Product Document

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TMF8821 Software Development Kit Overview

TMF8821_Driver_SDK_Source_vx.xx.zip

1/20/2021 v1.0

TMF8821 / LPC55S69 Software Development Kit (SDK)

Target Hardware

- The TMF8821 Software Development Kit has been developed as a quick and easy platform to begin evaluation and development of the TMF8821 direct Time of Flight senor within a microcontroller environment.

- The target hardware platform is the NXP LPC55S69-EVK featuring the LPC55S69, Arm® Cortex®-M33 microcontroller. The TMF8821-SHIELD includes headers compatible with Arduino® UNO. When used in conjunction with the LPC55S69-EVK & SDK provides a quick and easy TMF8821 development platform.

- The TMF8821-SHIELD can be used with many other MCU development kits due to the widely used header format.

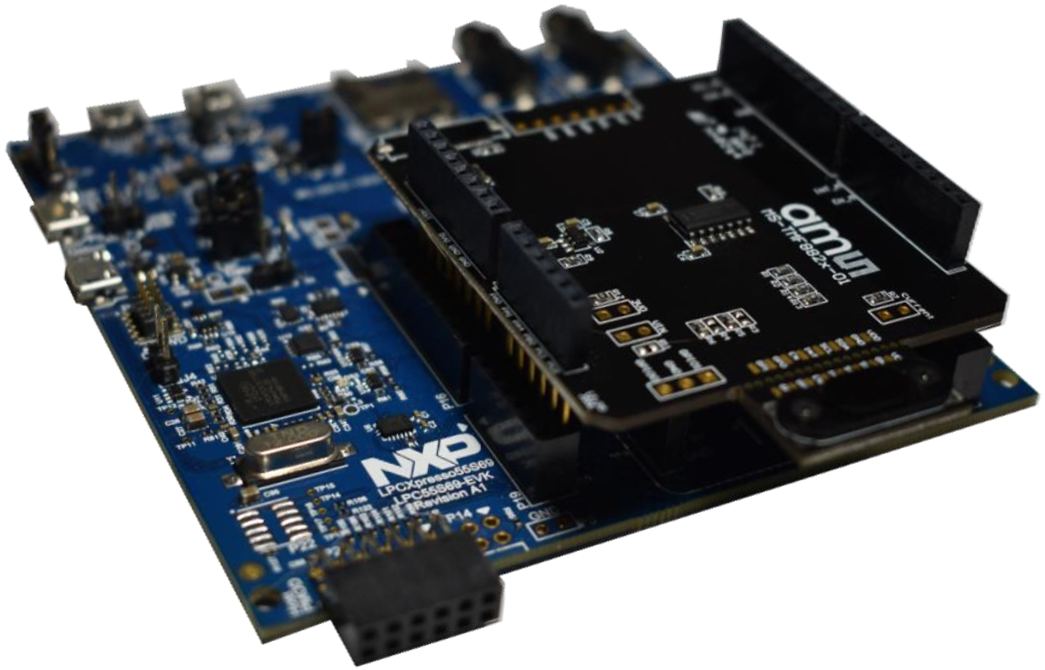

Figure 1: NXP LPC55S69-EVK with TMF8821-SHIELD installed

TMF8821 / LPC55S69 Software Development Kit (SDK)

Software overview

- The SDK can be downloaded from the ams website.

- Once installed with the MCUXpresso Integrated Development Environment (IDE), included source code examples can be compiled, downloaded and run on the LPC55S69 MCU connected to a TMF8821 device.

- Step by step download and installation instructions are included within the TMF8821_Driver_SDK_Source_vx.xx.zip file.

- Included source code examples:
  - Simple 3x3, 9 zone configuration distance measurement
  - Factory calibration data generation and usage
  - 3x3, 9 zone configuration histogram readout
  - Custom SPAD map upload

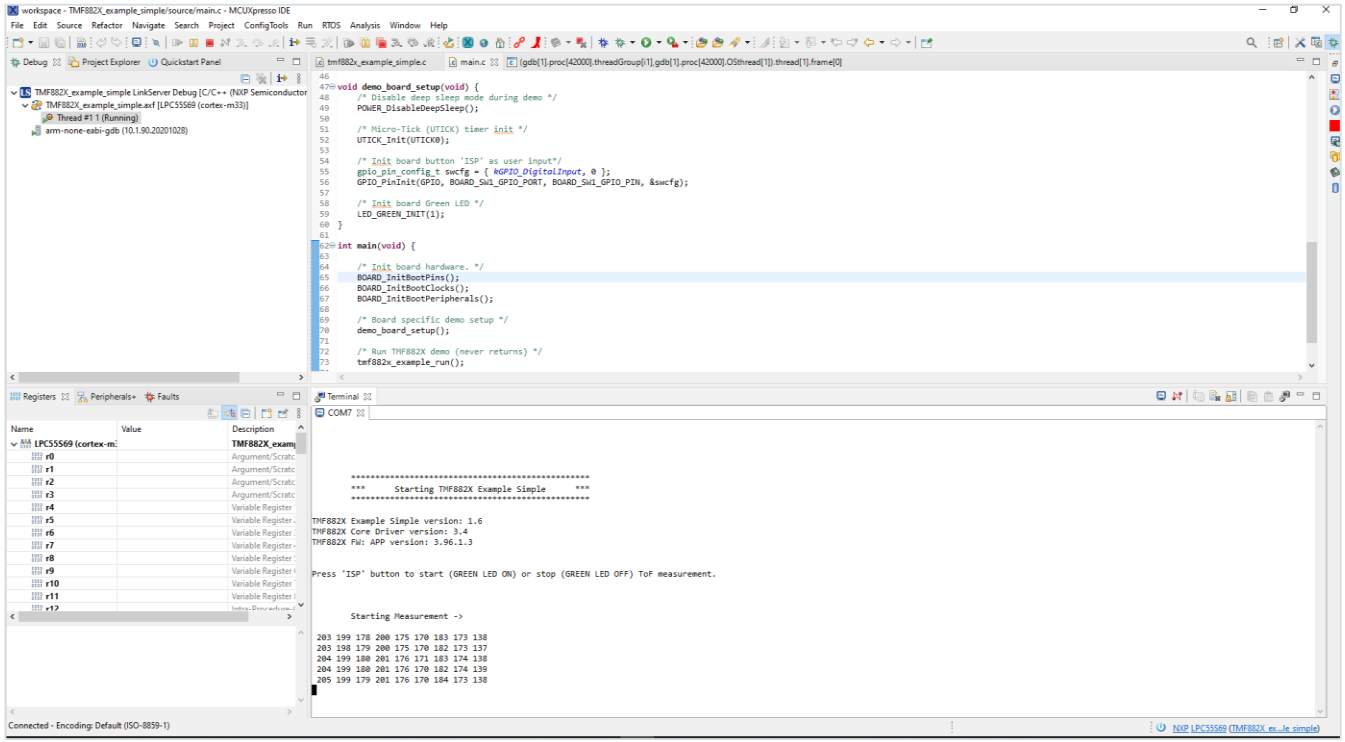

Figure 2: NXP LPC55S69 MCUXpresso IDE