



SigmaFusion™

SAFELY DRIVING AUTONOMOUS TRANSPORTATION WITH LOW POWER SENSOR FUSION SOLUTION

+ WHAT IS SigmaFusion™?

Autonomous vehicles will soon be a part of everybody's driving experience. SigmaFusion™ processes information signaled by car sensors such as Stereo camera, Lidars, Radar and Ultrasound. **It turns the many incoming data into clear information of the surrounding environment to guarantee safe driving.**

SigmaFusion™ offers:

- ASIL-D qualifiable multi-sensor environment perception
- Safe assessment of the free space
- Accurate and predictable implementation
- Low power and low cost integration
- Real-time in AURIX™ family microcontroller
- ADAS functional safety improvement through a stand-alone solution
- Safety companion for Artificial Intelligence algorithms

+ APPLICATIONS

Embedded into an INFINEON AURIX™ TRICORE™, an ASIL-D automotive MCU, **SigmaFusion™ is ready to be integrated in the upcoming vehicles.**

As a stand-alone solution, it provides fail-operational perception of the vehicle environment for ADAS functions.

As a safety companion solution, it increases the functional safety of AI algorithms implemented on number-cruncher platforms.





+ WHAT'S NEW?

- Compatible with any kind of range sensor
- Low-power: enables automotive functions under the 3-watts barrier
- Ultra-compact: fits into existing automotive microcontrollers
- Scalable Precision and number of sensors together with the AURIX™ family

SAFETY COMPANION SOLUTION



STAND-ALONE FOR ADAS FUNCTION



+ WHAT'S NEXT?

Leti is looking for new collaborations to fully implement SigmaFusion™ into automotive functions. SigmaFusion™ solution can easily be integrated to create cutting-edge products.

INTERNATIONAL RECOGNITION:



Strasbourg, France
June 19-22, 2017



Las Vegas, NV
January 5-8, 2017



San Francisco, CA
December 3-7, 2016



Messe Stuttgart
November 8-10, 2016



Grenoble, France
October 25-27, 2016



Austin, TX
June 5-9, 2016

INTERESTED IN THIS TECHNOLOGY?

Contact:

Stéphane Bailly

stephane.bailly@cea.fr

+33 438 786 555

Leti, technology research institute

Commissariat à l'énergie atomique et aux énergies alternatives
Minatec Campus | 17 rue des Martyrs | 38054 Grenoble Cedex 9 | France
www.leti-cea.com

