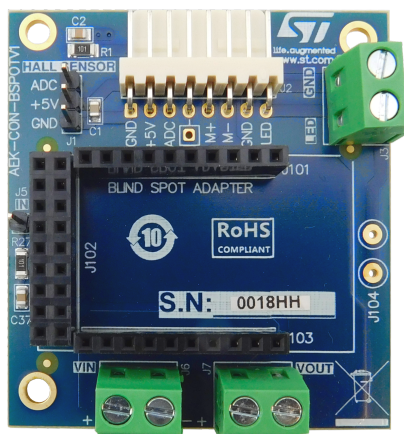


## Blind-spot educational tool connector board with EV-VN7xxx connector



### Features

- Host connector for EV-VN7xxx board type
- 3 pins available for Hall sensor connection
- Side connector for LED string driving
- Two connectors on the under side to supply the system and the AEK-LED-21DISM1 LED driving board
- 8-pin connector for AEKD-BLINDSPOTA1:
  - 2 pins for DC motor driving
  - 2 pins for LED driving
  - 3 pins for Hall sensor connection
- Part of the AutoDevKit initiative
- RoHS compliant

### Description

The **AEK-CON-BSPOTV1** board is principally a connector board for the Blind-spot Educational Tool actuators and loads. It conveniently arranges all the wire connections from the **AEKD-BLINDSPOTA1** into a single 8-pin connector, and has another connector for the **EV-VN7050AS** board that drives a DC geared motor for the conveyor belt. Finally, the board simplifies power connection between the boards and signal transfer from the LED driving board **AEK-LED-21DISM1** and the Hall sensor.

The Blind-spot detection and warning educational tool is designed help developers to become familiar with AutoDevKit based development. The AEKD-BLINDSPOTA1 kit is a hardware assembly set with all required loads for the specific application, and the **AEKD-BLINDSPOTB1** set consists of electronic boards to control the entire system.

Blind-spot detection is simulated through magnetic field detection by means of a Hall sensor mounted on a stationary car and magnets mounted inside another car placed on the conveyor belt moved by a 12 V DC gearbox motor with 40 RPM and very high torque.

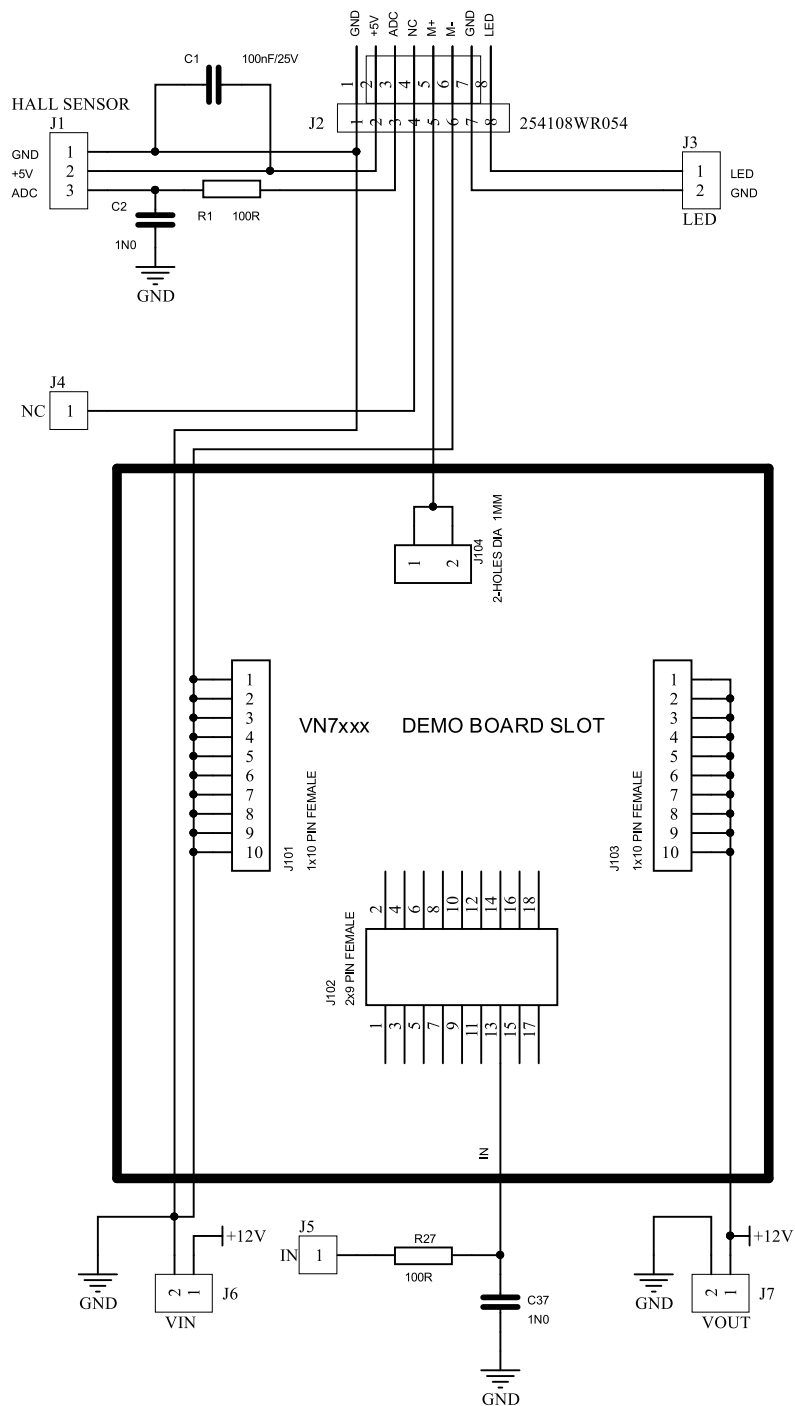
The entire tool will help you develop the skills to build the firmware to control the system triggers using SPC5-Studio extended with AutoDevKit plugin. You can compare your resulting code with source code provided in the AutoDevKit plugin, and system functionality can be tested by downloading the **STSW-BLINDSPOT SPC58EC** firmware.

Product summary	
Blind-spot educational tool connector board with EV-VN7 connector	<b>AEK-CON-BSPOTV1</b>
Blind-spot board panel	<b>AEK-BLINDSPOTB1</b>
Blind-spot detection simulation kit	<b>AEK-BLINDSPOTA1</b>
Firmware for AEKD-BLINDSPOTB1	<b>STSW-BLINDSPOTB1</b>
VN7050AS evaluation board based on VIPower M0-7 technology	<b>EV-VN7050AS</b>
Digitally controlled LED driver board for automotive lighting applications	<b>AEK-LED-21DISM1</b>



## 1.2 Schematic diagram

**Figure 2. AEK-CON-BSPOTV1 schematic**



## Revision history

**Table 1. Document revision history**

Date	Version	Changes
17-Jun-2020	1	Initial release.



## Contents

<b>1</b>	<b>Block diagrams and schematic diagrams</b>	<b>2</b>
1.1	Block diagram	2
1.2	Schematic diagram	3
	<b>Revision history</b>	<b>4</b>
	<b>Contents</b>	<b>5</b>
	<b>List of tables</b>	<b>6</b>
	<b>List of figures</b>	<b>7</b>



## List of tables

Table 1.	Document revision history . . . . .	4
----------	-------------------------------------	---



## List of figures

Figure 1.	Block diagram . . . . .	2
Figure 2.	AEK-CON-BSPOTV1 schematic . . . . .	3

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