



ST1VAFE6AX adapter kit for standard DIL24 socket with VAFE to measure biopotential signals from human body



Features

- Complete ST1VAFE6AX pinout for a standard DIL 24 socket
- Fully compatible with STEVAL-MKI109V3 motherboards
- RoHS compliant

Description

The STEVAL-MKI242A is an adapter board designed to facilitate the evaluation of MEMS devices in the ST1VAFE6AX product family. The board offers an effective solution for fast system prototyping and device evaluation directly within the user's own application.

The STEVAL-MKI242A can be plugged into a standard DIL24 socket. The adapter provides the complete ST1VAFE6AX pinout and comes ready-to-use with the required decoupling capacitors on the VDD and VDDIO power supply lines. To use STEVAL-MKI242A is mandatory to use an ECG cable with a 3.5 mm phone jack.

This adapter is supported and tested by the STEVAL-MKI109V3 motherboard, which includes a high performance 32-bit microcontroller functioning as a bridge between the sensor and a PC, on which it is possible to use the downloadable graphical user interface (GUI or MEMS-Studio), or dedicated software routines for customized applications.

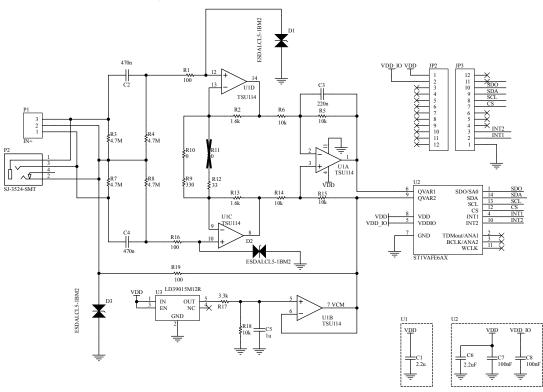
It is possible to use STEVAL-MKBOXPRO or X-NUCLEO-IKS4A1 instead of STEVAL-MKI109V3.

Product summary		
ST1VAFE6AX adapter kit for standard DIL24 socket with VAFE to measure biopotential signals from human body	STEVAL- MKI242A	
6 axis IMU (inertial measurement unit) with sensor fusion, AI, and vAFE for biopotential signals	ST1VAFE6AX	
Professional MEMS tool: ST MEMS adapters motherboard based on the STM32F401VE and compatible with all ST MEMS adapters	STEVAL- MKI109V3	
SensorTile.box PRO with multi-sensors and wireless connectivity for any intelligent IoT node	STEVAL- MKBOXPRO	
Applications	Body monitoring	

Schematic diagrams



Figure 1. STEVAL-MKI242A circuit schematic





2 Board versions

Table 1. STEVAL-MKI242A versions

Finished good	Schematic diagrams	ams Bill of materials	
STEVAL\$MKI242AA (1)	STEVAL\$MKI242AA schematic diagrams	STEVAL\$MKI242AA bill of materials	

^{1.} This code identifies the STEVAL-MKI242A evaluation board first version.

DB5237 - Rev 1 page 3/5



Revision history

Table 2. Document revision history

Date	Revision	Changes
17-Apr-2024	1	Initial release.

DB5237 - Rev 1 page 4/5



IMPORTANT NOTICE - READ CAREFULLY

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgment.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. For additional information about ST trademarks, refer to www.st.com/trademarks. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2024 STMicroelectronics – All rights reserved

DB5237 - Rev 1 page 5/5