

# Tiny ToF

## Depth Sensor System on Module

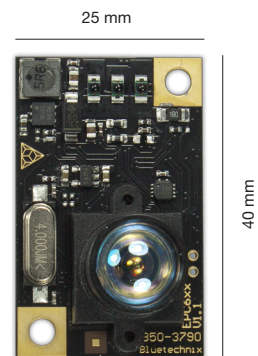


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The 'Tiny ToF Module' is a very new depth sensor fully integrated onto a module of only 25 x 40 x 18 mm. The four main components ToF IC, active lighting, a lens and CPU are integrated on the module and forming a very small ToF System on a Module, which provides all its functions via a single plug. This ToF system was developed especially for integration in smallest environments.

This depth sensor provides exclusively metadata like e.g. Distance Measurements, Digital Out or customer-specific data. The sensor has a resolution of 8 x 8 pixel and offers an aperture angle of 3.7 ° which enables precise measurements at an application range of up to 5 m.

Tiny ToF is also available as a package with extensive equipment (please see Scope of Supply Package). We provide a full BSP for IAR Embedded Workbench for ARM for an adequate fee.

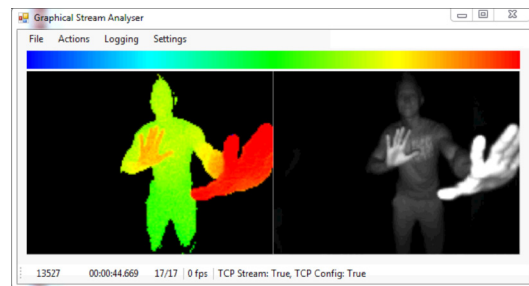


Tiny ToF Module

*Smart, Small & low-priced*

## Highlights

- » Full depth sensor system using ToF technology on a module „ToF Module Concept“
- » 8 x 8 pixel
- » 3.7° Field of View
- » 0.1 to 5 m application range\*
- » Active IR illumination
- » Meta data output



Sample ToF distance and greyscale information

# Tiny ToF

Depth Sensor System on Module



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## Feature Overview

Form Factor	25 x 40 mm
Sensor	epc610
Pixel	8 x 8
Field of View	3.7 °
Depth Data calc on module	Yes
Output	Meta data e.g. distance, Trigger signal etc.
Interfaces	UART, SPI, I <sup>2</sup> C
GPIO	4 (2 x PWM)
Power Supply	5 V <sub>DC</sub> @ 450 mA
Temperature Range	-20 to +65 °C

\*FPS & Range depends on integration time, ambient temperature and software configuration

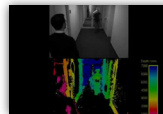
## Applications



- » **Automation and Control**
  - » Range Measurements



- » **Robotics**
  - » Map Building
  - » Navigation
  - » Obstacle detection
- » **Building Automation**
  - » Security Appliances
  - » Safety Access Control



## Customization

The depth sensor module concept is focused on modularity. Individual base boards with your required interfaces can easily be implemented.

Bluetechnix as one of the leading ToF experts ensures with this unique ToF module a new and very efficient way to build up customized depth sensing systems rapidly.

## Meta Data

- » **Distance**
  - » 64 independent values
  - » Real Time
- » **Digital Out**
  - » Trigger something
- » **User Specific**
  - » „Space free“
  - » „Wrong Vehicle“
  - » „Person Detected“
  - » etc.

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