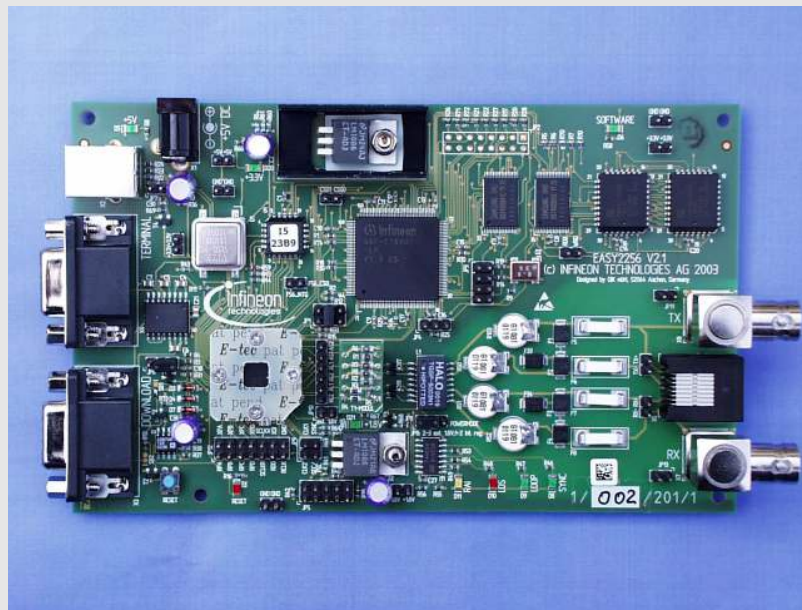


The EASY2256 Evaluation System includes specially optimized modular hardware and software components designed to demonstrate the performance of Infineon's FALC<sup>®</sup>56 (PEF 2256 H) in a real-world telecommunications environment.

Each module is controlled by its own device driver and API including SSM (Synchronization Status Message support). The API and SSM run on Infineon's C165UTAH controller together with the firmware.

The EASY 2256 provides system vendors with a highly integrated, software programmable interface reference design for sophisticated E1/T1/J1 framer and Line Interface Unit (LIU) applications based on Infineon's FALC<sup>®</sup>56 transceiver.

The EASY2256 Evaluation System is AT&T and ETSI certified.



# EASY2256

## Functionality

- Meets all relevant E1/T1/J1 standards for pulse template, jitter, receiver return loss, line attenuation for short and long haul applications.
- Flexible hardware clocking system with a single clock oscillator as the source for the FALC<sup>®</sup>56 reference clock in E1/T1 or J1 mode
- Features ITU-T K.20/21 approved line interface circuitry
- The FALC<sup>®</sup>56 driver code is downloaded to the board via RS-232 or USB connections to communicate with the Microsoft Windows<sup>®</sup> menu-based WinEASY program.

## Hardware Features

- FALC<sup>®</sup>56 device (P-MQFP-80 package) with RJ-45 and BNC connectors

- Highly flexible programmable PCM /system interface available through access connectors
- Single crystal oscillator and transformer for E1/T1/J1 without any resistor changes
- Infineon C165UTAH 16-bit controller
- 1 MByte SRAM system memory
- 1 MByte Flash EEPROM for firmware and user application software
- Two standard serial RS-232 PC interfaces for download and debugging
- High speed USB interface
- LED control for alarms

## Software Features

- PC Software for Windows 98/ME and Windows NT/2000
- Automatic detection of available RS-232 interface baud rate

- Log Window for supervising data transfer between Evaluation System and PC
- Track Window to run single API calls in sequences
- Application Manager Window for EEPROM management
- Modular driver system, user specific modification possible
- Download function
- FALC<sup>®</sup>56 API: Easy portable device driver for easy configuration
- All C source code available on CD-ROM
- Direct register access via Chip level
- Application Wizard for FALC<sup>®</sup>56

## Accessories

- CD-ROM containing all C-source code, WinEASY and documentation
- Application Wizard for FALC<sup>®</sup>56 and QuadFALC<sup>®</sup>

# EASY2256

Evaluation System for FALC<sup>®</sup>56



Never stop thinking.

## Hardware Description

The EASY2256 board includes the FALC<sup>®</sup>56 with an external line front end. The FALC<sup>®</sup>56 is connected to a 16-bit CPU C165UTAH. Two serial interfaces provide download and debug capability. The board can be connected to standard E1/T1/J1 test equipment via an RJ-45 or BNC connection.

The AFE represents an optimized generic E1 and T1/J1 platform to meet the pulse shape requirements. The AFE also meets receive and transmit return loss and impedance towards GND specifications without resistor switching for E1-120 Ω, E1-75 Ω and T1-100 Ω cables.

Test connectors provide easy access to all system interface, clock and boundary scan signals.

Four LEDs are included to indicate the synchronization state, loopback status, loss of signal (red alarm), and remote alarm (yellow alarm).

Schematics and layout files are part of the CD-ROM package.

## Software Description

In addition to the WinEASY GUI, the software package includes the Device Driver System (DDS) and API driver modules for the FALC<sup>®</sup>56.

The FALC<sup>®</sup>56 API provides state-of-the-art calls and call back functions to configure and maintain the device, and also supports SSM (Synchronization Status Messages). The API is easily ported to various platforms using adaptation layers.

The FALC<sup>®</sup>56-API contains all device specific functions for data and status transfer, including signaling, performance, and alarms, as well as for overall device configuration.

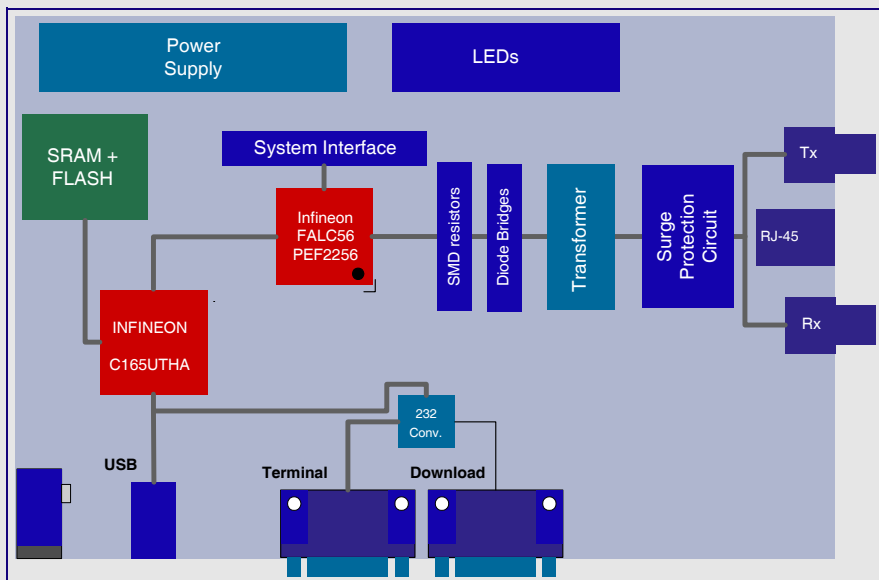
## Ordering Information

FALC<sup>®</sup> ICs

Product	Sales Code	Description	Package
FALC56	PEF 2256 H	E1/T1/J1 framer and Line Interface Unit	P-MQFP-80-1

## Evaluation Tools

Product	Sales Code	Description	Package
EASY 2256	EASY 2256	Evaluation system for the PEF 2256 H	One board and CD_ROM including software, documentation, and schematics



EASY2256  
Block Diagram

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Published by  
Infineon Technologies AG,  
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D-81669 München

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