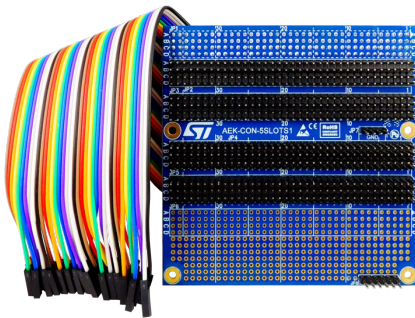


## 5-slot AutoDevKit connector board



### Features

- Fast and easy extension of 4x37 connector on SPC5x discovery boards
- Single female connector to plug the board onto an SPC5x 4x37 connector
- Two male connectors with same outputs as 4x37 connector
- Two configurable male connectors 4x37 whose pins can be reassigned to connect different functional boards
- Additional ground and 5V pins
- Bare section available on the board for specific application purposes
- Female-to-female jump wire set included
- Part of the AutoDevKit initiative

### Description

AutoDevKit allows you to save time and effort when prototyping concepts or designs for complex automotive applications by generating custom firmware code and pin-assignments across a suite of functional boards, using [SPC5-Studio](#) as your integrated development environment (IDE).

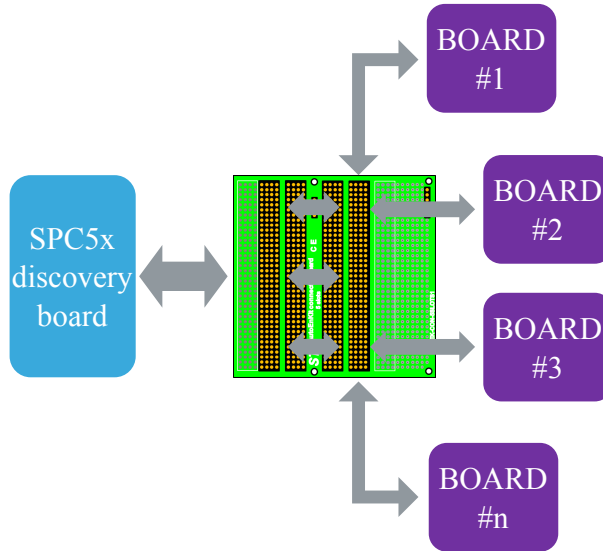
The [AEK-CON-5SLOTS1](#) interface board provides a set of 4x37 extension connectors that allow you to reconfigure the pin assignments for ADC, LIN, Timers, DSPI, GPIO, and other standard peripherals on the SPC5x Discovery control board connector for compatibility with AutoDevKit functional boards with different connector pin assignments.



Product summary	
5 slot AutoDevKit connector board	<a href="#">AEK-CON-5SLOTS1</a>
Development environment	<a href="#">SPC5-Studio</a> addon for Eclipse (with AutoDevKit plugin extension)

# 1 Overview

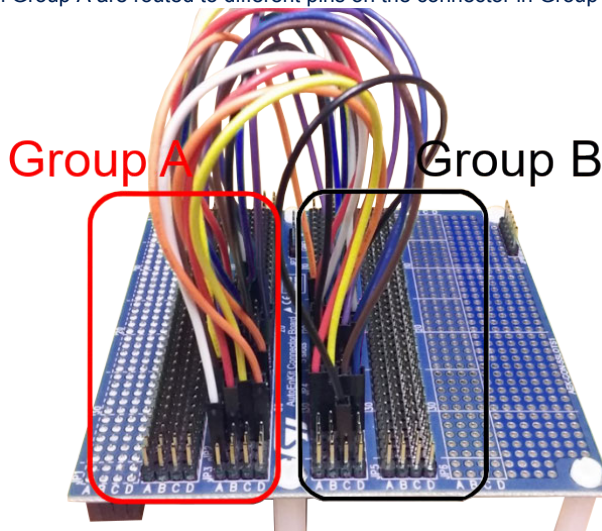
Figure 1. AEK-CON-5SLOTS1 block diagram



The AEK-CON-5SLOTS1 features two groups of two 4x37 connectors that we nominate Group A and Group B in the figure below. To reconfigure a connector, connect jumper wires from the original pin location on the inner connector of Group A to new pin locations on the inner connector in Group B.

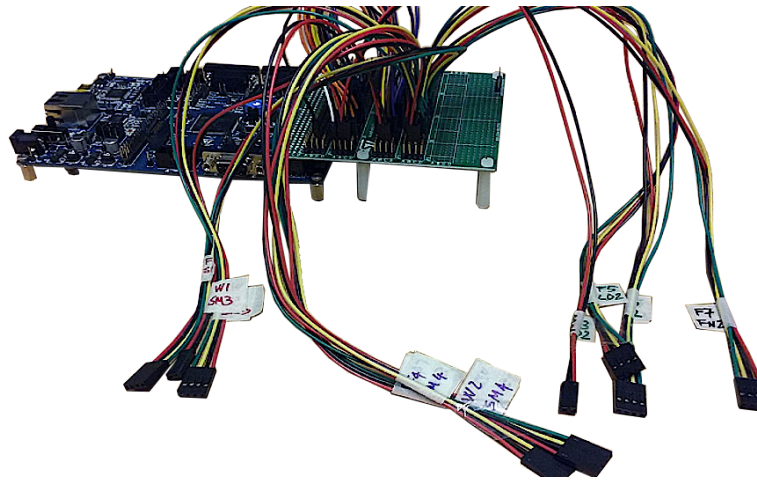
Figure 2. AEK-CON-5SLOTS1 jumpers to reconfigure the SPC5x discovery board connector pin assignments

Pins on inner 4x37 connector in Group A are routed to different pins on the connector in Group B



The outer connector in Group B matches the pin allocation of the inner connector in the same group, so you can connect jumper wires between the outer connector and external connectors on a separate functional board according to the new pin allocations on the Group B connectors.

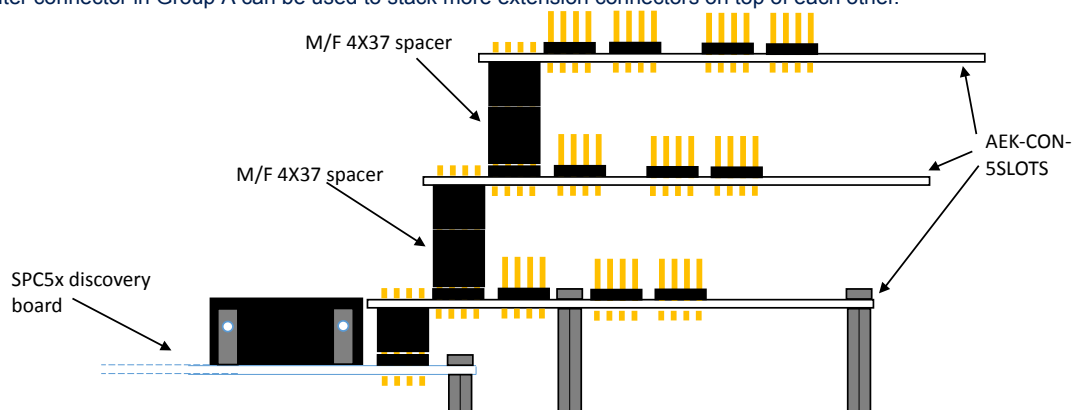
**Figure 3. AEK-CON-5SLOTS1 with reconfigured connector and jumper wires for external functional board**



The outer connector in Group A can either be used to wire a board that is pin-to-pin compatible with the SPC5x Discovery connector configuration, or to stack another AEK-CON-5SLOTS1 extension board.

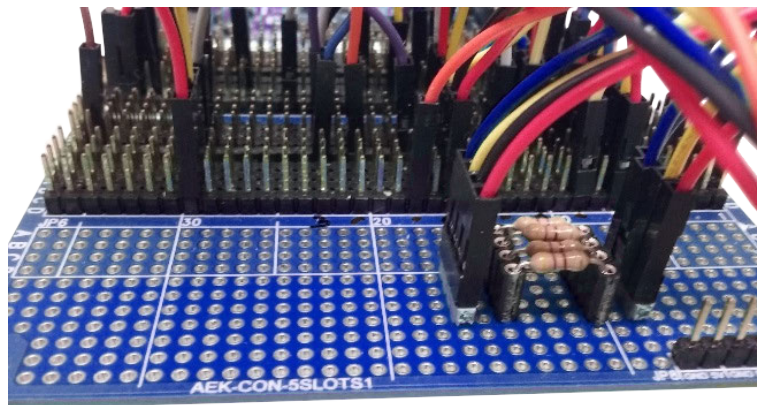
**Figure 4. Multiple AEK-CON-5SLOTS1 extension boards mounted on SPC5x Discovery board**

The outer connector in Group A can be used to stack more extension connectors on top of each other.



The board includes a breadboard area for you to add any simple circuits necessary to complete your prototype application.

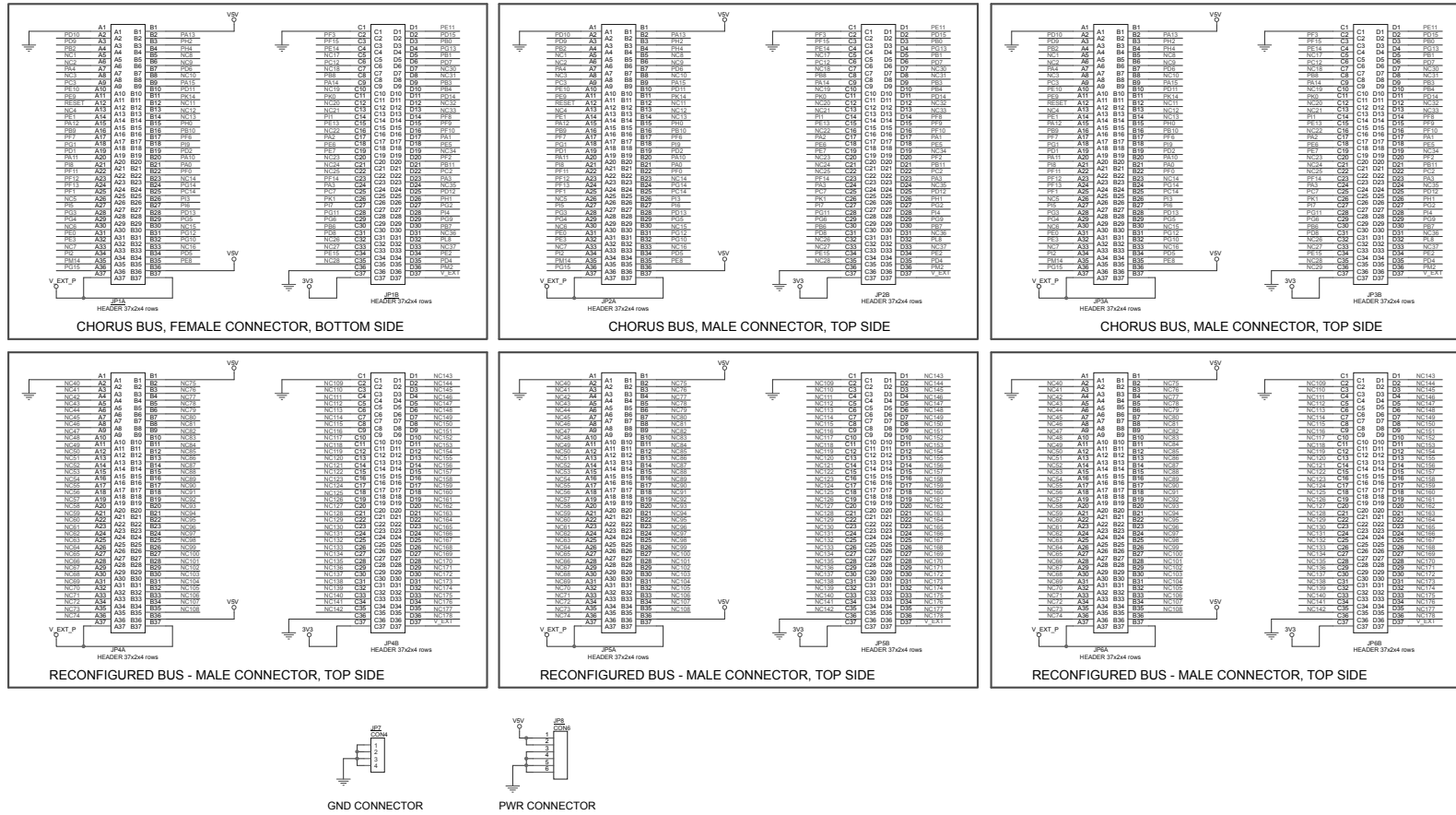
**Figure 5. AEK-CON-5SLOTS1 breadboard area**



# 2 Schematic diagrams



Figure 6. AEK-CON-5SLOTS1 schematic diagrams



## Revision history

**Table 1. Document revision history**

Date	Version	Changes
21-Jul-2019	1	Initial release.