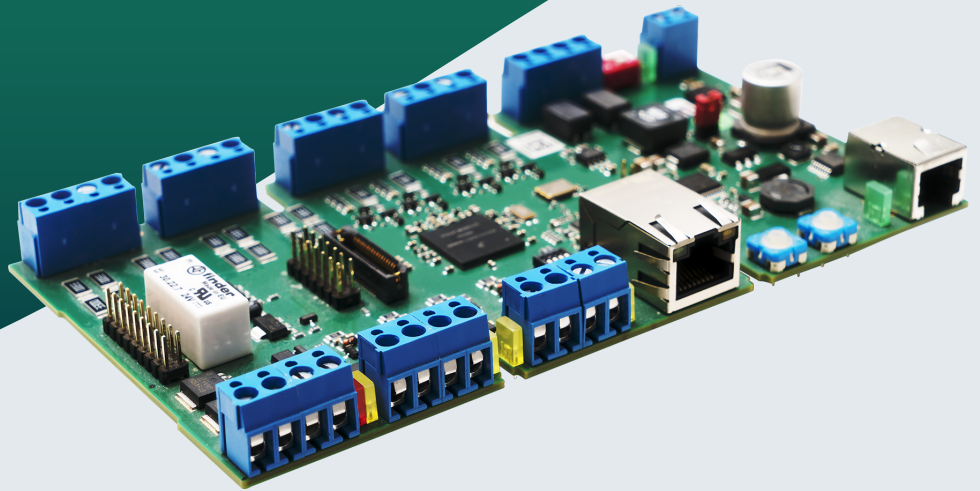


System Examples

# miriac® EK5744

based on NXP's MPC5744P MCU



## Highlights



- MCU MPC5744, 2xPower Architecture e400z4 cores
- PowerSBC 33907 System Basis Chip with Safe State Machine
- Signature Watchdog
- Ethernet (10/100MBit)
- Firmware including test and safety functions usable for applications up to SIL2/Kat.2





## Product Description

The miriac® EK5744 Functional Safety Evaluation Kit is a platform for evaluation, design and prototyping devices

It provides a solid base for custom developments und shows how to use the MPC5744P for devices meeting any of the standards IEC 61508/62061 (SIL1 and SIL2), ISO 13849 categories 1 and 2 and performance levels a-d or similar.



## Features

CPU	
<b>Processor:</b>	MCU MPC5744, 2xPower Architecture e400z4 cores, 180 MHz, 384 KB RAM (ECC), 2,5 MB Flash (ECC)
Security / Safety	
<b>Security:</b>	PowerSBC 33907 System Basis Chip with Safe State Machine, Signature Watchdog, CAN-Transceiver and primary wide input range SMPS regulartors
Operating Condition	
<b>Power Supply Voltage:</b>	12-24 V System Power Supply (acc. to ISO61131)
Software / Additional	
<b>Additional:</b>	<p>full access to MCU pins; may e.g. be used for additional I/O like the ones provided on-board</p> <p>Ethernet</p> <p>Additional field busses, e.g., EtherCAT, Profinet, Powerlink, on request</p> <p>PLC on request</p> <p>Basic abstraction layer for bus interfaces (no protocol support)</p>

### General Note:

Our standard product versions offer what we consider to be the optimum configuration in terms of performance, price, usage and TDP. The product features lists specify the maximum range of functions per interface. However, not all interfaces or functions are always available in parallel. Flexible SERDES multiplexing is one of the reasons for this. In addition, we provide multiple memory expansion options and are also happy to accommodate specific customer wishes. So do not hesitate to [contact us](#) directly to discuss your desired configuration.



## Order Info

Name	Code	Description	Status
Development Kit basic for miriac® EK5744	852410	Safety Development Kit Panther (EKS5744P) MPC5744P@ 180 MHz, 384KB ECC SRAM, 2,5MB ECC Flash Memory, includes power supply, RS232 cable, cabinet for DIN rail	active



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