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AutoDevKit

AutoDevKit™ a new development approach for automotive applications

A VIABLE, SIMPLE, LOW-COST TOOL FOR AUTOMOTIVE APPLICATION ENGINEERS

A new development flow and toolset dedicated to the Automotive & Transportation market delivering to engineers the best and easiest way for quick evaluation and rapid prototyping in a common, integrated and flexible environment supporting complete ECU-like development.

AutoDevKit is an Eclipse plugin running under SPC5Studio Integrated Development Environment.

AutoDevKit

AEK MCU Discovery and Functional Boards

AEKD System Solution Demonstrators

STSW Embedded Software

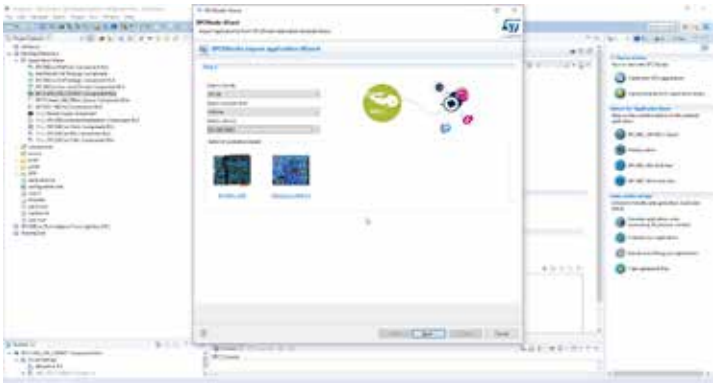
KEY FEATURES

- Focus in developing your application without bothering about hardware and software implementation details.
- Assemble and re-assemble hardware and software components without compatibility issues.
- Expand and customize your application adding new components, scaling your microcontroller for cost optimization, changing the compiler, adding a real-time operating system and other Eclipse-compatible plugins

Find out more at **www.st.com/autodevkit**
Software download **www.st.com/autodevkitsw**
Join our Community at **https://community.st.com/autodevkit**

SOFTWARE ENVIRONMENT

AutoDevKit™ ecosystem includes software and firmware components to develop your application prototype.



With its graphical user interface for easy configuration and setup, the AutoDevKit library (STSW-AUTODEVKIT) contains software components for functional boards where engineers can benefit from a very high level and easy-to-use methods or access very low-level board/chip advanced functionalities and features.

AutoDevKit mobile app (STSW-AEKEXPLORER*) for Android/iOS is a fast and smart way to explore ST's AutoDevKit™ development ecosystem using your smartphone or tablet to quickly generate a project on the fly to be downloaded and imported in SPC5 Studio.

Discover this viable, simple, low-cost tool for automotive application engineers developing feature-rich customizable vehicle ECUs.

AEK MCU DISCOVERY BOARDS

A set of boards for evaluating specific automotive microcontrollers.

AEK-MCU-C4MLIT1

AEK MCU discovery board for general-purpose SPC58 Chorus Line automotive microcontrollers with CAN transceivers and 4MByte Flash.

Dual-core SPC58ECx microcontrollers introduce new features coupled with higher throughput to provide substantial reduction of cost per feature and significant power and performance improvement (MIPS per mW).

AEK-MCU-C1MLIT1* / SPC582B-DIS

MCU discovery board for general-purpose SPC58 2B Line automotive microcontrollers designed for body, networking and convenience applications.

ISO 26262-compliant, single-core SPC58 2B Line microcontrollers support the ASIL-B safety standard and are available with up to 1 Mbyte of Flash memory with error-correcting code (ECC).

* coming soon

AEK POWER MANAGEMENT BOARDS

Designed to be used with our AEK MCU discovery boards, these functional boards support power conversion and distribution inside the vehicle.

AEK-LED-21DISM1

Digitally controlled LED driver board able to control four LED strings through two embedded L99LD21 flexible LED drivers with high efficiency boost controller and two embedded buck converters.

AEK-POW-L5964V1

Digitally controlled DC-DC converter designed for power car or truck body applications requiring different voltages, such as USB-PD or infotainment.

AEK MOTOR CONTROL BOARDS

A set of boards dedicated to evaluate different motor topologies.

AEK-MOT-SM81M1

Stepper motor driver evaluation board designed to drive a bipolar stepper motor in micro-stepping mode, with coil voltage monitoring for stall detection.

EV-VNx7xxx / EV-VNHx7xxx

A range of pre-assembled evaluation boards with VIPower® drivers for uni- or bi-directional DC motor driving and general actuation.

AEK CONNECTOR BOARDS

Simplify the wiring connections to build your prototypes.

AEK-CON-5SLOTS1

5 slots AutoDevKit interface board allows MCU peripheral pin assignment reconfiguration to match connectors on functional boards.

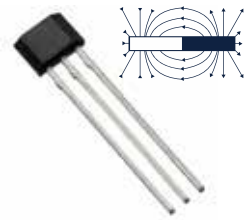
AEK-CON-AFLVIP2

Adaptive front lighting dedicated connector board with VIPower slot (AEK-CON-AFLVIP2) is designed to connect a car headlight demo like AEKD-AFLPANEL1.

SENSORS

Third-party components to enrich prototypes.

RPLIDAR A1M8 360° laser range scanner



Ratiometric Hall effect sensor

AEK COMMUNICATION & CONNECTIVITY BOARDS

Add Bluetooth, GNSS, or USB communication modules to your prototype.

AEK-COM-BLEV1*

The Bluetooth® functional board is based on the BlueNRG-1, a low-power Bluetooth® smart system-on-chip, and provides a set of hardware resources for implementing a wide range of application scenarios.

* coming soon

AEK-COM-GNSST31*

The GNSS functional board is based on our tiny Teseo-LIV3F GNSS module that provides superior accuracy and a reduced time-to-first fix (TTFF).

AEK-USB-2TYPEC1

The USB Type-C and Power Delivery dual port expansion board embeds two STUSB1702Y USB Type-C™ port controllers for a two-port Provider solution.

AEK DEMO KITS

Set of pre-assembled demonstrator kits implementing an automotive system solution.

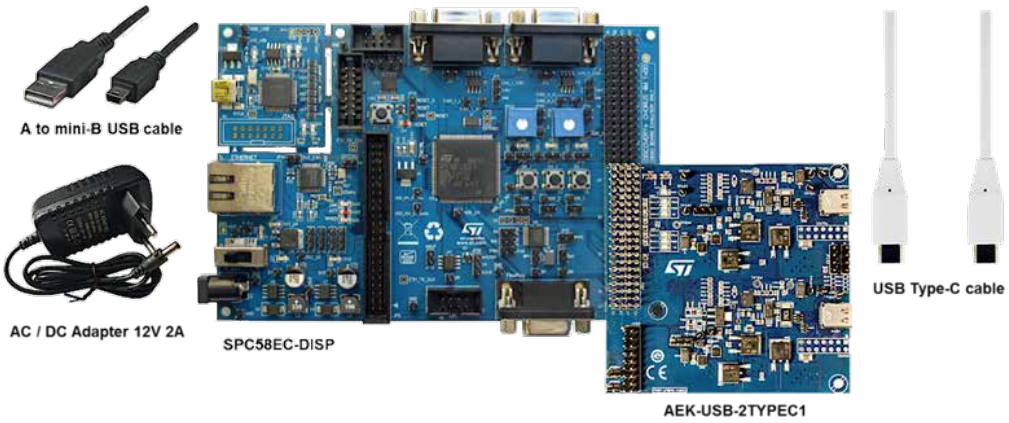
AEKD-AFLLIGHT1

Car headlight assembly with LED lights, motors and cooling fan able to accommodate adaptive front light (AFL) adjustment systems for simulation and development purposes.

AEKD-AFLPANEL1

Adaptive Front Light testing and prototyping kit allowing simplified wiring connection customizations and addition/removal of functional boards.

* coming soon



AEKD-USBTYPEC1

USB Type-C™ and USB Power Delivery evaluation kit lets you test the USB Power Delivery protocol stack implemented on ASIL-B automotive grade 32-bit SPC58 microcontrollers.

AEK EDUCATIONAL TOOLS

GTM Educational Tool

SPC5 Generic Timer Module (GTM) educational tool demonstrating a typical use in fuel injection and ignition of a one-cylinder ICE.

For availability, contact ST sales and official distributors.

AEKD-BLINDSPOTA1* AEKD-BLINDSPOTB1*

Blind-spot warning system educational tool

BlindSpot Detection simulator is designed to help engineers become familiar with the AutoDevKit ecosystem and get their hands on a working demonstrator. For this purpose, the two car proximity detection is implemented measuring a magnetic field variation through a hall sensor and the warning is actuated with a high power LED.

* coming soon

Find out more at **https://www.st.com/en/ecosystems/autodevkit.html**

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Order code: BRAUTODEVKIT0220

For more information on ST products and solutions, visit www.st.com

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