

STEVAL-MKI109V1

STM32-based MEMS motherboard compatible with all ST MEMS adapters

Data brief

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Features

- Compatible with all available ST MEMS adapter boards
- Controlled by the STM32F102R8 highperformance ARM CortexTM-M3 microcontroller
- Includes a DIL24 socket for easy MEMS adapter connection
- 3 V on-board linear voltage regulator
- DFU compatible for USB microprocessor firmware update
- USB 2.0 full-speed compliant
- Debugging connector for SWD/JTAG
- RoHS compliant

Description

The STEVAL-MKI109V1 is a motherboard designed to provide users with a complete, ready-to-use platform for the evaluation of STMicroelectronics' MEMS products.

The board features a DIL24 socket to mount all available adapters for both digital and analog output MEMS devices.

The motherboard includes a high-performance 32-bit microcontroller, which functions as a bridge between the sensor and a PC, on which it is possible to use the downloadable graphical user interface (GUI), or dedicated software routines for customized applications.

For further information contact your local STMicroelectronics sales office.



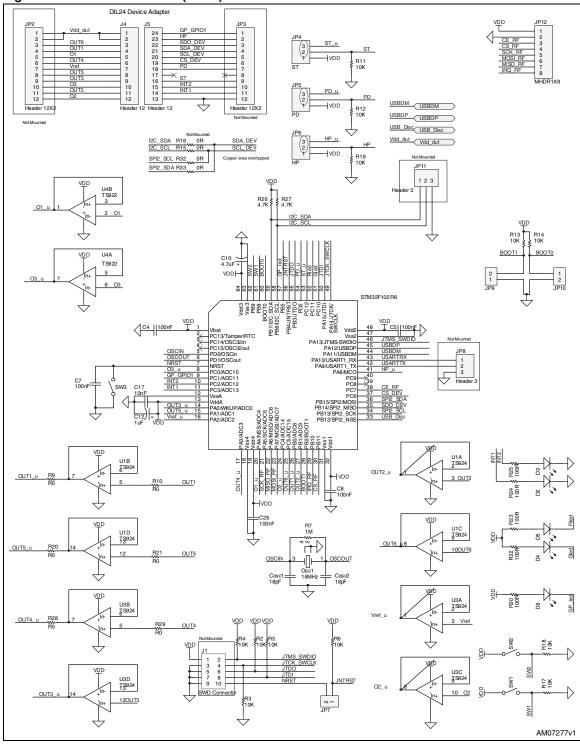
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Schematic diagrams STEVAL-MKI109V1

1 Schematic diagrams

Figure 1. Circuit schematic (1 of 2)



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Figure 2.

Circuit schematic (2 of 2)

USB_5V 1 TP1 Power Supply VDD Vdd_dut lds3985xx30 U2 Vin BYPASS 10uF ΕN C2 __C3 __ 100nF __ 100nF ⊏ C14 33nF (TANT.) USB_5V VDD VDD ₹R8 10k ₹R39 47k Q1 BC817 Not mounted ₹R1 ₹0R R31_ Q2 BC817 ₹ R34 36k USB_Disc R35 180R √ GND ₹R36 1.5k R37_____22R USBDM Vbus USBDP O2 VO2 -USBLC6-2P6 VO2 R38 22R USB_5V C1 10uF / DM DP nc GND Mini-USB B GND USBDM USBDM USBDP USB_Disc USB_Disc Vdd_dut Vdd_d ut

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Revision history STEVAL-MKI109V1

2 Revision history

Table 1. Document revision history

Date	Revision	Changes
16-Jun-2010	1	Initial release.
18-Aug-2010	2	-Enlarged and reoriented schematic diagrams in <i>Figure 1</i> and <i>Figure 2</i> to improve readabilityMinor text correction in <i>Figure 1</i> .

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