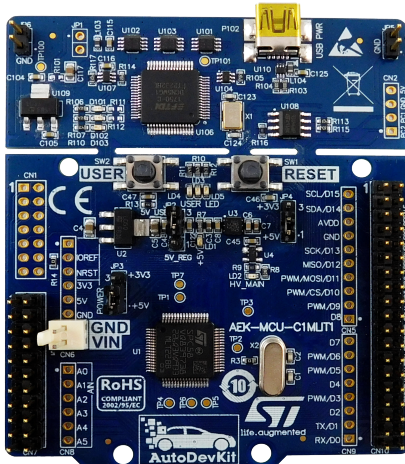


MCU discovery board for SPC5 Chorus 1M automotive microcontroller



Features

- SPC582B60E1 microcontroller: 32-bit z2 core at 80 Mhz CPU, 32-bit Power Architecture® technology CPU, 1 MB Code Flash in eQFP64 package
- On-board USB-JTAG PLS debugger and dedicated optional connector to plug a standalone JTAG debugger
- Extension headers for all the device pins for fast prototyping
- Mini-B USB port
- One user push button and one RESET button
- 3 LEDs for user purposes
- 3 integrated programmers/debuggers
- 1 Reset and 1 Power LED (+5 V)
- 40 MHz Crystal
- RoHS and WEEE compliant
- Part of the AutoDevKit™ initiative

Description

The AEK-MCU-C1MLIT1 board exploits the functionality of SPC582B60E1 Power Architecture® microcontrollers with full access to I/O signals and peripherals.

The SPC58 2B Line MCUs are designed to address automotive vehicle body, gateway and industrial applications.

Free ready-to-run application firmware examples are available in the SPC5-STUDIO software with AutoDevKit plug-in (STSW-AUTODEVKIT) to support quick evaluation and development.

Product summary	
MCU discovery board for SPC5 Chorus 1M automotive microcontroller	AEK-MCU-C1MLIT1
32-bit power architecture MCU for automotive general purpose applications - Chorus family	SPC582B60E1
Code generator, quick resource configurator and Eclipse development environment for SPC5 MCUs	SPC5-STUDIO
Applications	Automotive Gateway Body Control Module

1 System requirements, HW and SW resources

- Hardware requirements:
 - Windows PC
 - USB cable: Type A to mini-B
- Software requirements:
 - SPC5-STUDIO for low-level drivers, code generation, system and peripherals configuration, pin configuration and firmware development
 - PLS UDE for MCU programming and debugging
 - [AutoDevKit](#) plug-in for cross-platform functional board components

2 Schematic diagrams



Figure 1. AEK-MCU-C1MLIT1 circuit schematic (1 of 4)

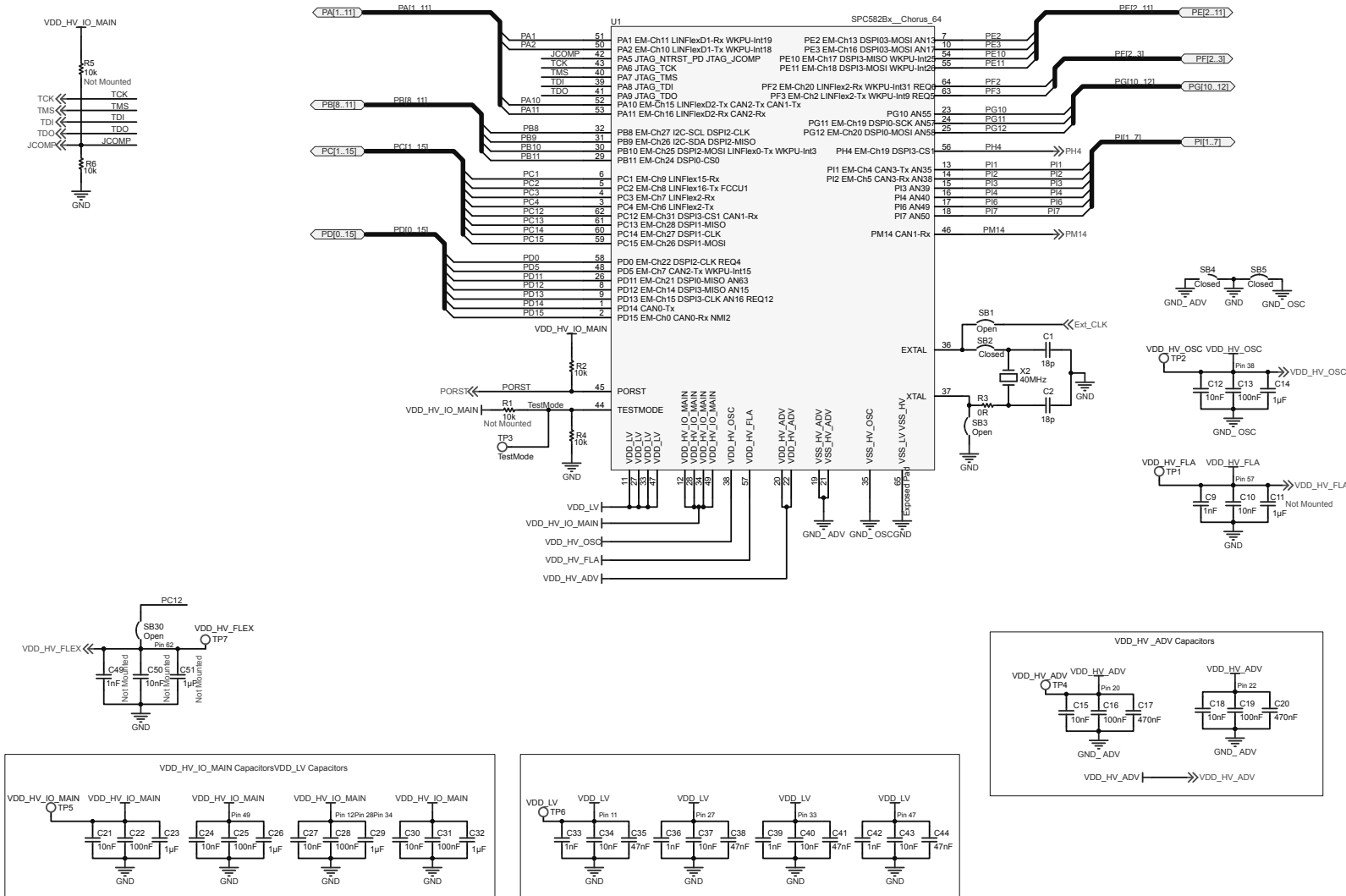


Figure 2. AEK-MCU-C1MLIT1 circuit schematic (2 of 4)

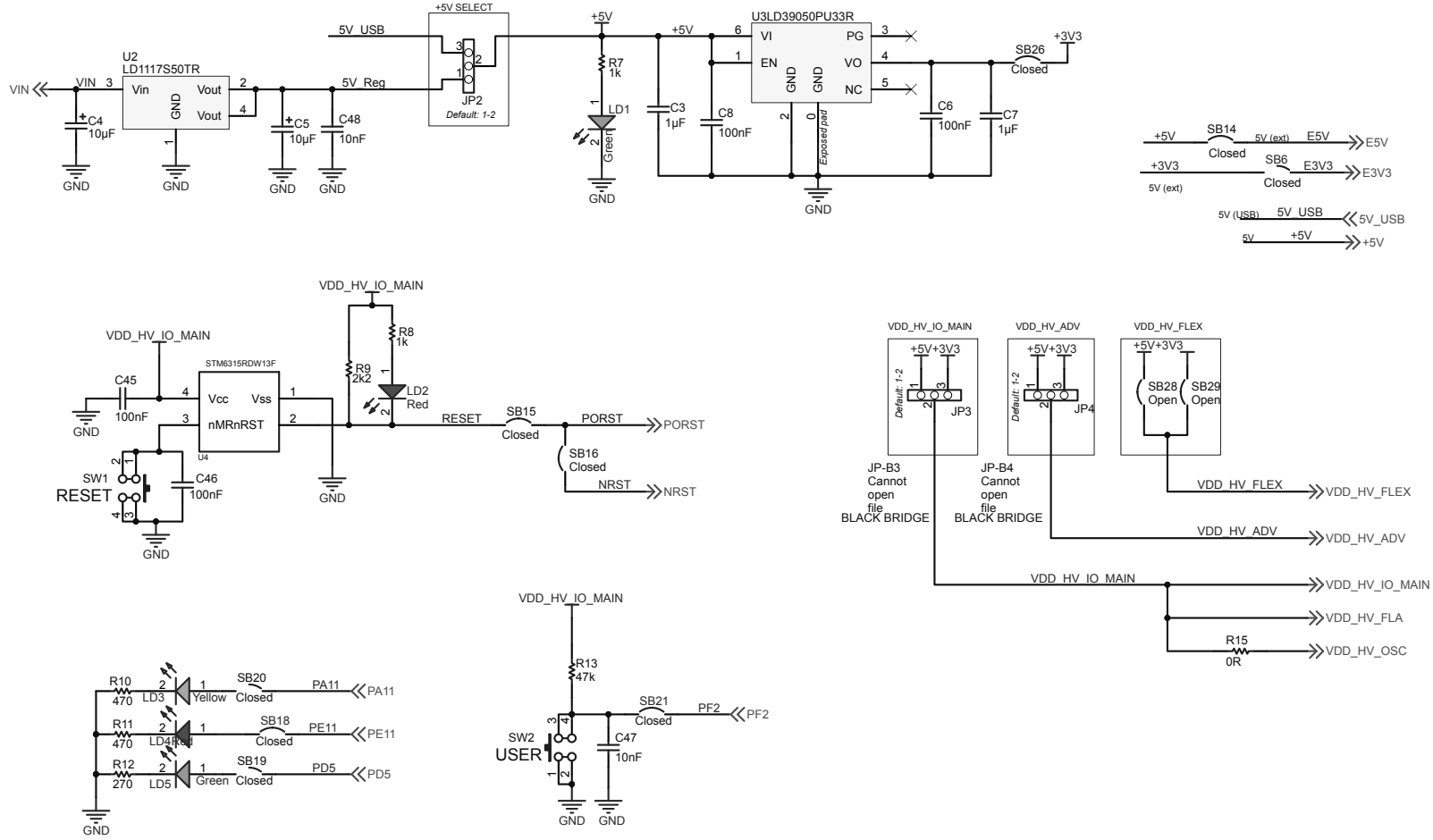


Figure 3. AEK-MCU-C1MLIT1 circuit schematic (3 of 4)

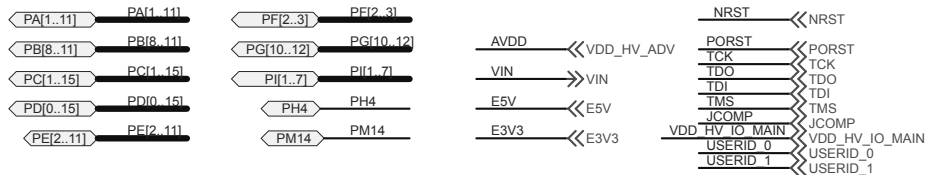
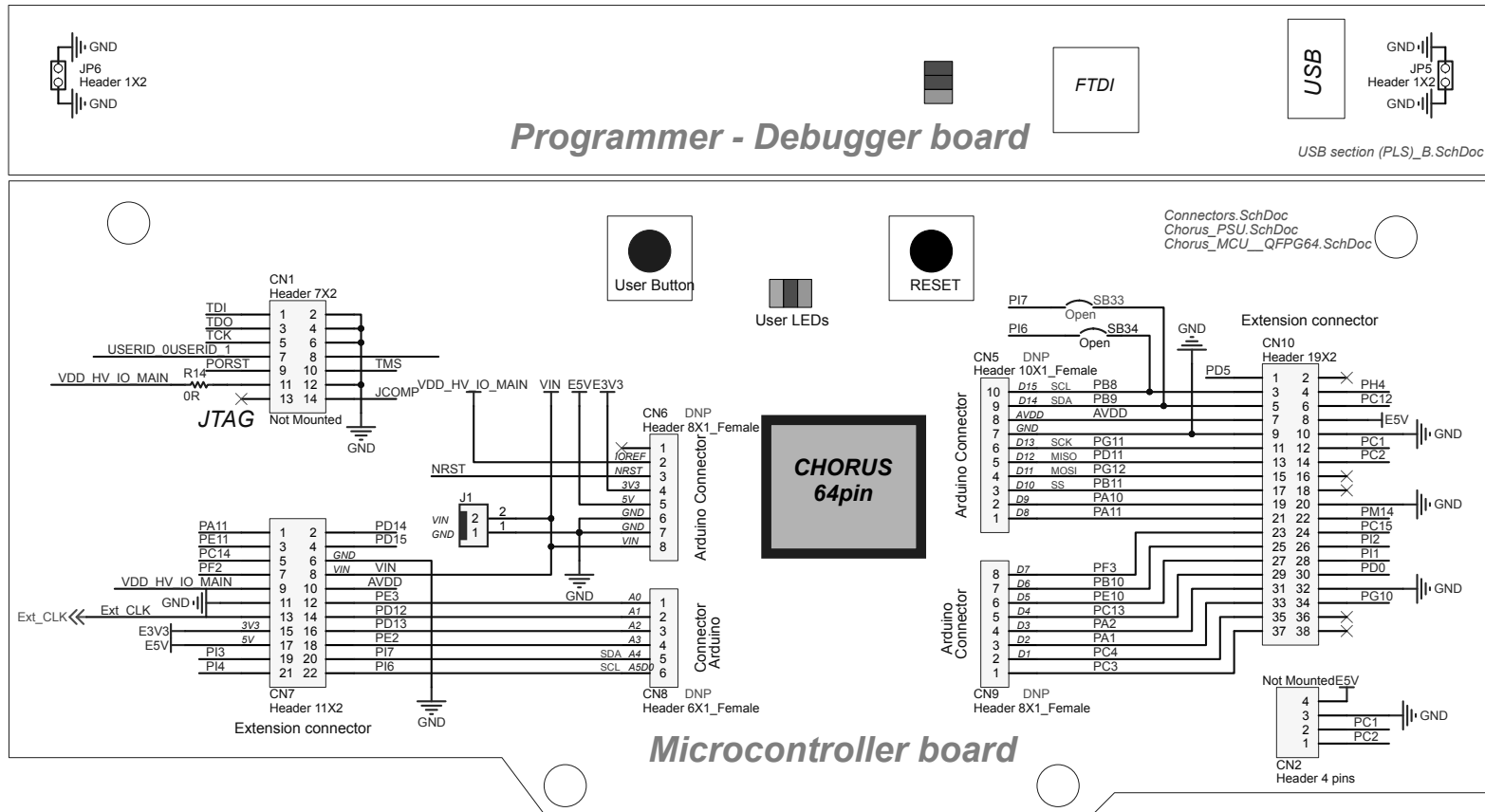
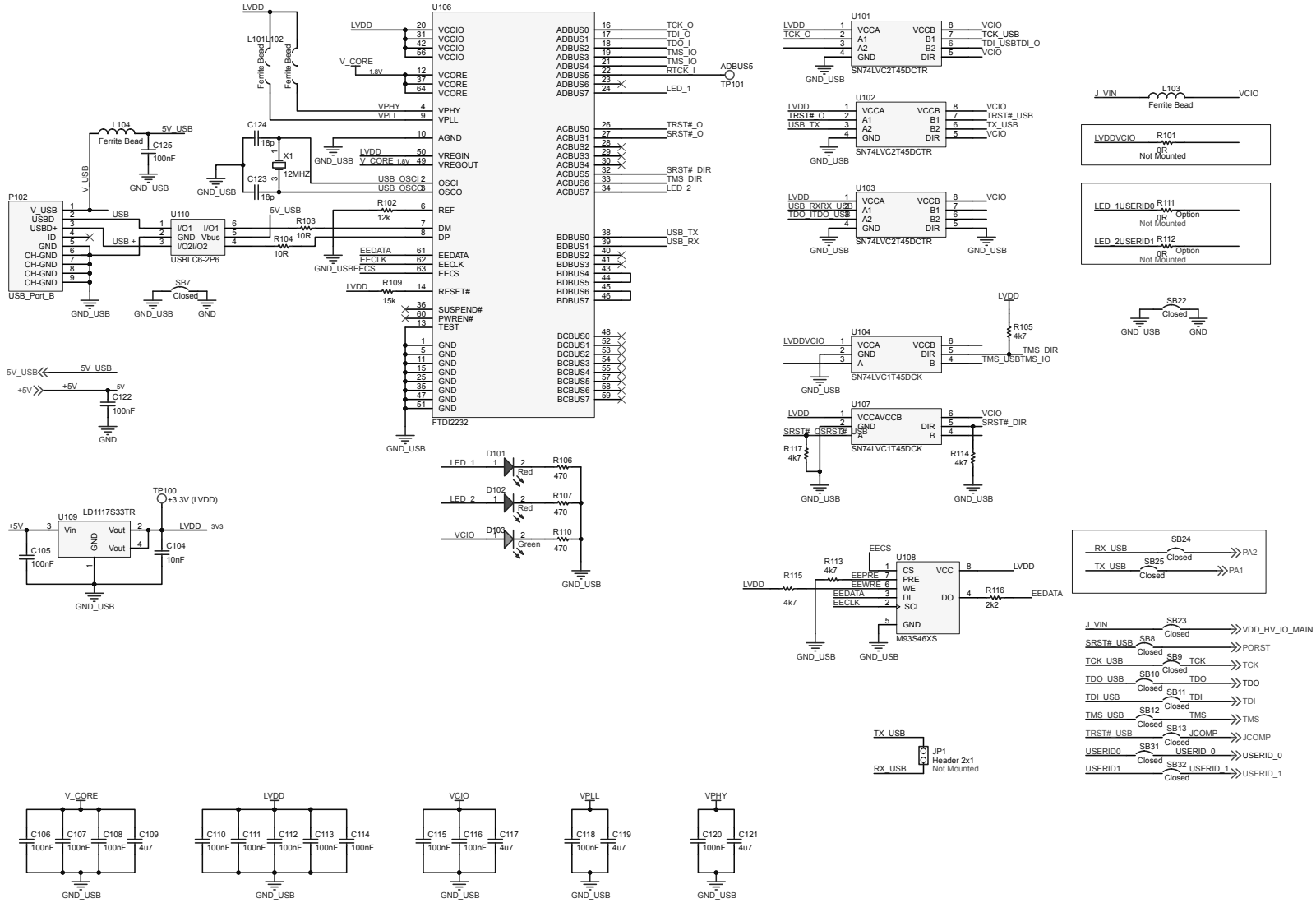


Figure 4. AEK-MCU-C1MLIT1 circuit schematic (4 of 4)



Revision history

Table 1. Document revision history

Date	Version	Changes
12-Feb-2020	1	Initial release.
24-Feb-2025	2	Updated Section Description .

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