DACOM West

Melexis
INSPIRED ENGINEERING

EVB90393-web

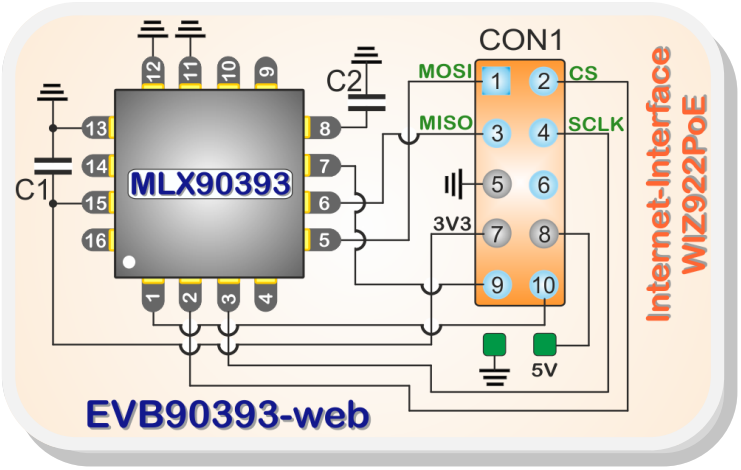
3D Hall Sensor & Internet-Interface

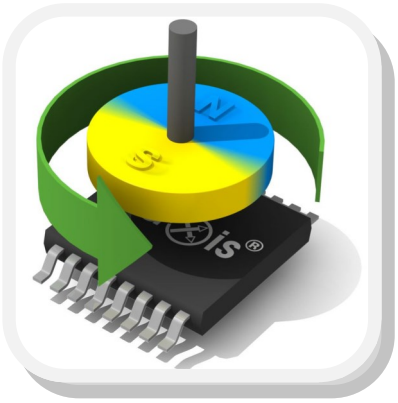
The EVB90393-web consists of two parts:

- The MLX90393 3D-Hall sensor IC assembled on a small EVB for universal use and easy access.
- The Internet-Gateway-Module WIZ922PoE with a dedicated Webserver for configuration (EEPROM).

The MLX90393 senses the absolute position of a magnet moving above it. It enables the design of contactless joysticks (3D), rotary (2D) and linear (1D) position sensors. The MLX90393 3D-HALL position sensor is sensitive to the 4 components of the flux density (Bx, By, Bz & TA) applied to the IC with Integrated Magneto Concentrator (IMC).

The WIZ922PoE is a small Module based on the W7200 Hardwired TCP/IP 4in1 SoC integrating an ARM 32-bit Cortex M3 MCU + Hardware TCP/IP engine and Ethernet-MAC & PHY. In this application it is being used as Sensor (SPI) to Ethernet Gateway and Webserver. Source-Code is available on request.





MLX90393 3D Hall Sensor IC

- Triaxis™ Hall technology - absolute 3D position
- 16 bit digital X, Y, Z and TA
- In application programmable: gain, mode, axes, …
- Modes: Continuous Mode, Single Measurement Mode, Burst Mode and Wake-up On Change Mode
- Micropower: 2.2V – 3.6V , < 5µA Idle current
- Low voltage I/O: 1.8V – Vdd
- SPI: 3+4 wire
- I2C Interface, Slave mode
- Operating temperature range: –20° C to +85°C
- 16 Lead 3x3 QFN Package

WIZ922PoE Internet-Interface

- ARM 32-bit Cortex M3 MCU from STmicro
- Hardwired TCP/IP SoC W7200 (128k Flash + 20k RAM)
- PoE output as supply option and 3.3V LDO onboard
- UART,SPI, I2C and GPIOs on jumper connectors

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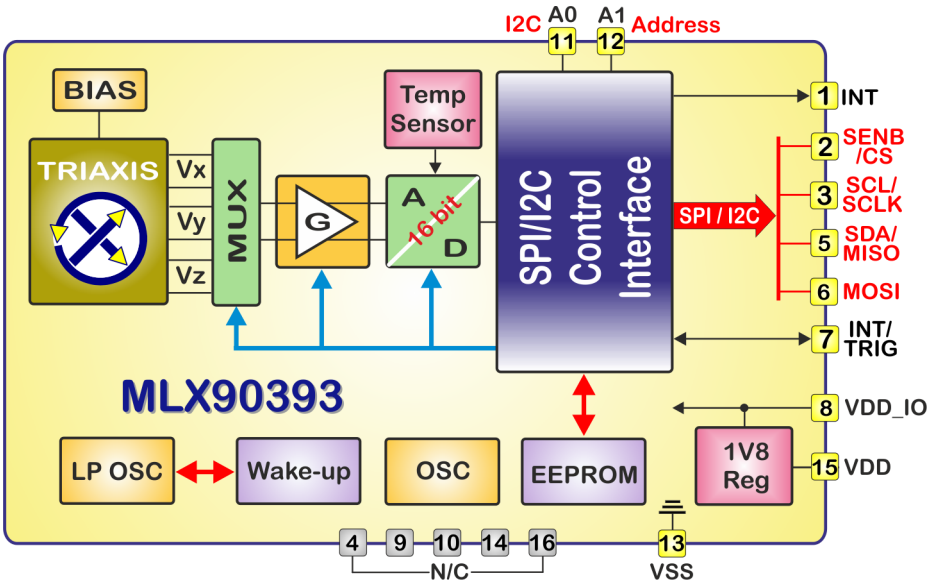
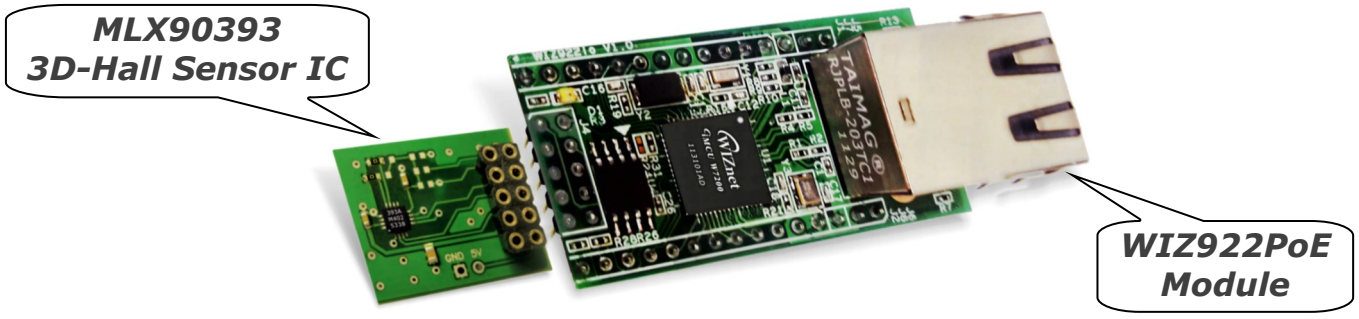
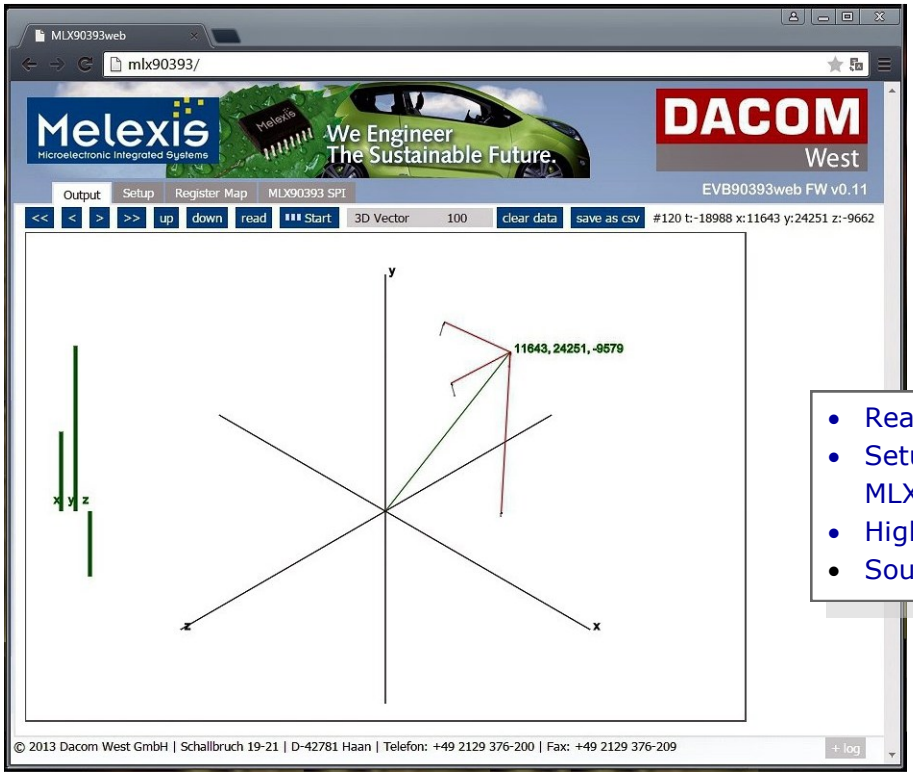
Block Diagram MLX90393



EVB90393-web



Webserver-Features



- Real-time 3D graphic output
- Setup menu and register map for MLX90393-EEPROM configuration
- High speed data-logging and save to file
- Source code available

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