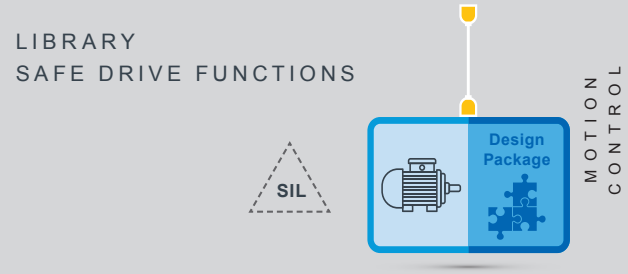
- Reduced development risk
- Cost reduction
- Short time-to-market
- Easy product certification

**MESCO Design Packages: A product of MESCO Systems*

Library Safe Drive Functions

The complexity associated with the development of industrial drives based on the latest safety standards is high. In particular, if advanced safety functions (i.e. more than just STO – safe torque off) are required, development time and effort usually increase significantly.

With the Software Library Safe Drive Functions you get self-contained, tested and ready-to-use software modules. The product development gets easier, faster and the risk is much lower.



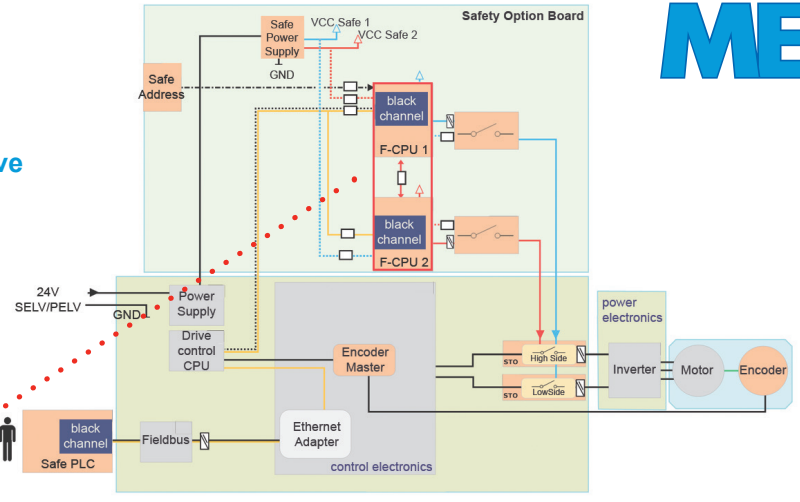
Details

The library for safety drives contains 11 safety functions according the relevant product standard IEC 61800-5-2. All functions can be easily embedded directly in the safety drive or on an optional safety option board.

The development of our library follows all relevant safety standards. It can be integrated directly in your project thus helping you achieve significant savings in development time. As an added benefit to you the product certification will be made much easier. This reduces development risks and use of valuable development resources.

We support you with the integration of the library and help you with product development.

Block diagram Safety Drive



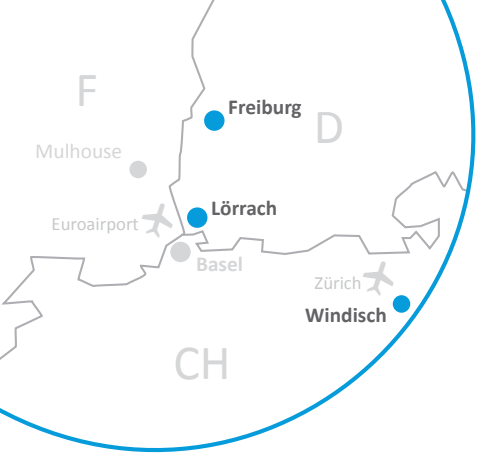
Library Safe Drive Functions

The Design Package comprises

- Software library in Source Code (C99 MISRA-C 2012)
- Integration manual
- Development documentation
- Technical support

Technical data

- Safe drive functions according to IEC 61800-5-2 (PDS/SR)
- Advanced stop functions
  - SS1: safe stop 1
  - SS2: safe stop 2
  - SOS: safe operating stop
- Advanced position functions
  - SLI: safely-limited increment
  - SLP: safely-limited position
  - SCA: safe CAM
  - SDI: safe direction
- Advanced speed functions
  - SMS: safe maximal speed
  - SLS: safely-limited speed
  - SSM: safe speed monitor
  - SLA: safely-limited acceleration
  - SAR: safe acceleration range
  - SSR: safe speed range
- Brake functions
  - SBC / SBT: safe brake control / safe brake test
- Usable for applications up to SIL3/SILCL3 IEC 61508/IEC 62061
- Usable for PLe / CAT4 ISO 13849
- Optimized for 32-Bit Microcontroller (easy porting)



About MESCO

MESCO is your partner for innovative software and hardware development in the field of process and factory automation.

We have a unique and comprehensive knowledge in the areas of industrial communication, functional safety and explosion protection.

Since 1990 we have been offering our customers worldwide up-to-date cross-sector know-how, integrated solutions and comprehensive services.

Benefit from our many years of expert knowledge and our expertise in the development of customer-specific solutions from concept to approval.

We develop for you!

MESCO Engineering GmbH
Berner Weg 7
79539 Lörrach, Germany
Phone +49 7621 1575-0
info@mesco-engineering.com
www.mesco-engineering.com

07112018