

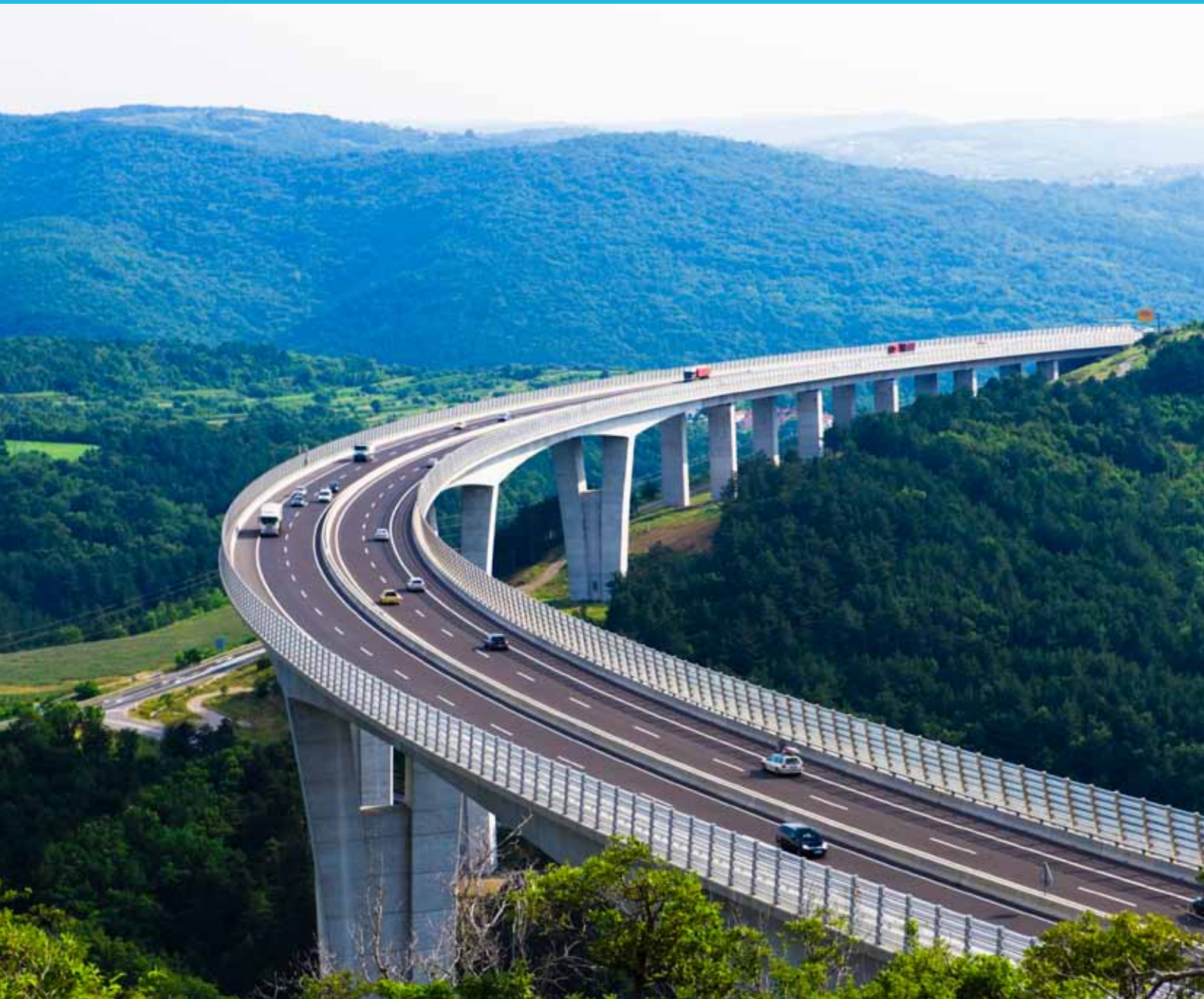


Fraunhofer

IIS

FRAUNHOFER INSTITUTE FOR INTEGRATED CIRCUITS IIS

TPEG DECODER SOFTWARE



BENEFITS

FASTER TIME TO MARKET

The product-ready Fraunhofer IIS TPEG (Transport Protocol Experts Group) decoder software allows for a fast and efficient integration of the TPEG functionality into your product.

RESOURCE-EFFICIENT

The decoder software is optimized to selectively interpret the information needed for the current context, thus relieving the computational resources and enabling reduced power consumption.

READY-TO-RUN CONDITIONAL ACCESS SYSTEM INTEGRATED

The TPEG decoder software optionally comes with the seamlessly integrated HECA (High Efficiency Conditional Access) decoder software. The TPEG Automotive Profile (TAP) mandates the use of HECA for protected applications.

FASTER ACCESS TO NEW TPEG FEATURES

As a contributor to the Traveller Information Services Association (TISA), Fraunhofer IIS provides fast access to the newest developments and helps you deliver a cutting-edge performance.

ONE-STOP-SHOP FOR DIGITAL RADIO BROADCASTING

Fraunhofer IIS develops and implements all technologies and components needed to build and support Digital Audio Broadcasting (DAB, DAB+) and Digital Radio Mondiale (DRM) radio systems. Fraunhofer IIS covers all relevant standards and components along the digital radio broadcasting chain.



Technical Features

Comprehensive availability – The decoder software is a generic library designed for embedded solutions (e.g. ARM). It is available as a pure C source or an object code.

Granular Composition – The decoder can be easily expanded by new TPEG features.

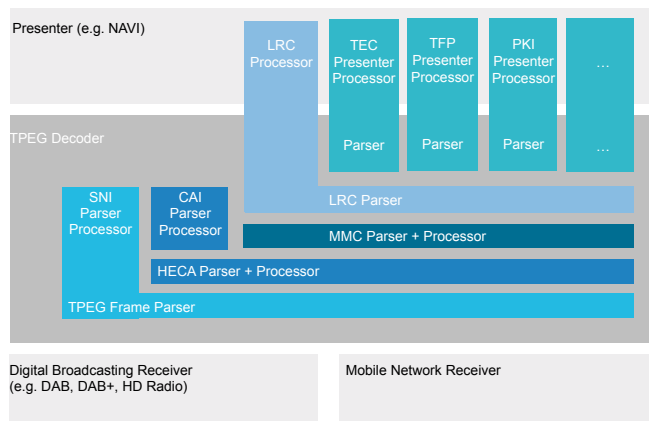
Efficient Filtering – Only messages that are relevant for the current geographic area and active applications are forwarded for further processing.

TISA conformity – The decoder software's TISA conformity grants you access to the latest TPEG generation available.

Complete solution – Fraunhofer IIS provides comprehensive solutions for digital broadcasting, ranging from the transmitter to the receiver side. Fraunhofer IIS operates its on-site DAB/DAB+ transmission tower for TPEG life stream tests under real-world conditions.

What happens in the TPEG decoder?

Data streams coming either from a digital broadcasting receiver (e.g. DAB, DAB+, HD Radio) or a mobile network receiver enter the TPEG decoder. Here they are parsed for service and network information (SNI) along with any conditional access information (CAI) identification. The single information units are categorized according to their significance, location and respective type of TPEG applications through the message management container (MMC) and the location referencing container (LRC). They are then forwarded to the presenter module of your navigation device as a dedicated event (e.g. traffic jam). Currently supported TPEG applications are Traffic Event Compact (TEC), Traffic Flow & Prediction (TFP), Fuel Price Information (FPI) and Parking Information (PKI). Further TPEG applications will be added once specified.



What is TPEG?

The broadcasting application TPEG is an advanced travelling and traffic service. It not only informs about local hazard warnings and traffic jams, but also about traffic flow and prediction, parking capacity, dynamic speed limits, fuel pricing, weather information and more.

Currently, the application is adapted for transmission via DAB, DAB+, HD-Radio and mobile network (http).

TPEG is the successor of RDS-TMC. TPEG overcomes the limited transmission and information capacity associated with RDS-TMC.

What is HECA?

The new business models of modern broadcast systems demand the protected distribution and controlled consumption of digital content. Traditional broadcast systems distribute content to every member in the network, whereas the integration of a conditional access system enables the transmission to closed user groups.

With HECA, the High Efficiency Conditional Access system, Fraunhofer IIS has designed a CA system especially tailored for digital broadcast systems with limited bandwidth.

For more information about the TPEG Decoder Software, please visit

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About Fraunhofer IIS

The Fraunhofer IIS Audio and Multimedia division, based in Erlangen, Germany, has been working in audio coding technology for more than 20 years and remains a leading innovator of technologies for cutting-edge multimedia systems. Fraunhofer IIS is the main inventor of mp3 and universally credited with the co-development of AAC (Advanced Audio Coding) as well as technologies for the media world of tomorrow, including MPEG Surround and the Fraunhofer Audio Communication Engine.

Through the course of more than two decades, Fraunhofer IIS has licensed its audio codec software and application-specific customizations to at least 1,000 companies. Fraunhofer estimates that it has enabled more than 5 billion commercial products worldwide using its mp3, AAC and other media technologies.

The Fraunhofer IIS organization is part of Fraunhofer-Gesellschaft, based in Munich, Germany. Fraunhofer-Gesellschaft is Europe's largest applied research organization and is partly funded by the German government. With nearly 20,000 employees worldwide, Fraunhofer-Gesellschaft is composed of 60 Institutes conducting research in a broad range of research areas.