

An underwater scene with several sharks and many small fish swimming in clear blue water. The sharks are silhouetted against the lighter blue background. The fish are scattered throughout the scene, some appearing as small specks and others as more distinct shapes.

Optical Gesture & Proximity Sensing IC

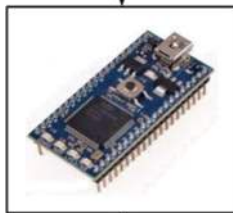
Evaluation Board EVB75030V2

Melexis
INSPIRED ENGINEERING

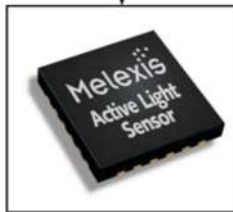
Evaluationboard Concept



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

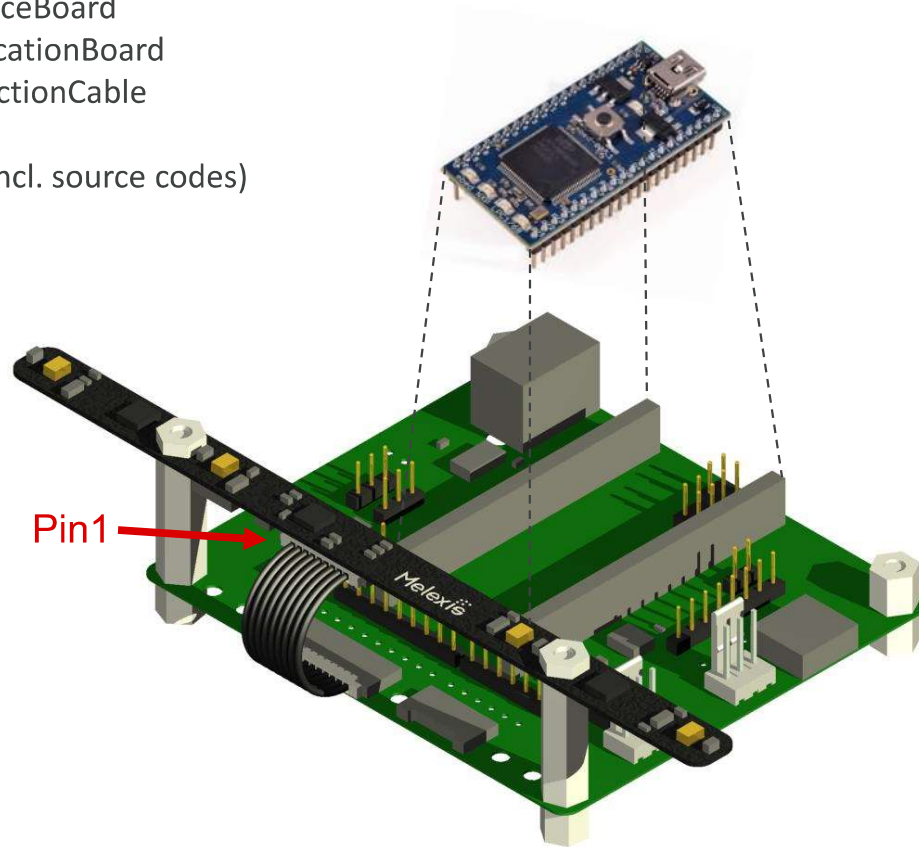
MLX75030

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

EVB75030V2 Overview

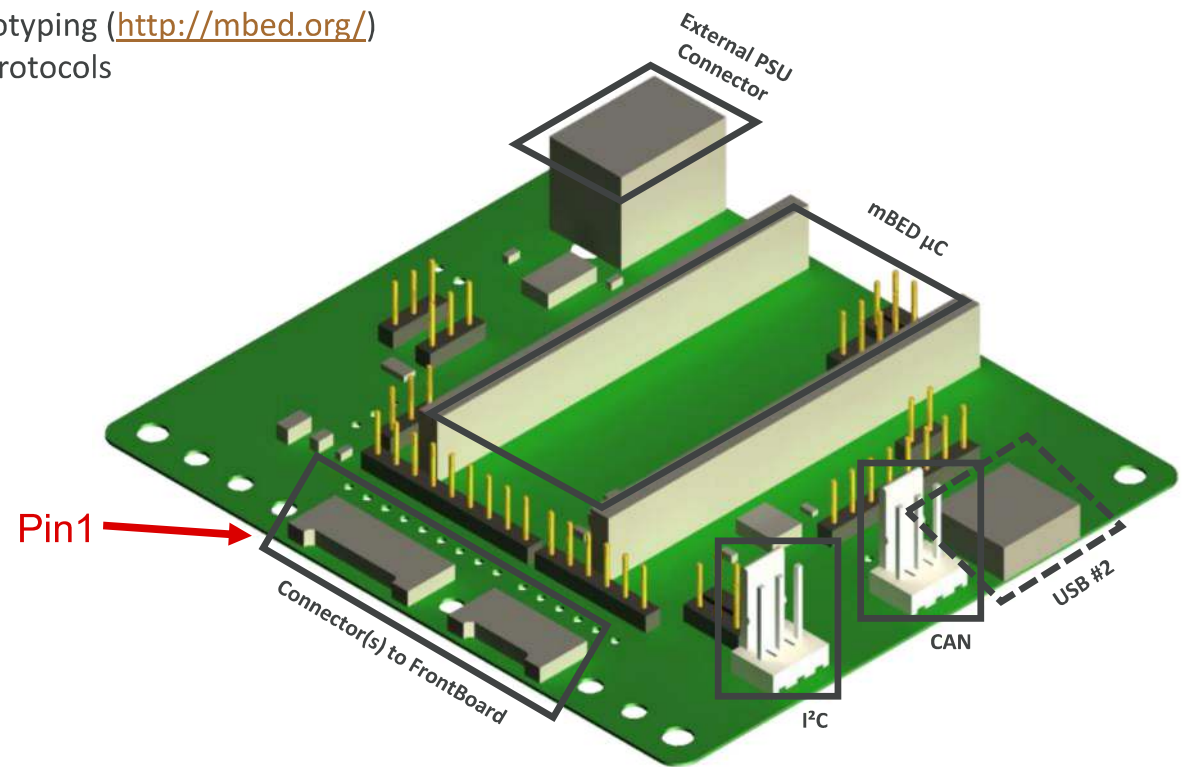
Package Contents :

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

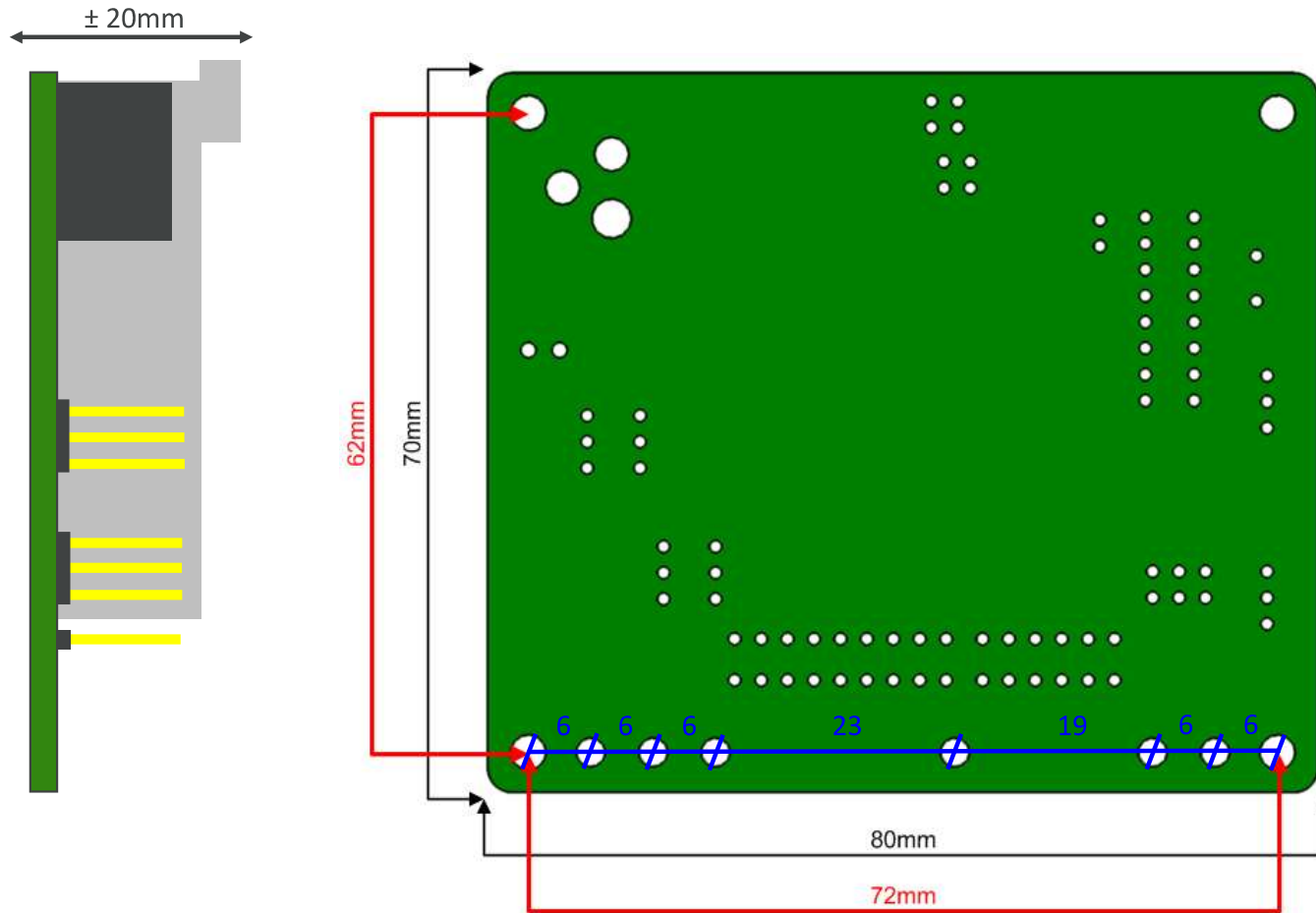


EVB75030V2BB11 InterfaceBoard

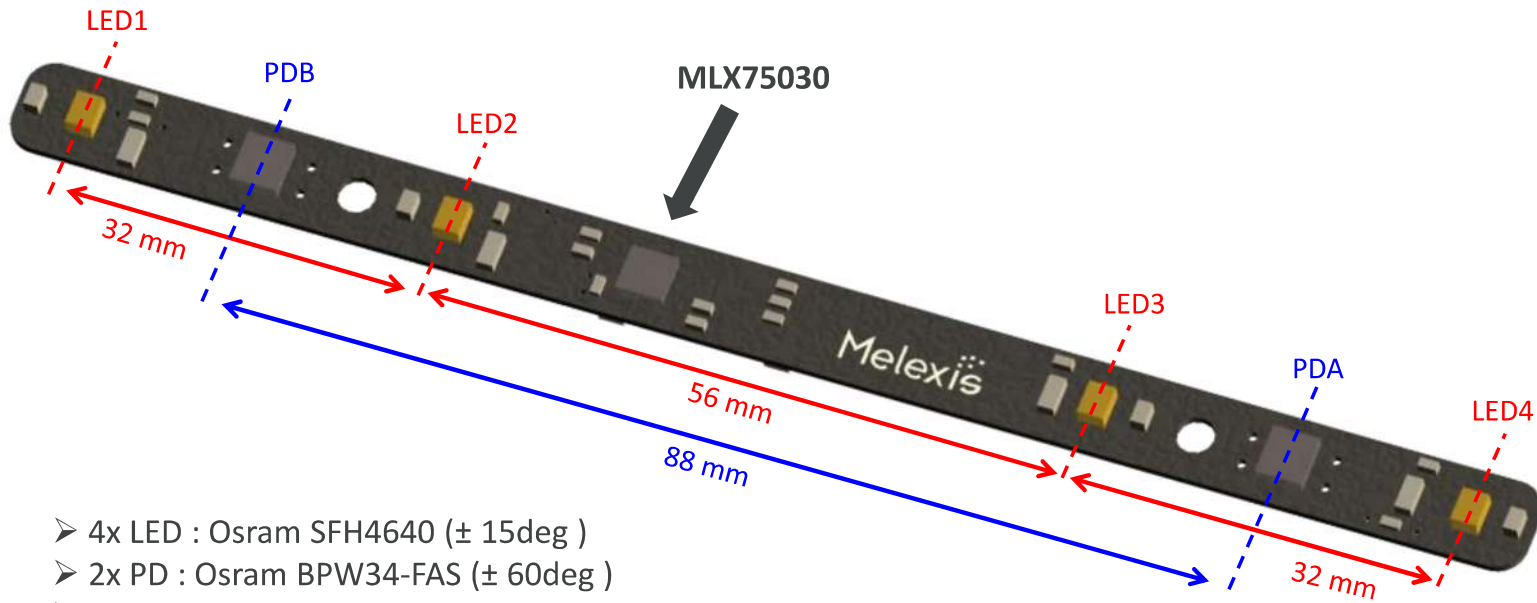
- InterfaceBoard between PC/laptop & MLX75030 applicationboards
- Incl. mBed microcontroller for rapid prototyping (<http://mbed.org/>)
- Supports USB, CAN, I²C communication protocols
- USB powered via mBed or external PSU
- Dimensions : 70x80x1.6 mm



EVB75030V2BB11 Mechanical Outline



EVB75030V2LRP11 ApplicationBoard

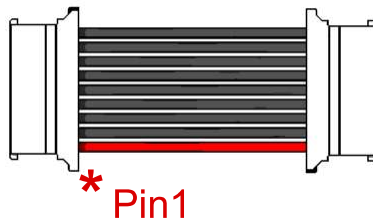


- 4x LED : Osram SFH4640 ($\pm 15\text{deg}$)
- 2x PD : Osram BPW34-FAS ($\pm 60\text{deg}$)
- Reference Schematic = available
- ApplicationBoard with Simple Left & Right Gesture Recognition + Proximity Sensing
- Dimensions : 130x8x0.8 mm

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



