

An underwater scene with several sharks and many small fish swimming in clear blue water. The sharks are silhouetted against the light blue background. A dark blue rectangular box is overlaid on the center of the image, containing white text.

Optical Gesture & Proximity Sensing IC

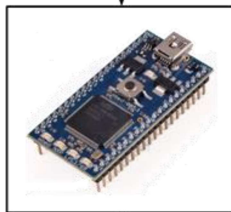
Evaluation Board EVB75030V2

Melexis
INSPIRED ENGINEERING

Evaluationboard Concept



USB



SPI



PC/Laptop

- Easy way for signal evaluation & visualization
- Allows customers to test & simulate system performance in their preferred environment

Mbed MicroController (<http://www.mbed.org>)

- Fast prototyping
- Simple Pre-processing
- Operates as “bridge” between pc & sensor

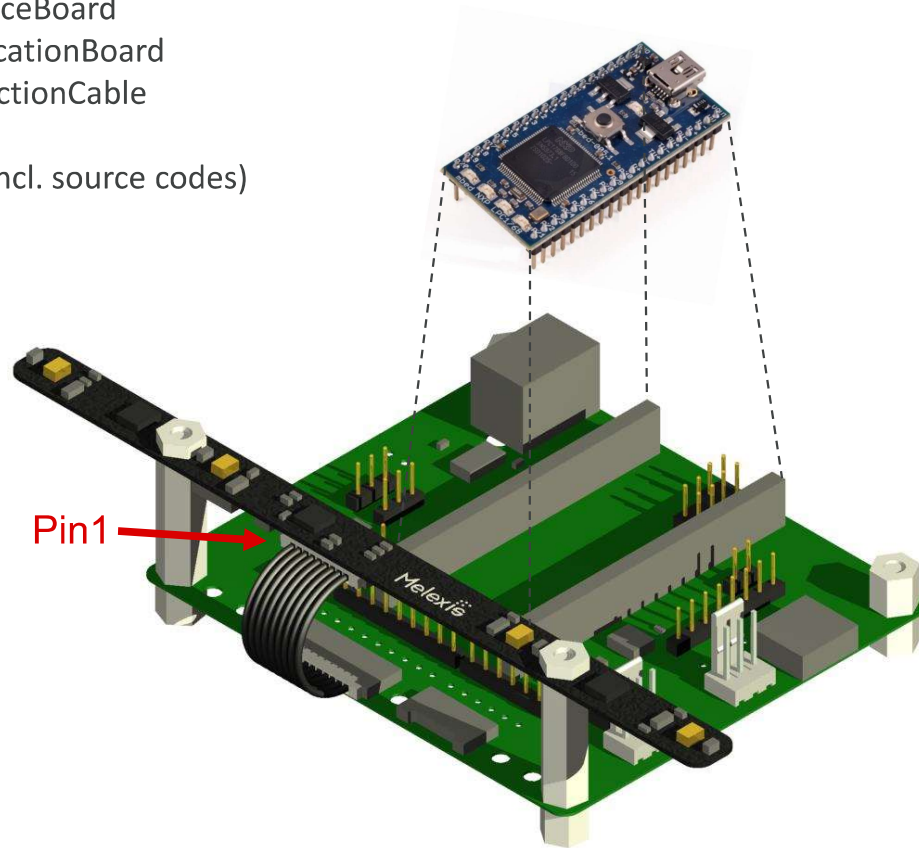
MLX75030

- LED & PD control/read-out
- Data acquisition
- Rejects background light

EVB75030V2 Overview

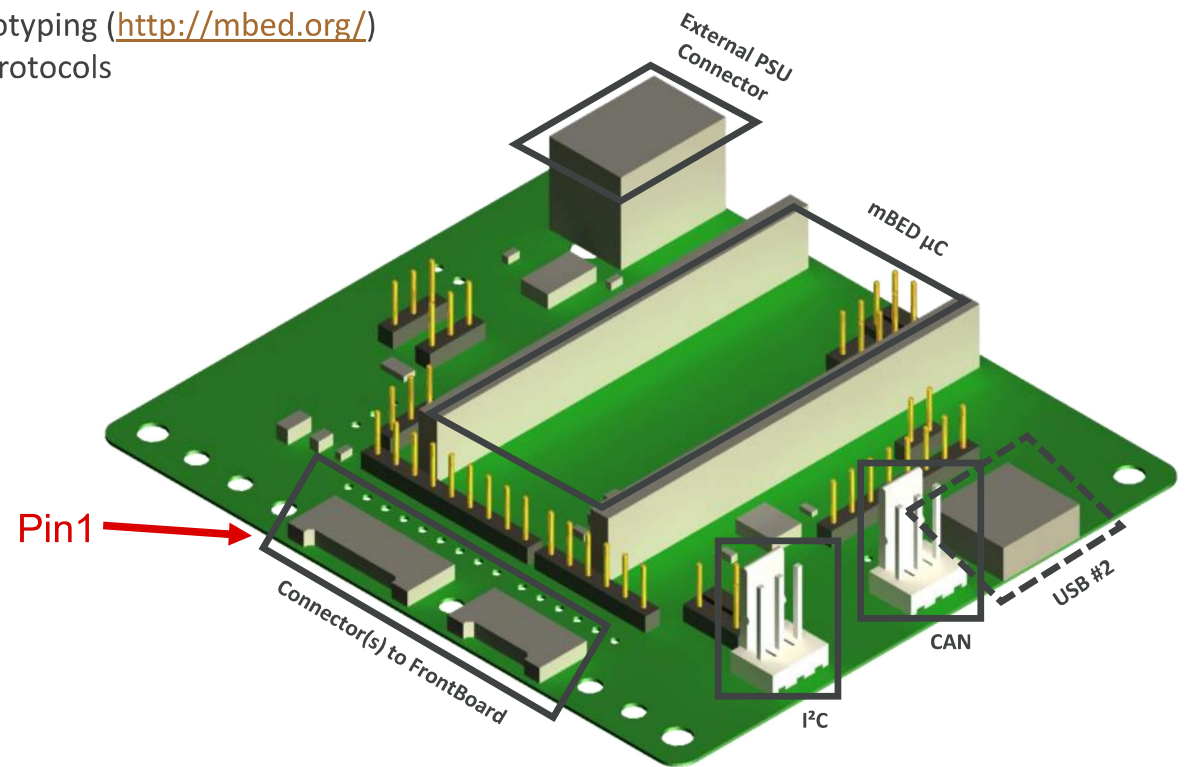
Package Contents :

- 1x EVB75030BB10 InterfaceBoard
- 1x EVB75030LRP11 ApplicationBoard
- 1x EVB75030CC95 ConnectionCable
- Evaluation Software
- Technical + SW support (incl. source codes)

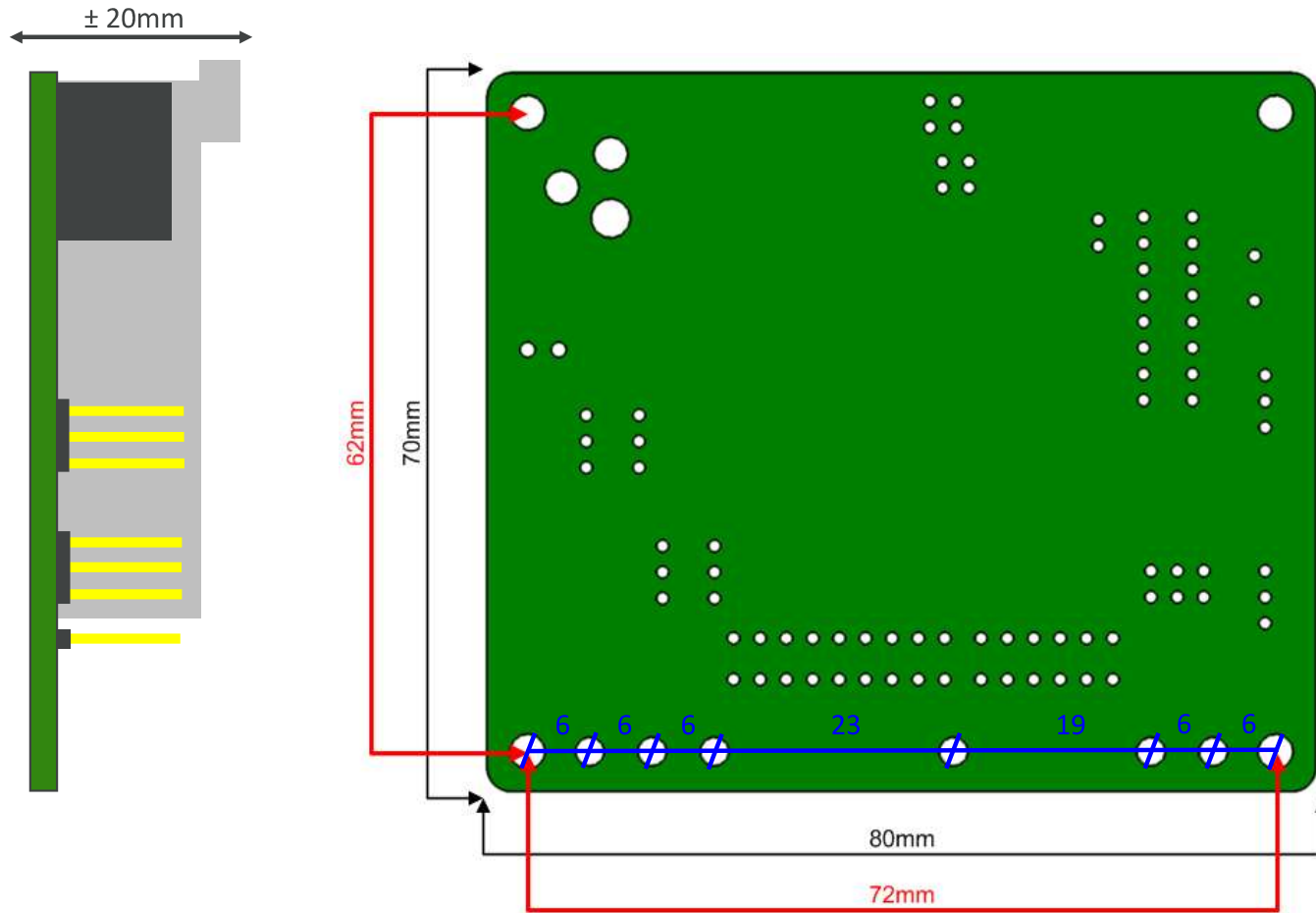


EVB75030V2BB11 InterfaceBoard

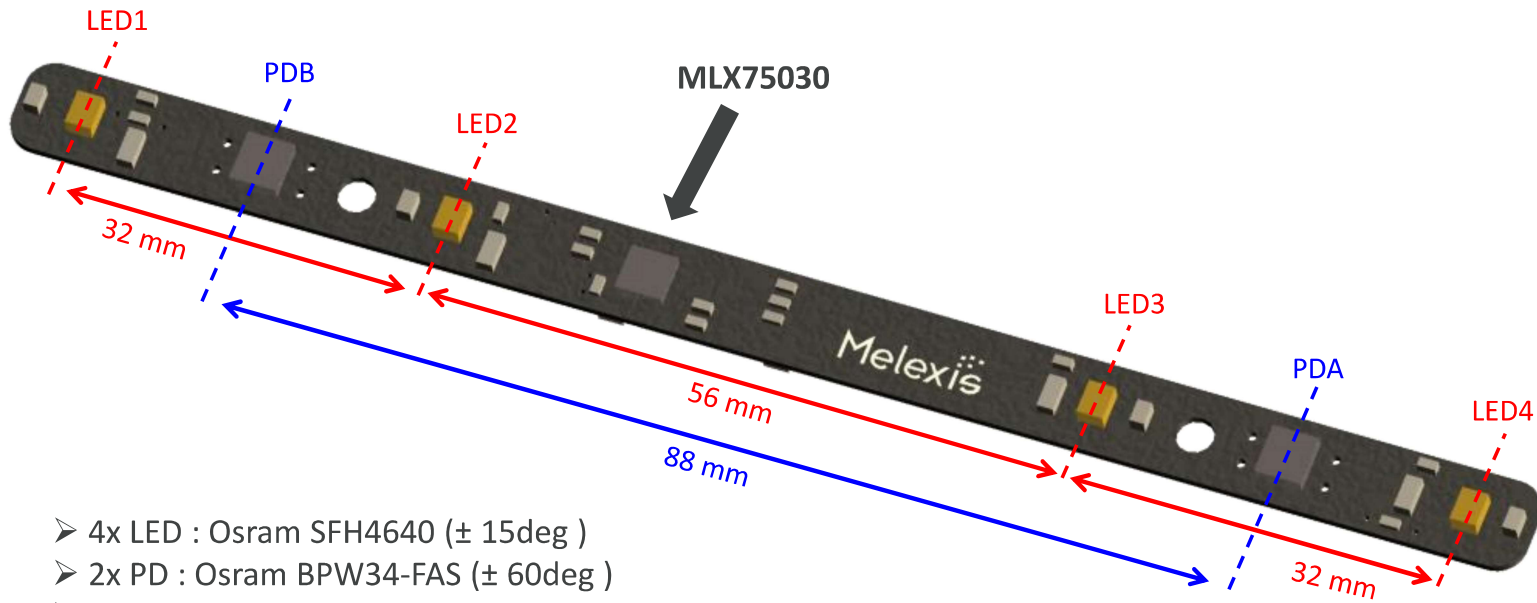
- InterfaceBoard between PC/laptop & MLX75030 applicationboards
- Incl. mBed microcontroller for rapid prototyping (<http://mbed.org/>)
- Supports USB, CAN, I²C communication protocols
- USB powered via mBed or external PSU
- Dimensions : 70x80x1.6 mm



EVB75030V2BB11 Mechanical Outline



EVB75030V2LRP11 ApplicationBoard

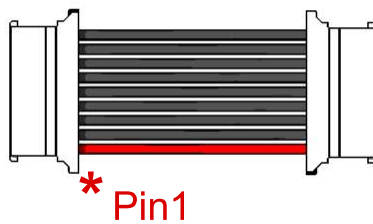


- 4x LED : Osram SFH4640 ($\pm 15\text{deg}$)
- 2x PD : Osram BPW34-FAS ($\pm 60\text{deg}$)
- Reference Schematic = available
- ApplicationBoard with Simple Left & Right Gesture Recognition + Proximity Sensing
- Dimensions : 130x8x0.8 mm

EVB75030V2CC95 Connection Cable

- Connection between application board(s) & interface board
- Length : 5cm
- 9 connections
- AWG : 28-30
- 2x connector Molex PanelMate™ [51146-0900](#)
- Ultra Low Profile, 1.25mm Pitch
- 18x crimp terminal [50641](#)

➤ Pinout :



9. GND
8. SCLK
7. MISO
6. MOSI
5. CS
4. DR
3. Sensor 3V3
2. GND
1. LED Supply



