

XEN1210

Magnetic Sensor evaluation Kit

Evaluation kit

The XEN1210 evaluation kit enables the user to quickly become familiar with the performance of the XEN1210 device. The basis XEN1210 evaluation kit consists of USB-bus interface board, a 3D compass demo board, a micro connection cable, a USB cable and evaluation software. The full kit has two extra demos, a position sensor demo and an electrical current sensing demo.

After assembly of the hardware and installing the delivered software it is ready to use. Software and drivers can be found on www.sensix.nl. It is recommended to install the software on modern PCs, since the demo software has to perform a lot of real time data I/O and calculations.

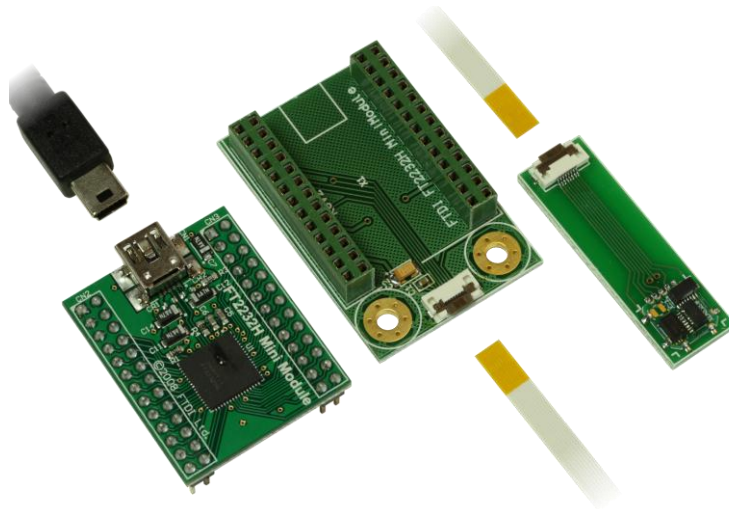


Figure 1 The evaluation kit hardware consists of a USB mini connection cable, a USB interface board, a 3D compass board and a micro connection cable.

The compass demo shows the real time performance with different power consumption and digital filter settings. Also a compass calibration routine can be tried out.

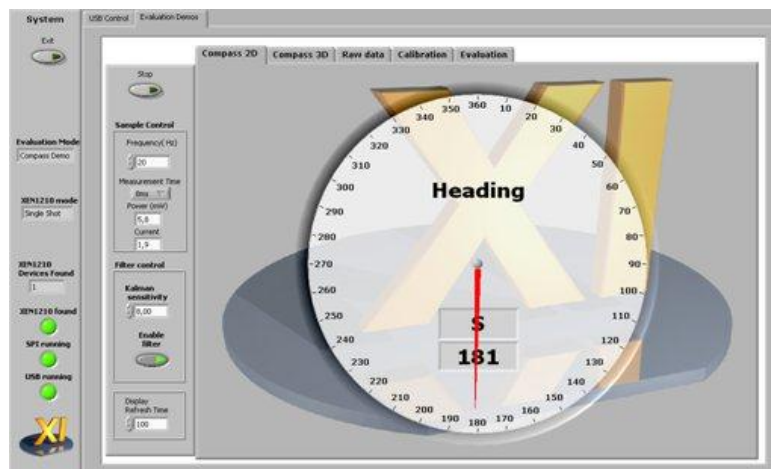


Figure 2 The delivered software of the evaluation kit, with the compass demo enabled

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Evaluation kit extension

Two extension boards can be ordered to use with the basic kit. The first one is a rotational position and speed board. It consists of a central rotating magnet, with a single pole pair and eight XEN1210 sensors. The sensors are placed in different configurations in order to read out the sine and cosine signals of the rotating magnet.

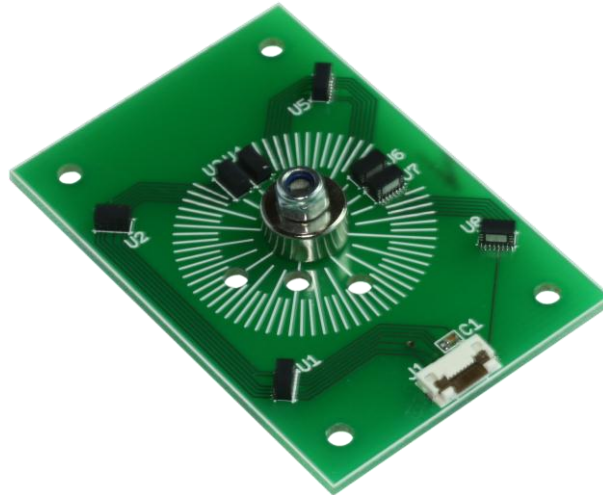


Figure 3 The board of the position demo

The second demo is a current measurement demo. The magnetic field generated by the current in a single wire is magnetically measured by two XEN1210s. The demo shows that currents as low as 1mA can be measured, while the maximum current is determined by the wires capacity.

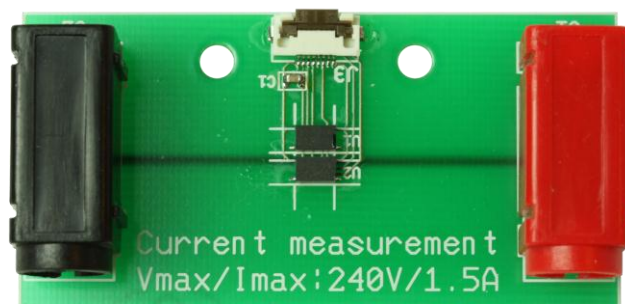


Figure 4 The board of the current demo.

The demo software also contains two modes in which magnetic signals can be analyzed in detail. These can be selected in the demo selection window. The first mode is a magnetic scope which displays the real time signal of the first sensor of any demo board. The second mode is a noise and frequency analyzer. It shows a FFT of the signal, an Allan plot and a running average of the magnetic signal of the first sensor.

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General Information

Product Status

The product is in production.

Right to make changes

Sensixs Design reserves the right to make changes to improve reliability, function or design of the devices. Sensixs Design assumes no responsibility or liability for the use of this product.

Application Information

Applications that are described herein are for illustrative purposes only. Sensixs Design makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.

Life critical applications

These products are not qualified for use in life support applications, aeronautical applications or devices or systems where malfunction of these products can reasonably be expected to result in personal injury

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