AFBR-S50-FEK

Evaluation Kit for Time-of-Flight Sensor Modules

User Guide

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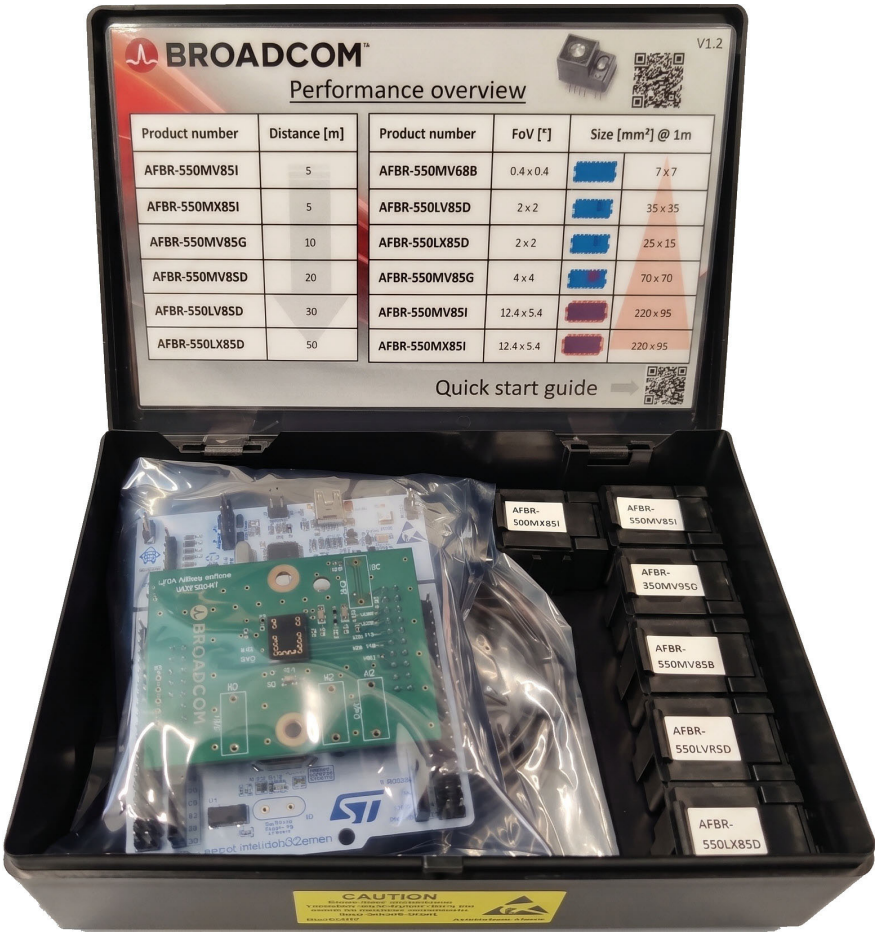
Chapter 1: Getting Started

1.1 Evaluation Kit Overview

The Broadcom® AFBR-S50 family evaluation kit is composed of the following components:

- STM32F401RE MCU evaluation board
- Functional sensors:
  - AFBR-S50MX85I
  - AFBR-S50MV85I
  - AFBR-S50MV85G
  - AFBR-S50MV68B
  - AFBR-S50LV85D
  - AFBR-S50LX85D
- Adapter board, with socket included
- USB-mini to USB-type-A cable
- Information cards with an overview of key sensor parameters, key dependencies, and important links

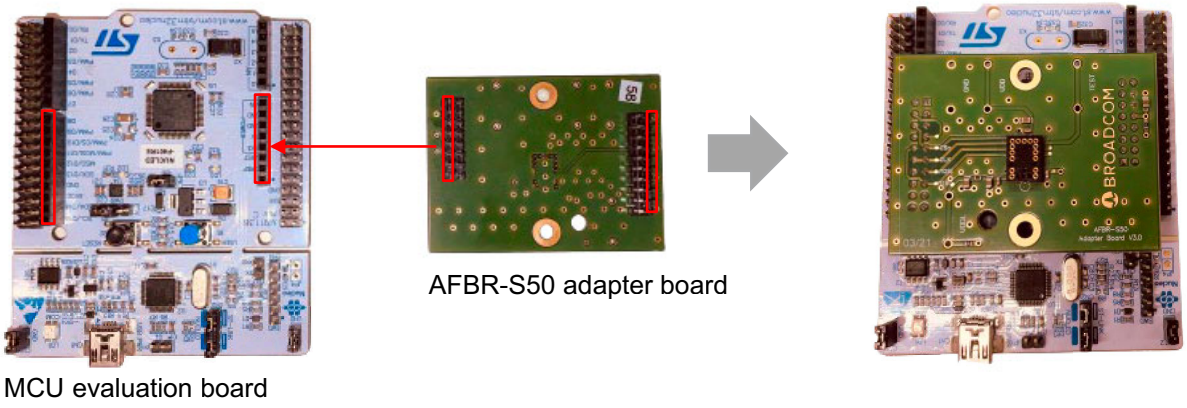
Figure 1: Evaluation Kit Components



1.2 Hardware Assembly

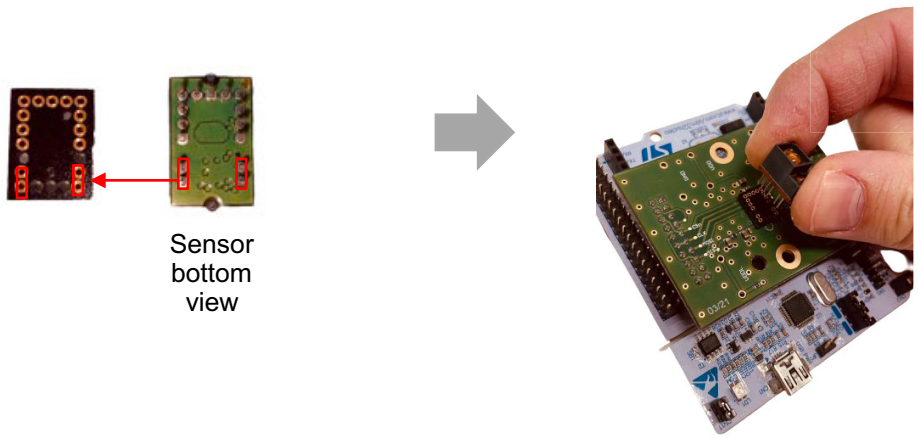
1. Connect the adapter board and the MCU evaluation board at the Arduino pinout.

Figure 2: Connect the Adapter and Evaluation Boards



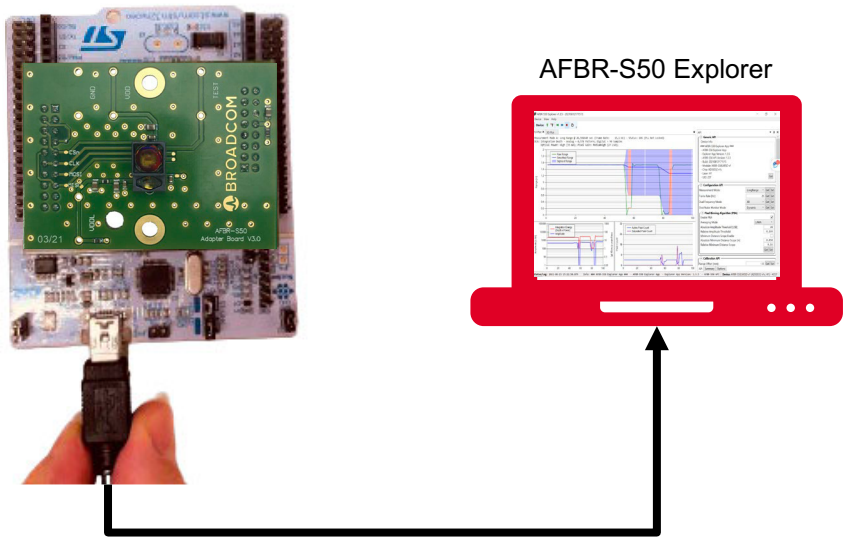
2. Ensure that the sensor orientation is correct. Plug the sensor into the socket on the adapter board.

Figure 3: Sensor Connection



3. Use the USB cable to connect the evaluation board to the PC.

Figure 4: Connect the Evaluation Board to a PC



NOTE: For more information regarding the use of AFBR-S50 Explorer, refer to the *AFBR-S50 User Guide* at https://docs.broadcom.com/docs/AFBR-S50-EK-UG.

Chapter 2: Related Documents

The references in the following table may be used in conjunction with this document.

Table 1: References

Document Name	Document Number	Source
AFBR-S50 User Guide	AFBR-S50-EK-UG	https://docs.broadcom.com/doc/AFBR-S50-EK-UG

Revision History

AFBR-S50-FEK-UG102; September 11, 2026

- Added AFBR-S50MX85I sensor.
- Replaced Figure 1, Evaluation Kit Components.

AFBR-S50-FEK-UG101; February 9, 2024

Replaced Figure 1, Evaluation Kit Components.

AFBR-S50-FEK-UG100; November 30, 2023

Initial release.

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