

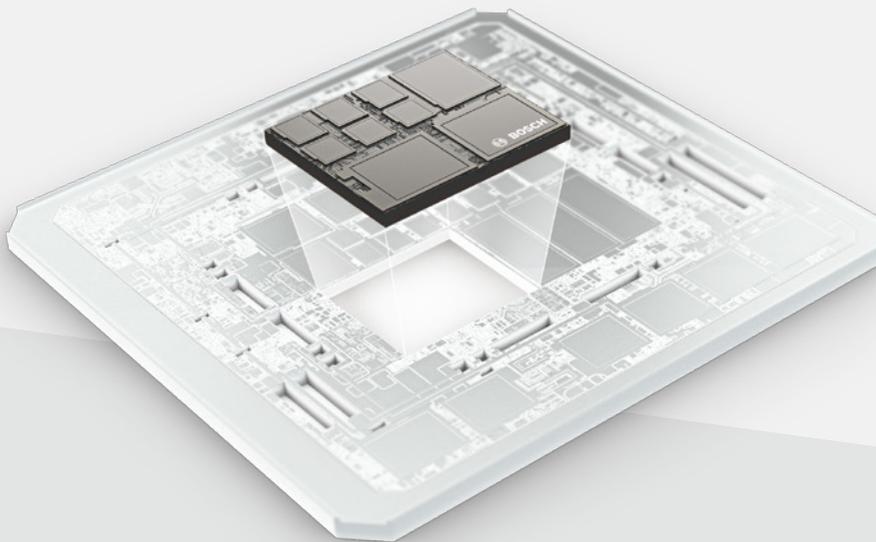
Automotive control units

E-Ray protocol controller IP for FlexRay



BOSCH

Invented for life



PRODUCT BENEFITS

- ▶ Support of FlexRay communication according to protocol specification v2.1
- ▶ Smart message handling reduces CPU load
- ▶ Most widely used FlexRay IP module due to its proven concept
- ▶ Established ecosystem
- ▶ Payload up to 254 byte
- ▶ Connectable to customer-specific host CPUs with 8/16/32-bit generic CPU interface

100 %

successfully conformance tested

TASK

E-Ray protocol controller IP for FlexRay enables time-triggered communication according to the FlexRay protocol specification v2.1.

FUNCTION

The IP module is integrated into a microcontroller, a dedicated ASIC, or FPGA and ensures the protocol conform handling of data transfer via FlexRay bus. It filters received messages from the FlexRay bus and transmits messages according to the FlexRay schedule and thereby reduces interrupt load.

VARIANTS

The E-Ray protocol controller IP module is available for integration into microcontrollers, ASICs, or FPGAs.

up to 10 Mbit/s

on each channel for real-time data transmission

E-RAY IP MODULE FOR MICROCONTROLLER OR ASIC DESIGN

E-Ray	110k gates
Message RAM	8.5kB
Deliverables for ASIC design	VHDL source code, VHDL test bench environment, documentation, conformance test report

E-RAY IP MODULE FOR ALTERA FPGAS

E-Ray	12,780 ALUTs + 23 M4Ks RAM
Deliverables for FPGA design	Encrypted VHDL source code, source code of bus interface example, documentation, conformance test report

