

## STEVAL-MKI119V1

# eMotion Win8: STEVAL-MKI109V2 + STEVAL-MKI108V2 demonstration board

Data brief

#### **Features**

- Ready to support iNemoEngine\_PW8
- Compatible with all available ST EMS adapter boards
- Controlled by the STM32F103RE high performance ARM 32-bit Cortex<sup>TM</sup>-M3 CPU
- 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
- L3GD20 and LSM303DLHC 9-axis module designed to be plugged into a standard DIL24 socket
- RoHS compliant

### **Description**

The STEVAL-MKI119V1 demonstration board is a kit composed by STEVAL-MKI109V2 (eMotion: ST MEMS adapters motherboard based on the STM32F103) plus the STEVAL-MKI108V2 (L3GD20 and LSM303DLHC 9-axis module designed to be plugged into a standard DIL24 socket).

The STEVAL-MKI119V1 demonstration board is ready to be used for iNemoEngine\_WP8 evaluation through firmware upgrade.

The STEVAL-MKI109V2 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.



STEVAL-MKI119V1

The motherboard includes a new highperformance 32-bit microcontroller STM32F103RE

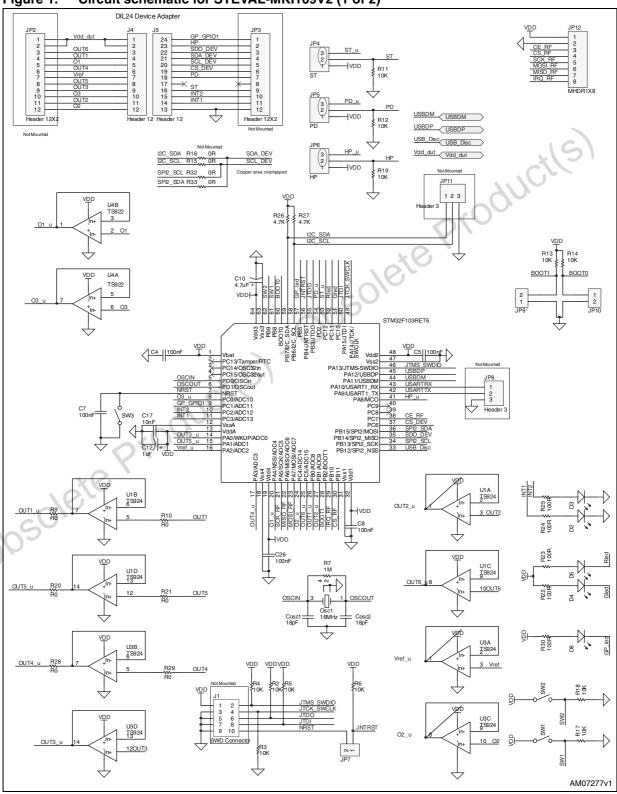
which functions as a bridge between the sensor and a PC on which it is possible to use the downloadable graphical user interface (GUI) or dedicated software routines for customized applications.

The STEVAL-MKI108V2 is included in the kit and is an adapter board designed to facilitate the evaluation of the L3GD20 and LSM303DLHC product family. The demonstration board offers an effective solution for fast system prototyping and device evaluation directly within the user's own application. The STEVAL-MKI108V2 can be plugged into a standard DIL 24 socket. The adapter provides the complete L3GD20 and LSM303DLHC pin-out and comes ready-to-use with the required decoupling capacitors on the V<sub>dd</sub> power supply line.

Schematic diagrams STEVAL-MKI119V1

# 1 Schematic diagrams





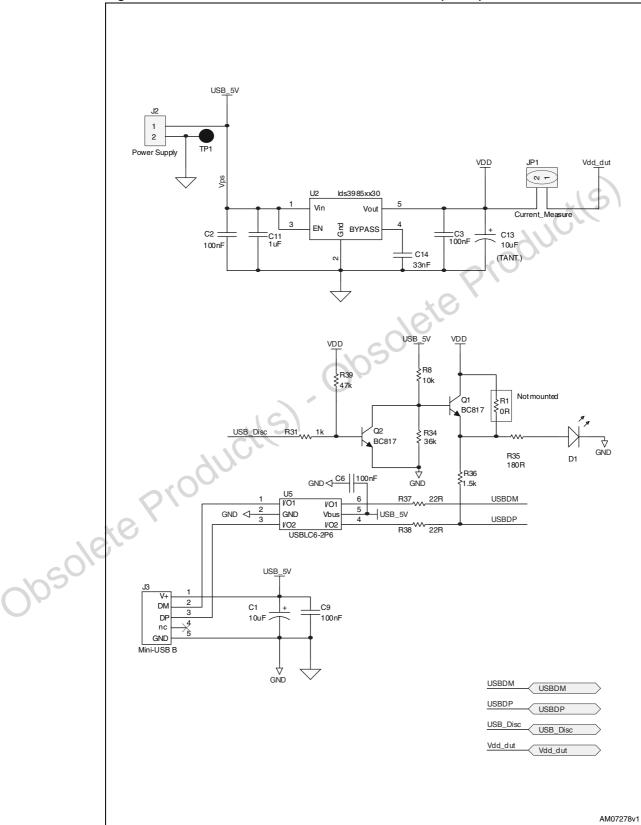
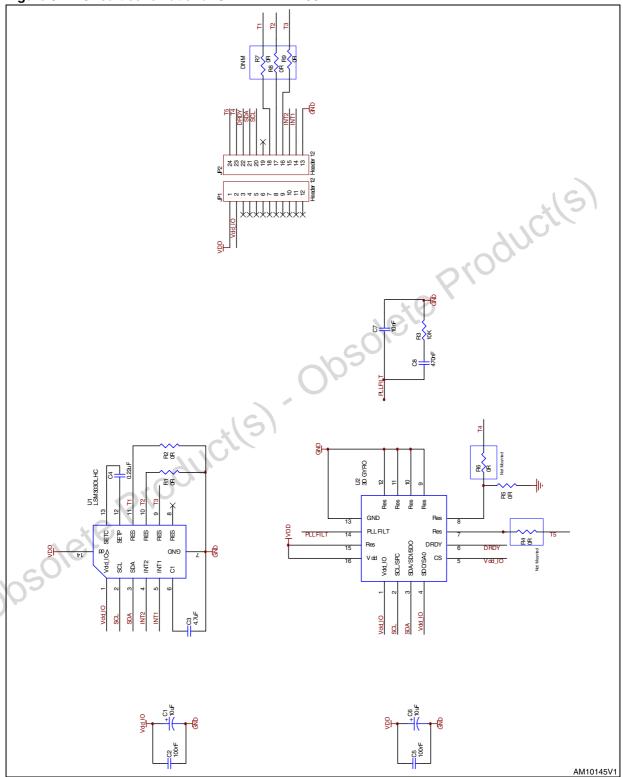


Figure 2. Circuit schematic for STEVAL-MKI109V2 (2 of 2)

Schematic diagrams STEVAL-MKI119V1

Figure 3. Circuit schematic for STEVAL-MKI108V2



STEVAL-MKI119V1 Revision history

# 2 Revision history

Table 1. Document revision history

Date	Revision	Changes
03-Nov-2011	1	Initial release.

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