

AFBR-S50-FEK

Evaluation Kit for Time-of-Flight Sensor Modules

User Guide

Copyright © 2023–2024 Broadcom. All Rights Reserved. The term "Broadcom" refers to Broadcom Inc. and/or its subsidiaries. For more information, go to www.broadcom.com. All trademarks, trade names, service marks, and logos referenced herein belong to their respective companies.

Broadcom reserves the right to make changes without further notice to any products or data herein to improve reliability, function, or design. Information furnished by Broadcom is believed to be accurate and reliable. However, Broadcom does not assume any liability arising out of the application or use of this information, nor the application or use of any product or circuit described herein, neither does it convey any license under its patent rights nor the rights of others.

Table of Contents

Chapter 1: Getting Started	4
1.1 Evaluation Kit Overview	4
1.2 Hardware Assembly	
Related Documents	. 7
Revision History	. 8
AFBR-S50-FEK-UG101; February 9, 2024	. 8
AFBR-S50-FEK-UG100; November 30, 2023	. 8

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-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





AFBR-S50 adapter board



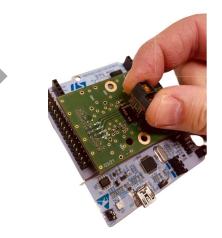
MCU evaluation board

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

Figure 3: Sensor Connection

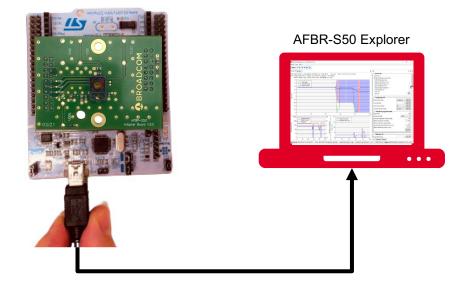


Sensor bottom view



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-UG101; February 9, 2024

Replaced Figure 1, Evaluation Kit Components.

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

Initial release.

Copyright © 2023–2024 Broadcom. All Rights Reserved. The term "Broadcom" refers to Broadcom Inc. and/or its subsidiaries. For more information, go to www.broadcom.com. All trademarks, trade names, service marks, and logos referenced herein belong to their respective companies.

Broadcom reserves the right to make changes without further notice to any products or data herein to improve reliability, function, or design. Information furnished by Broadcom is believed to be accurate and reliable. However, Broadcom does not assume any liability arising out of the application or use of this information, nor the application or use of any product or circuit described herein, neither does it convey any license under its patent rights nor the rights of others.

