Scope

The MLX90320EVB development had two main goals: to provide a very general and user friendly software that can be used to quickly evaluate the performances of the MLX90320 and to provide a library of specific functions that can be used to develop a software optimised for a particular application.
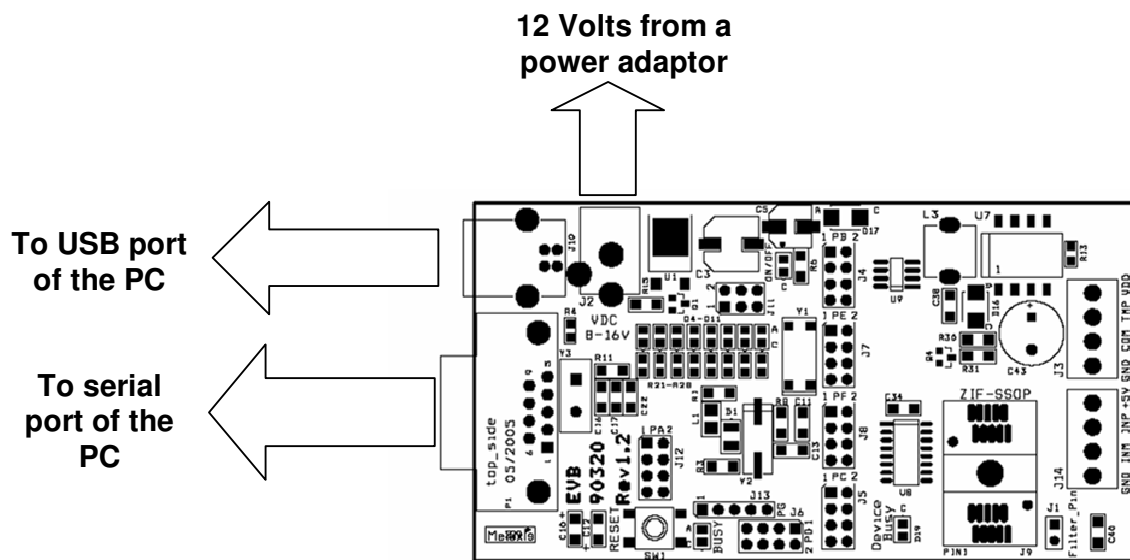
Related Documents

The CD distributed with the evaluation kit contains the following documents:

- ❑ MLX90320_software_description.pdf
- ❑ PSF90320EVB_Object_Model.pdf describes the DLL's.
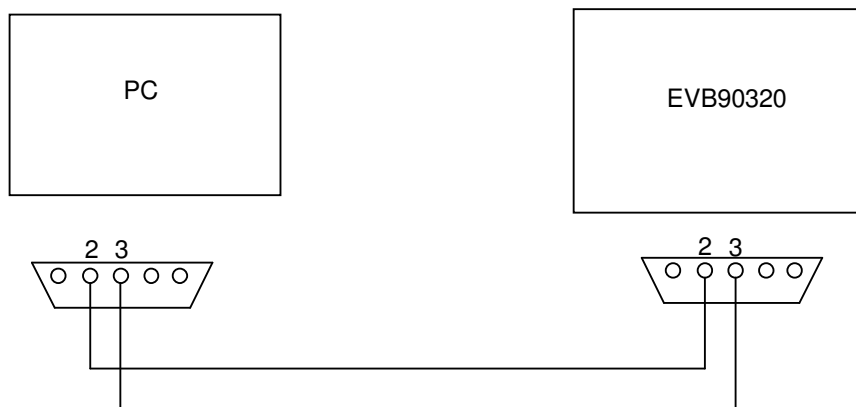- ❑ Installation_Guide_USB.pdf
- ❑ This application note.

The MLX90320 datasheet is available on the melexis web site (www.melexis.com)

Connections of the EVB90320.

The EVB90320 can be supplied with USB or with 12Volts from a power adaptor. The communication can be through USB or RS232. The USB driver installation is required for working with the USB. The communication with the board can also be done with the serial connection and with the board supplied through USB.
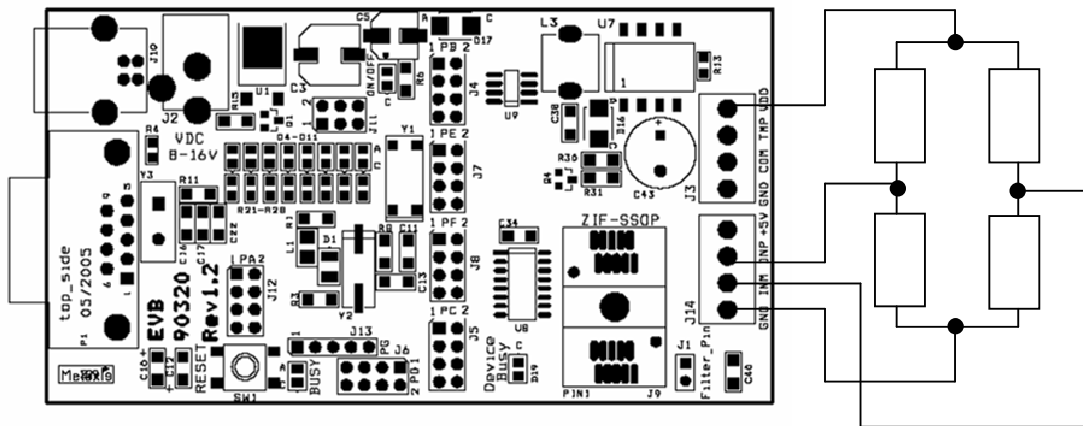
12 Volts from a power adaptor

To USB port of the PC

To serial port of the PC

For the serial connection a non crossed cable has to be used (see picture bellow).

PC

EVB90320

2 3

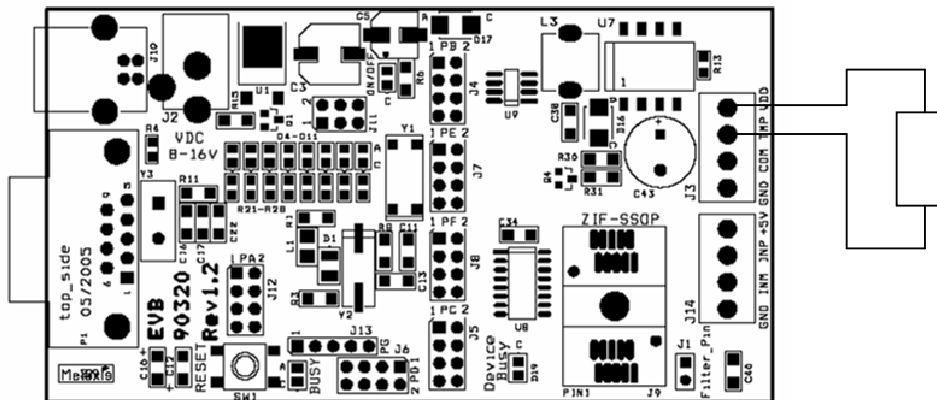2 3

Rev 003

Application Note
Sept/05

Connections of the MLX90320

If the MLX90320 is used directly in its socket, the sensor has to be connected to the EVB like described in the picture bellow:

Pay attention to the connection of INP and INM, the differential signal INP-INM from the sensor has to be positive.

If an external temperature sensor is used, it has to be connected like described in the picture bellow:

Rev 003

Application Note
Sept/05

If the MLX90320 has been build together with the pressure sensor in a module, the module has to be connected to the EVB like described in the picture bellow:

Application Note
Sept/05

Rev 003