Information

ESPROS launches revolutionary 8x8 TOF imager!

Sargans, Switzerland - December 5th, 2017

ESPROS Photonics AG proudly announces the market introduction of epc611, a revolutionary new generation 8x8 pixel Time-of-Flight sensor. The arrival of the epc611 establishes a new industry standard in terms of photon sensitivity, distance measurement frame rate and versatility for a wide range of applications. With its small footprint of 2.6 x 2.6mm and bare die packaging, the epc611 fits in every device. The epc611 will be produced in cooperation with ESPROS fab partner TSMC and is the designated workhorse for many volume applications such as gesture recognition, robotics, drones, automated guided vehicles, doors & gates, machine safety and many more.

SENSITIVITY: epc611 has a 30% enhanced sensitivity in comparison to previous generation ESPROS TOF sensors due to the latest generation TOF pixel design. Only 7.5 nW per millimeter-square of optical power is needed to measure accurately distance. And this under full sunlight condition.

FRAME RATE: The epc611 allows up to 8'000 distance measurements per second. This high measurement rate makes the chip ideal for SLAM applications with up to 10Hz rotation and high angular resolution.

VERSATILITY: beyond imagination. The epc611 can be configured to operate in 7 different TOF modes. From an 8x8 imager to binning of all pixels into a single large pixel almost anything is possible. Groups of pixels can be configured to operate at different integration times or at different phase angles. In this way the imager can achieve a wide dynamic distance range or catch fast moving objects without generating motion blur.

«We put our entire experience in this new generation sensor», says Beat De Coi, CEO and founder of ESPROS Photonics. «I built sensors my whole life and know about the quite individual requirements that need to be satisfied. Therefore I wanted this chip to come with all configuration options that we could think of. And now its here!».

The new epc611 TOF sensor is available now. Several pilot customers have epc611 already in the laboratory. A first distance measurement module is under development and will be released soon.

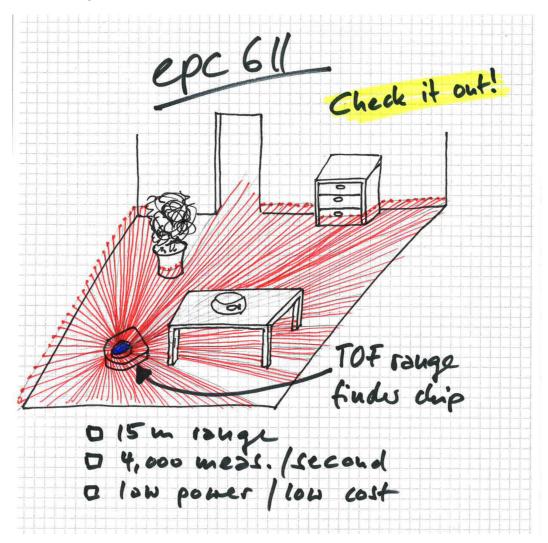
About ESPROS Photonics

ESPROS Photonics develops and produces photosensitive semiconductors for challenging industrial and scientific applications. For this purpose, ESPROS has developed and industrialized a dedicated CMOS process technology.

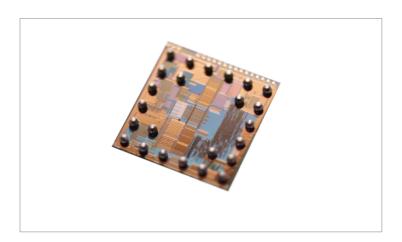
The ESPROS Photonic CMOS™ process is a unique offering in todays semiconductor markets.

ESPROS was founded in 2006 and is financed by private investors. Today, the company employs over 60 people and realizes projects for well renowned customers from automotive, industry, aerospace, automation and science. The product portfolio reaches from standard TOF imagers, classic foundry services on ESPROS' unique $OHC15L^{TM}$ process to providing the complete development and supply chain for demanding imager solutions.

Pictures epc611



Caption picture: epc611 in a cleaning robot



Caption picture: epc611 chip

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