

MOST AUTOMOTIVE COMMUNICATION SYSTEM



AUTOMOTIVE COMMUNICATION SYSTEM

SIMPLIFY YOUR MOST APPLICATION DEVELOPMENT

Various devices connected via MOST interact with synchronous and asynchronous communication to create an end user experience of a rich and comfortable multimedia and infotainment environment. The devices build increase in complexity and apply many consumer electronics technologies to the automotive environment. Often, two or even more embedded CPUs, sometimes of different types and with varying operating systems, are integrated in one device connected via inter-processor communication (IPC). Thus, both communications over field buses and device internal distributed communications is a paramount challenge in such classes of embedded automotive devices. CETITEC meets that challenge with the Automotive Communication System to make workflows easier for OEMs as well as suppliers.

Automotive Communication System

CETiBox SDK is available with CETITEC Software components pre-integrated to suit your application case:

- **CETITEC Automotive Communication System (ACS) includes a framework for embedded application development and a tool chain increasing the productivity of application programmers.**
- **ACS provides a comprehensive set of APIs for easing application development including definitions of MOST specific data types and function classes as well as standard functionality like notification inside a rich C++ class library.**
- **ACS MOST Application Generator (Integra) reads XML file based MOST function catalogs to generate user selectable Function Block and Shadow interface logic for your application.**
- **ACS framework architecture allows multiple application processes to participate in MOST communication in a dynamic, scalable and message driven way without any need for call back or pre-processor based element definitions.**
- **ACS architecture allows seamless distribution of applications on multiple CPUs, even driven by different operating systems sharing one physical MOST node.**

PART LIST

- Automotive Communication System software component
- MOST Application Generator
- Detailed user manual
- Example applications
- Setup of PC applications and ACS components

ACS SYSTEM REQUIREMENTS

Operating Systems:

- I QNX
- GHS Integrity
- Embedded Linux
- Windows CE 6.0 and 7.0
- MS-Auto
- TEngine
- Android
- OSEK

INTEGRA SYSTEM REQUIREMENTS

- Windows 7 (32 or 64 bit)
- or Windows XP
- Dual-Core CPU
- 1 GB RAM
- .NET Framework >= 4.0

NEXT STEPS

Request for Quotation: sales@cetitec.com

Further Information: +49 (7231) 95688-62



ACS PRODUCT HIGHLIGHTS

- Concentrates on programming behavioral aspects and business logic by generation of MOST interface logic and data types rather than retyping MOST function catalogs
- Designed for portability to various operating systems (OS) and integration scenarios available for static and dynamic operating systems including multi-CPU scenarios (in-line and tree-topology supported for interconnection of different CPUs)
- Customization by implementing own specific feature requests on application level which are not part of the MOST specification but rather OEM-driven
- Supports multiple instances of physical or virtual MOST networks e.g. for realization of private internal MOST communication like "hidden" Function Blocks
- The ACS Server is designed to interact seamlessly with other CETITEC products such as the CETITEC MOST driver
- Applicable with own IPC implementations on almost any appropriate
- physical layer (e.g. UART, SPI, USB ... Ethernet)

ACS BENEFITS

- Efficient product development and improved quality by integration of generated code and a mature 3rd generation MOST application framework
- Seamless integration of multiple MOST catalog versions through fully object oriented approach of deriving from generated interfaces (no round-trip-engineering problems)
- Let your business logic experts instantly apply MOST technology without climbing a steep learning curve on MOST details
- Let Integra analyze the MOST function catalog and identify weak, incomplete and erroneous definition spots on interfaces
- Start your development on the PC or experience full functionality of ACS on a reference hardware platform
- Take advantage of the support and experience of CETITEC as a key supplier of leading edge MOST competence

FEATURES

- **Middleware for message event and MOST related communication**
- Connects with identical API:
 - **Applications in different devices (ECUs)**
 - **Applications in the same device executed on different CPUs**
 - **Applications (processes) running on one CPU**
- Local (invisible) communication possible between:
 - **Applications on one CPU**
 - **Applications in one device**
- **Possibility for integration of additional communication protocols**
- Identical interfaces on all supported operating systems, e.g.:
 - **QNX**
 - **Embedded Linux**
 - **Windows CE 6.0 and 7.0**
 - **MS-Auto**
 - **TEngine**
 - **Android**
 - **OSEK**
- **External trace viewers available (including payload-disassembly)**

