

BLUETECHNIX  
Embedding Ideas

# MTK-USB Evaluation-Kit TIM-UP-19k- S3-Spartan6



Quick Start Guide

Version 2

Bluetechnix

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MTK USB Evaluation KIT-Quick Start Guide

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#### Information

For further information on technology, delivery terms and conditions and prices please contact Bluetechnix (<http://www.bluetechnix.com>).

#### Warning

Due to technical requirements components may contain dangerous substances.

## 1 Unboxing

### 1.1 In the box

- MTK-USB Evaluation-Kit
- USB Cable
- Quick Start Guide
- Power Supply \*
- Mains cable
- Tripod

**\* Note**

The power supply's operating temperature is specified from 0 to +40°C. This represents not the effective working temperature of the MTK-USB Evaluation-Kit sensor!

### 1.2 Connecting your MTK-USB Evaluation-Kit

#### 1.2.1 Connector Overview

- a. Power Supply
- b. USB

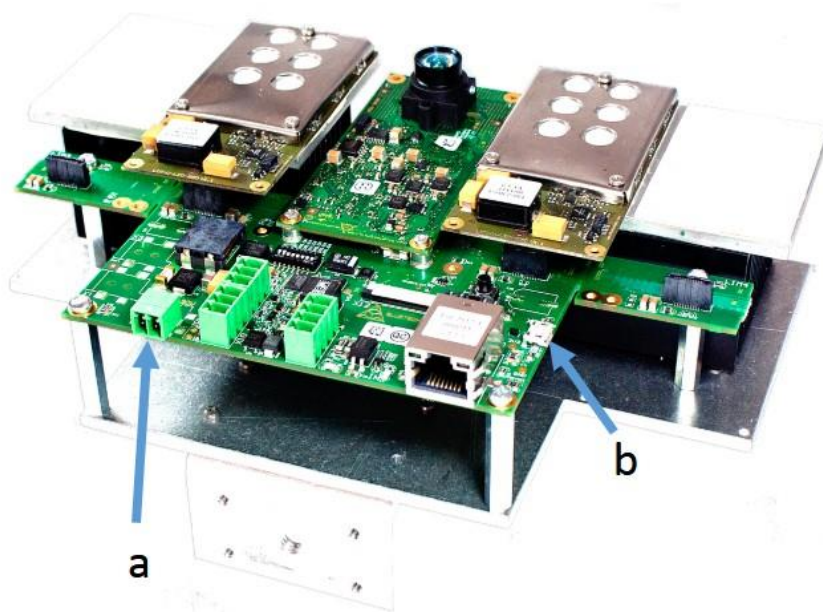


Figure 1-1: MTK-USB Evaluation-Kit connectors and interfaces

**Note**

Please follow the next steps in the right order to get your 'MTK-USB Evaluation-Kit up and running correctly.

## 1.2.2 Power Connector (a)

### Pin assignment on the power connector:

Connector Type: 2.1mm ID / 5.5mm OD

Voltage: 18-30V



#### Note

Use inherently limited power sources only!

The power supply connector is protected against wrong polarity but the 'MTK-USB Evaluation-Kit' will not work in case you don't use the correct polarity!  
If the MTK-USB Evaluation-Kit doesn't work please check the power supply polarity first!

To ensure, that your MTK-USB Evaluation-Kit works correctly, connect the 'MTK-USB Evaluation-Kit' to the **24V DC / 90W** power supply using connector **(a)** and the DC-Jack as an adapter to the power supply and wait for approximately 20 seconds until the camera boots up.

## 1.2.3 USB Connector (b)

This standard USB connector provides a USB 2.0 interface to the MTK-USB Evaluation-Kit.

Plug in the USB cable **(b)** and connect your MTK-USB Evaluation-Kit to your PC.

### 1.3 Overview of the Setup

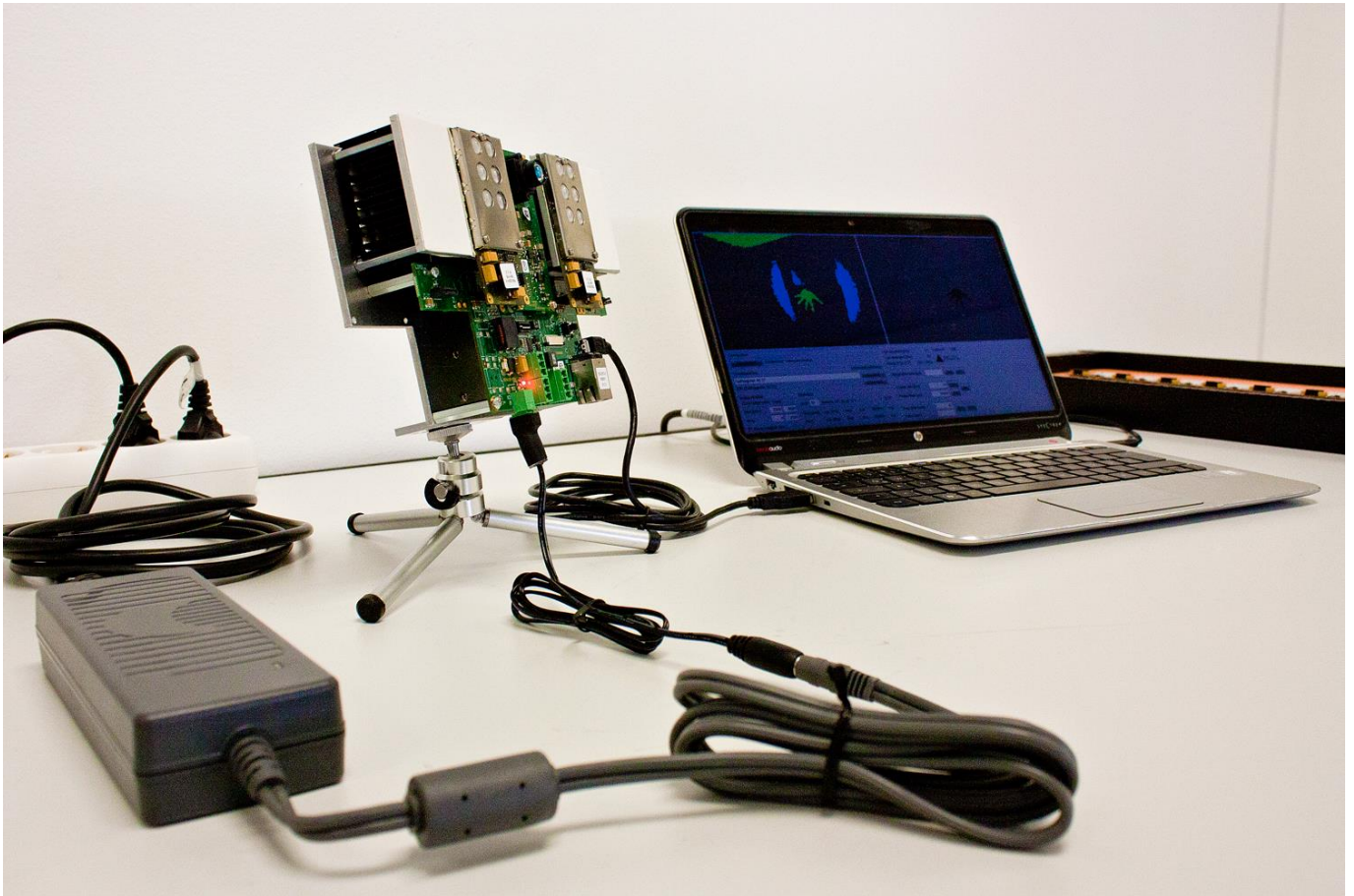


Figure 1-2: MTK-USB Evaluation-Kit with connected power supply and USB cable

## 2 Downloading the Evaluation Software

Please point your browser to our support site <https://support.bluetechnix.com/> and select the 'Free Access' area.

### 2.1 Support website

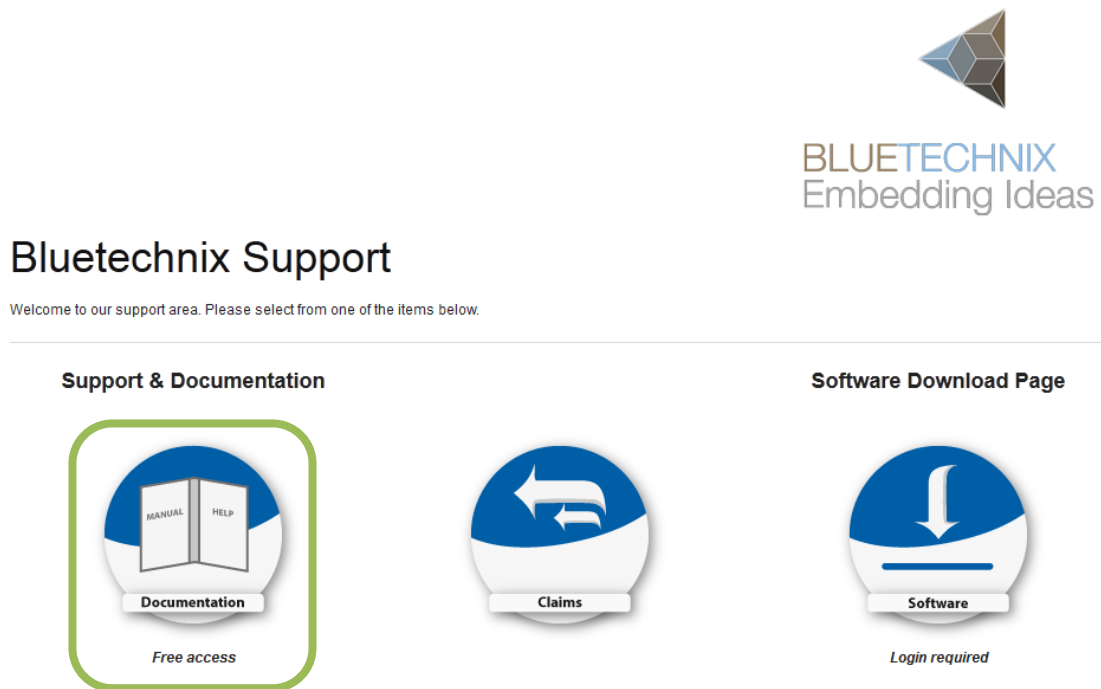



Figure 2-1: Bluetechnix support site

### 2.2 Start-up screen

You should see the startup screen:





navigation

- [Main Page](#)
- [Depth Sensing](#)
- [Tiny Boards](#)
- [Software](#)
- [BLACKSheep](#)
- [Software Download](#)
- [Support](#)

search

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toolbox

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print/export

- [Create a book](#)
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- [Printable version](#)

## Main Page

Welcome to the Bluetechnix Support Wiki!

Please click on a product name to get detailed information.

### 1 Depth Sensing

**Products**

Argos

- [Argos 3D - P100](#)
- [Argos 3D - P310](#)

Sentis

- [Tiny ToF - epc610](#)
- [Sentis ToF - M100](#)
- [Sentis ToF - P100](#)
- [Sentis ToF - P510](#)
- [Sentis ToF - P509](#)

Flash

- [ToF-Flash](#)

**Modules**

ToF Modules (TIM)

- [TIM-UP-19k-S3-Spartan6](#)

**KITs**

MTK Evaluation KITs

- [MTK USB Evaluation KIT for TIM-UP-19k-S3-Spartan6](#)
- [MTK ETH Evaluation KIT for TIM-UP-19k-S3-ETH](#)

Figure 2-2: Product main page

Please select your product: e.g. MTK-USB Evaluation-Kit for TIM-UP-19k-S3-Spartan6

On the product support page please download the latest software support package from the download section.

### 3 Install USB Driver

At the first time you have plugged in your Bluetechnix device you have to install the driver which can be found in the support package.

Open the Windows “Device Manager” in the “Control Panel”

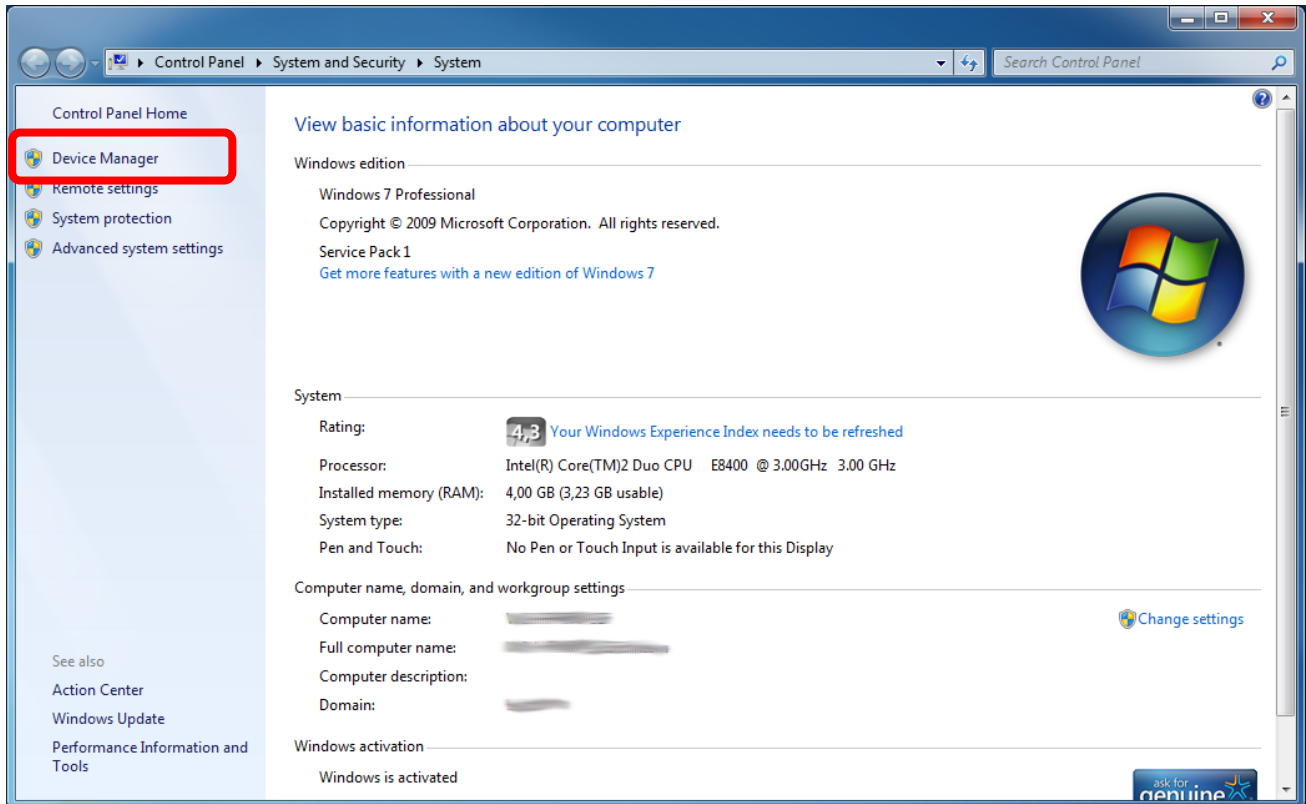


Figure 3-1: Windows Device Manager

Once Device Manager is opened, right click “*Bluetechnix – Argos3D – P100*” in “*Other Devices*” and click “*Update Driver Software*”. The correct device name will be applied after the driver installation.

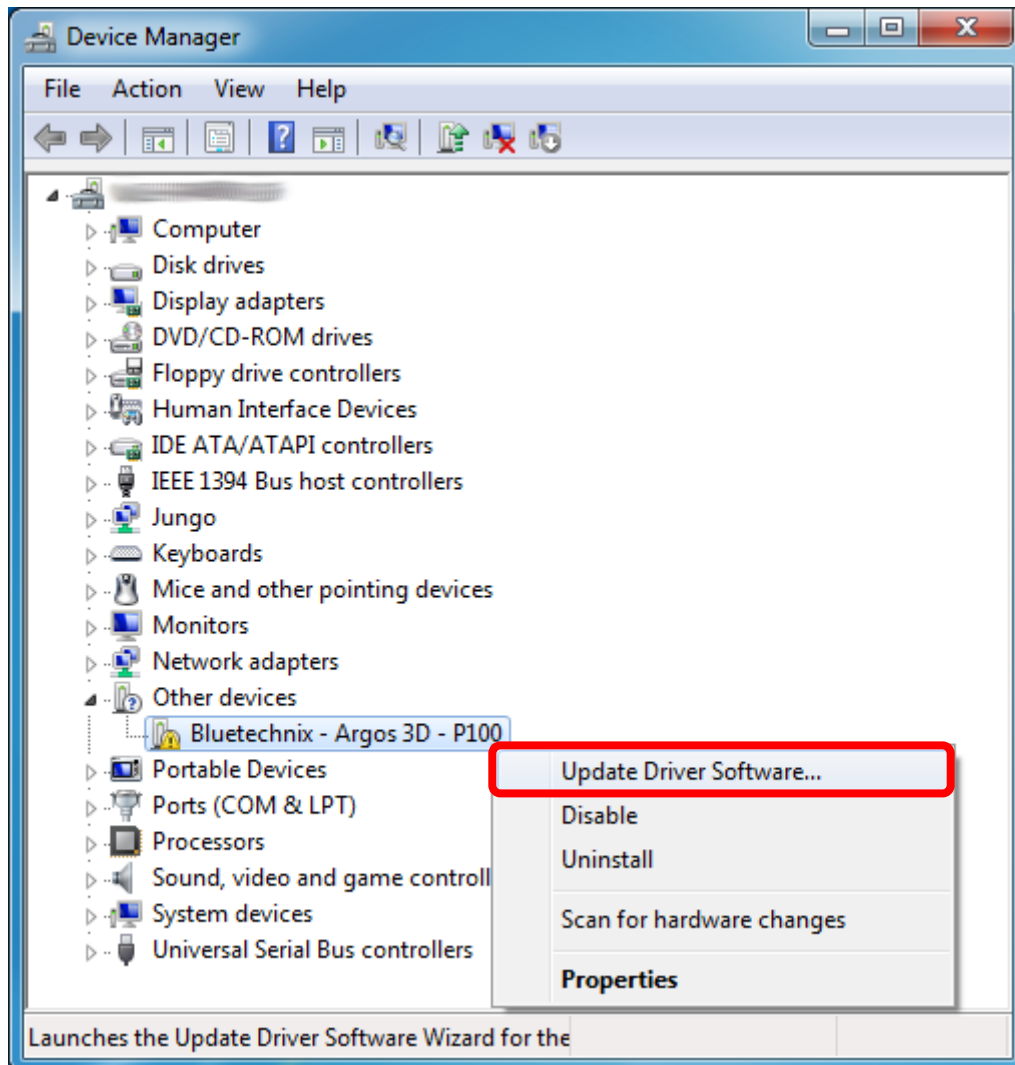


Figure 3-2: Device Manager – Update Driver Software

Then choose “Browse my computer for driver software”.

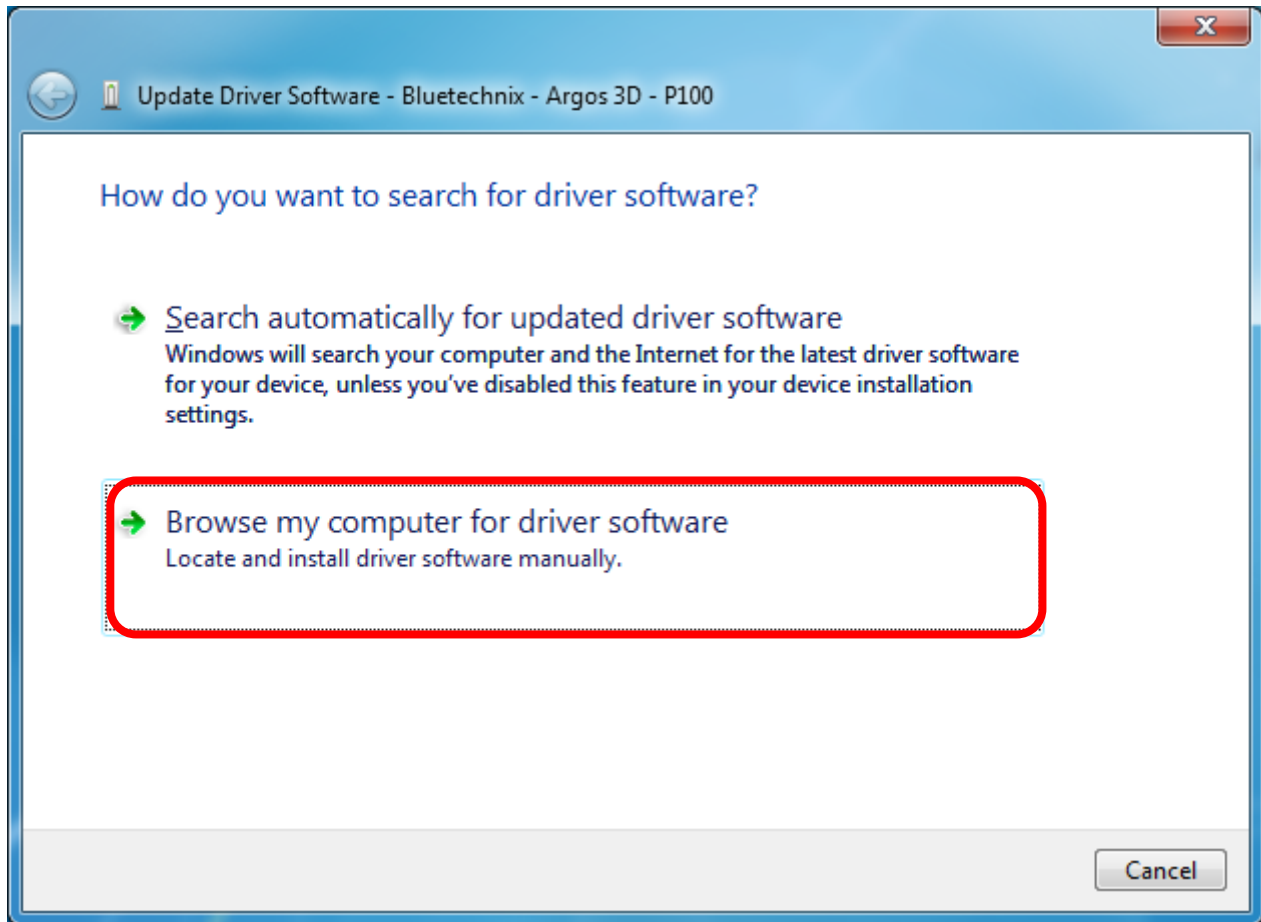


Figure 3-3: Locate and install driver software manually

Point the driver install utility to “*driver\windows\*” on your local hard drive. Check “*Include subfolders*” and click “*Next*”.

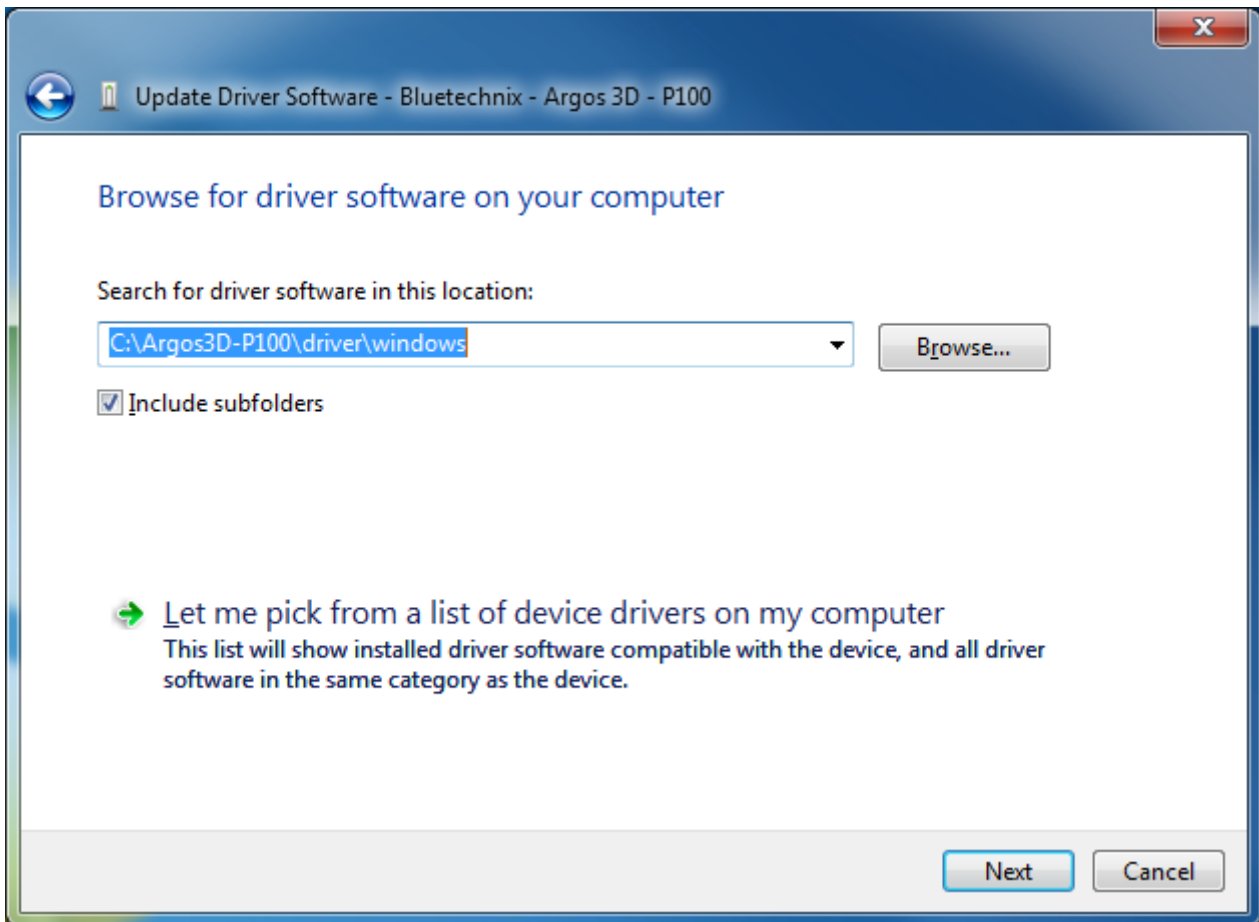


Figure 3-4: Browse for driver software on your computer

If the following question arises, choose to lay your trust upon Bluetechnix GmbH.

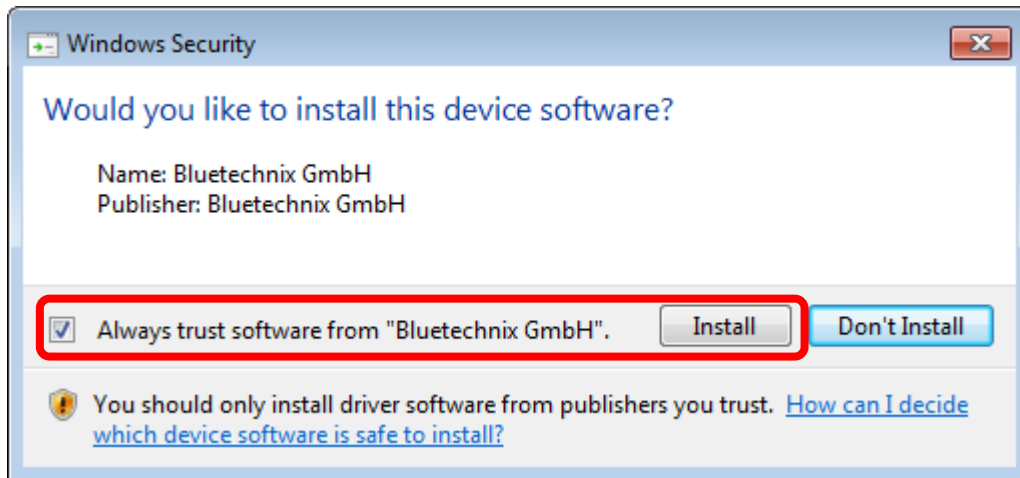


Figure 5: Always trust software from "Bluetechnix GmbH"

The *Update Driver Software Utility* finishes the driver installation showing following Window.

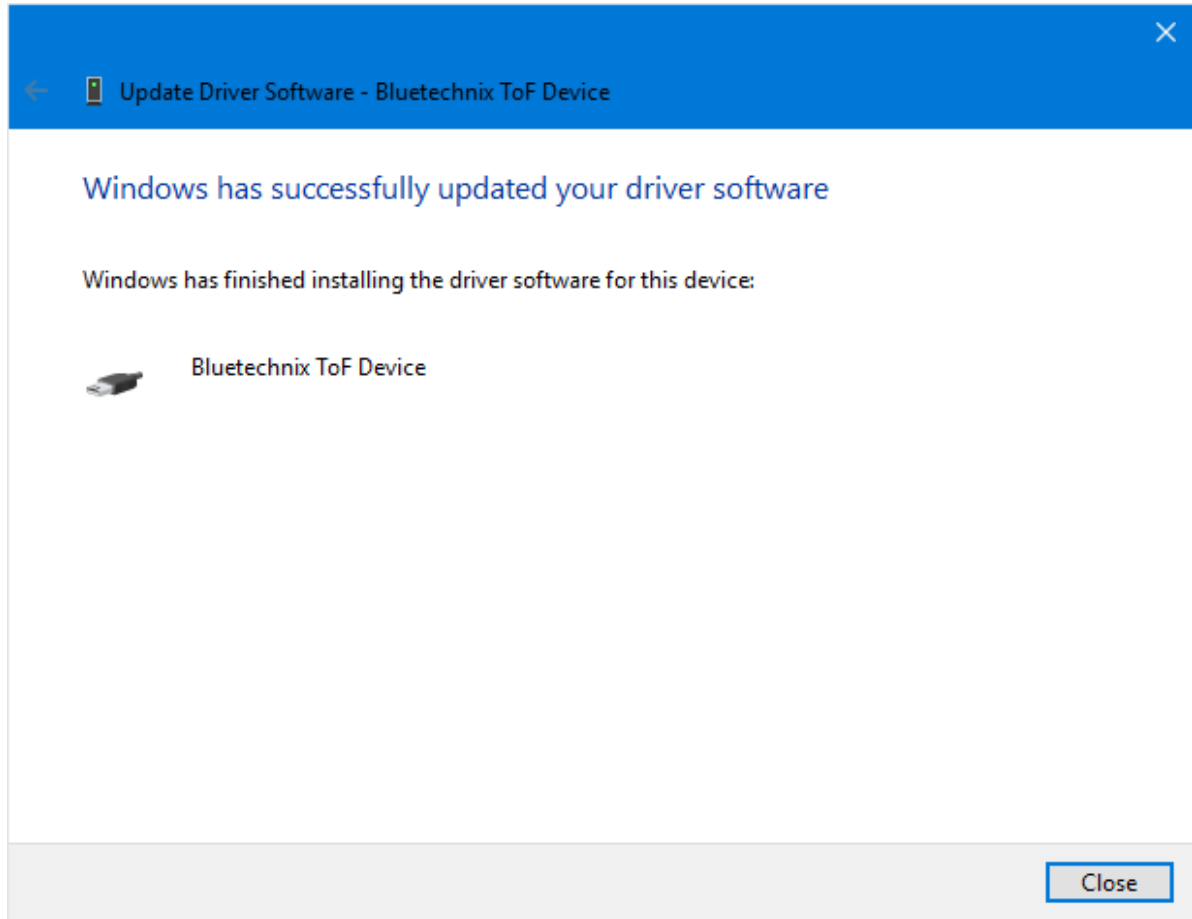


Figure 3-6: Driver Software successfully installed

After successful driver installation there should be a new device in the device manager named “*Bluetechnix - Argos 3D - P100*”.

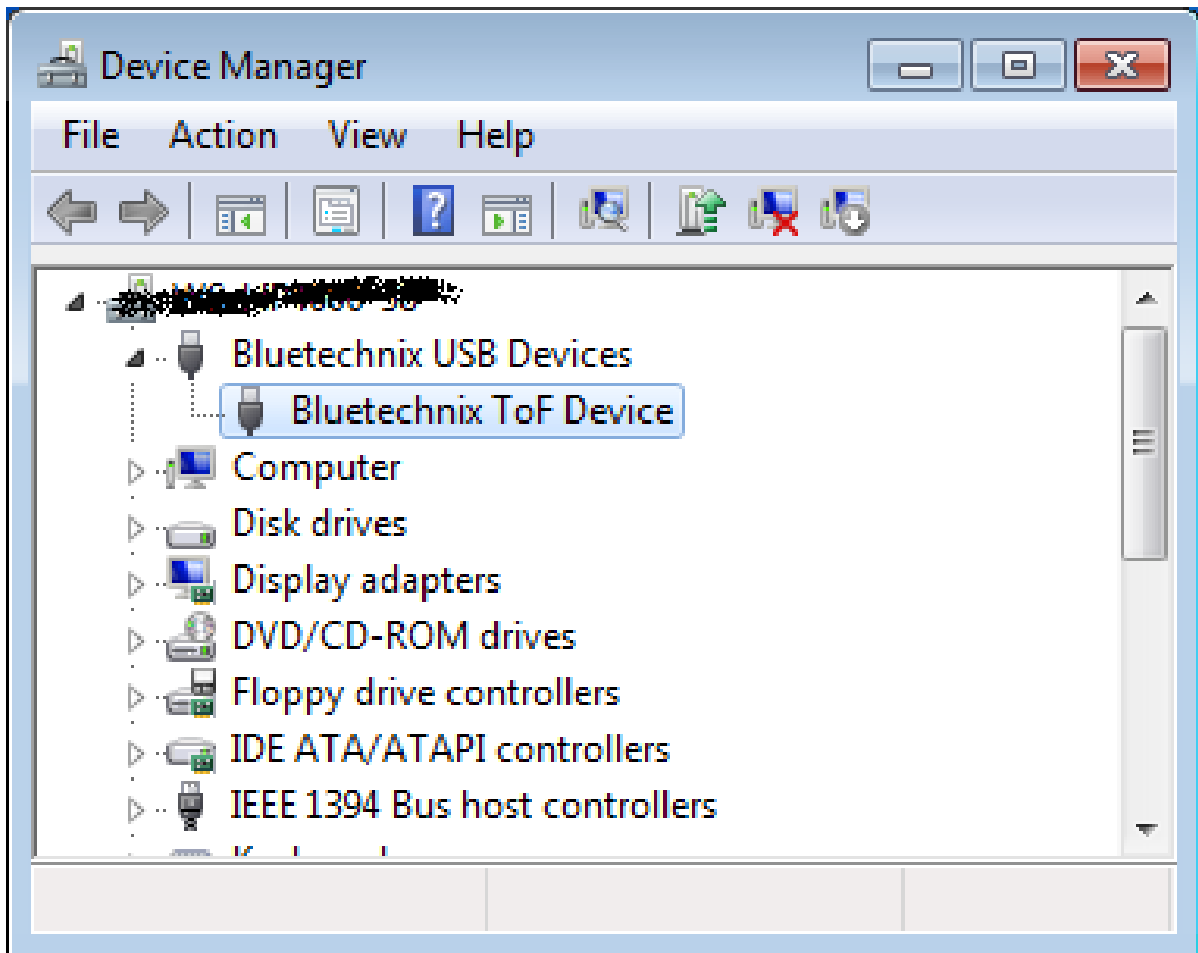


Figure 3-7: Bluetechnix PMD Devices in Device Manager

### **Congratulations**



You now have successfully installed your Argos<sup>3D</sup> - P100 on your PC.



## 4 Start using your MTK-USB Evaluation-Kit with 'BltTofSuite'

Using this software you can simply display the depth image and the amplitude image of the MTK-ETH. For a detailed introduction to the software, please read the 'Bluetechnix ToF Suite - Quick Start Guide'

Place the MTK-ETH Evaluation-Kit on your desk approximately 50 cm in front of you.

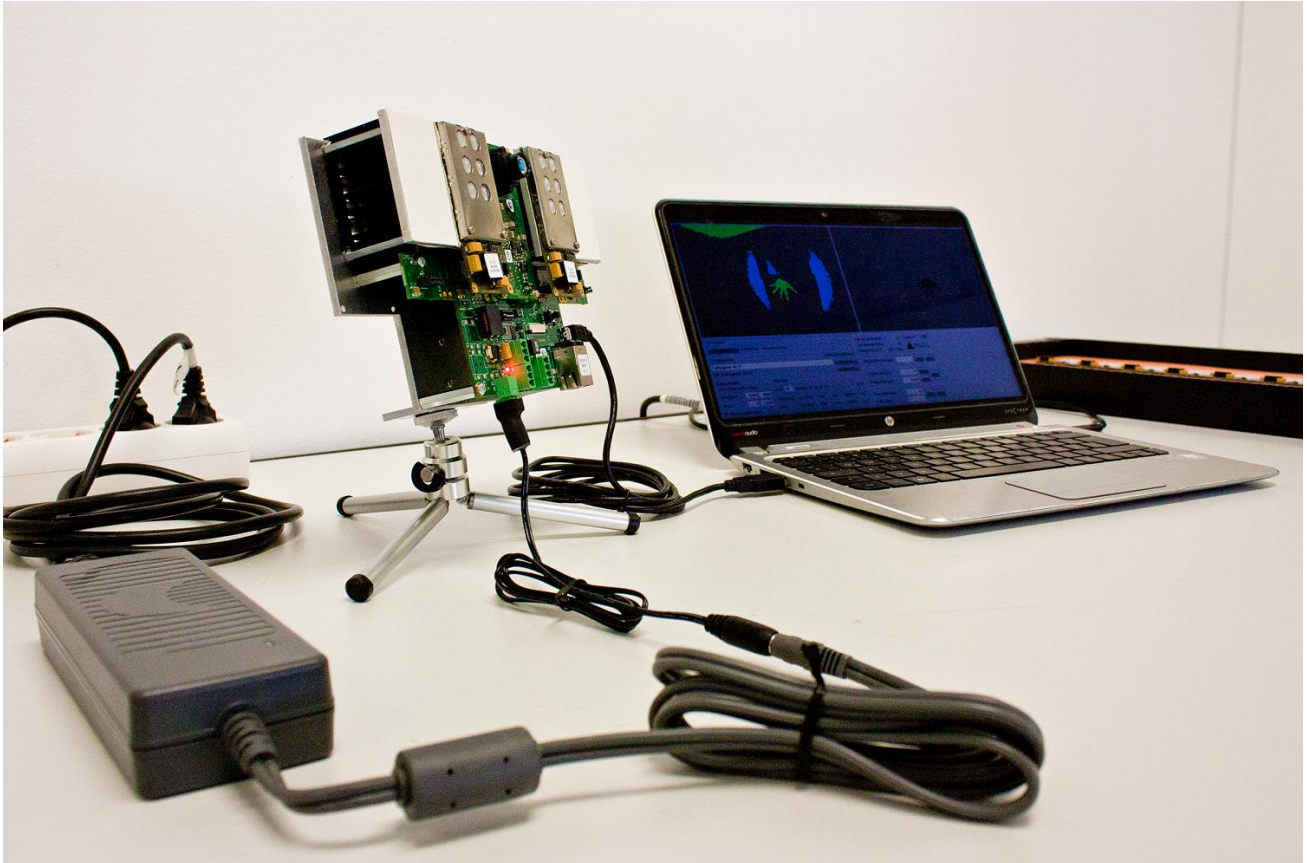


Figure 4-1: Sample scenario with MTK-USB Evaluation-Kit

Browse to the tools directory of your unzipped software support package. Start the BltTofSuite. On how to use this software, connect and evaluate your product, please refer to the Bluetechnix ToF Suite user manual included in the software support package.

## 5 System Requirements & Support

- Operating System: Microsoft Windows 7/8
- 32 bit (x68) or 64 bit (x64) processor
- Dual-core 2 GHz or faster CPU
- Dedicated Ethernet port
- 2GByte RAM

### 5.1 Support

For answers to common questions, troubleshooting steps and further documentation visit our Bluetechnix support website <https://support.bluetechnix.at/wiki/>

## 6 Product History

### 6.1 Version Information

#### 6.1.1 MTK-USB Evaluation-Kit

Version	Release date	Firmware Version
X-Grade	March 2015	

Table 6.1: Overview MTK-USB Evaluation-Kit product changes

Additional information can be found at <http://support.bluetechnix.com>

### 6.2 Anomalies

Version	Date	Description
0.0.0		No anomalies reported yet.

Table 6.2: Product anomalies

Additional information can be found at <http://support.bluetechnix.com>

### 6.3 Document Revision History

Version	Date	Document Revision
0	20150307	First draft
1	20150327	First released Issue
2	20160210	Removed BltTofSuite section

Table 6.3: Revision history