

Deliverable D3.4

Environment perception module
implemented for possible use in
the demonstrator vehicle

Dissemination level	CO
Version	1.0 Final
Lead contractor	University of Ulm
Due date	31.09.2017
Version date	06.09.2017



Bundesministerium
für Bildung
und Forschung

Tekes



GOBIERNO
DE ESPAÑA

MINISTERIO
DE INDUSTRIA, ENERGÍA
Y TURISMO



ECSEL Joint Undertaking
Electronic Components and Systems for European Leadership

Co-funded by
the European Union



This project is co-funded
by the ECSEL JU

Document information

AUTHORS

Franz Gritschneider - UULM

Hasan Iqbal - UULM

Stefan Hörmann - UULM

Andrea Saccagno - Ficoso

Matti Kuttilla - VTT

Ossi Martikainen - VTT

Fridjof Stein - Daimler

Hendrik Königshof - FZI

Claus Christmann - Bosch

Coordinator

Dr. Werner Ritter

Daimler AG

Wilhelm-Runge-Straße 12

89082 Ulm

Germany

Phone: +49 731 505 2140

Email: Werner.R.Ritter@Daimler.com

Project funding

H2020-EU.2.1.1.7.

ECSEL Programme

Contract No. 661933

Legal Disclaimer

The information in this document is provided 'as is', and no guarantee or warranty is given that the information is fit for any particular purpose. The above referenced consortium members shall have no liability for damages of any kind including without limitation direct, special, indirect, or consequential damages that may result from the use of these materials subject to any liability which is mandatory due to applicable law.

© 2015 by RobustSENSE Consortium

1 Summary

Deliverable 3.1 describes the conceptual design for the Environment Model Architecture meeting ambitious RobustSENSE objectives.

This deliverable (D 3.4) targets the more concrete form of the Environment Model specifically its implementation. Here, we address the questions how the augmented sensor data readings from the RobustSENSE sensor layer holding the augmented RobustSENSE sensor are used. Further, the data fusion processing scheme, using a divide-and-conquer strategy is introduced and emphasized. The functional modules together with the subsequent high-level fusion module form the overall data fusion layer.

It is also highlighted which beneficial properties are preserved if it comes down to a concrete hardware implementation. Specifically, considerations are made concerning the development process of new functionalities as well as the demand for rapid prototyping capabilities up to the point of series production.