Technical Article TDA ADAS Solutions Enable a Safer Driver Experience



Joe Folkens

Our TDAx family of Advanced Driver Assistance Systems (ADAS) processors enables automotive OEMs to provide a safer driving experience for drivers worldwide. See some of the different applications that the TDA family enables.

Stay tuned because we'll be adding new videos to this page throughout the 2017 Consumer Electronics Show (CES). These videos will demonstrate how TDAx processors are being used in real-world automotive applications,

TDA Camera Monitoring System for Mirror Replacement

- See how the integrated Image Signal Processor (ISP) on TI's scalable family of TDA products can enable best-in-class camera monitoring systems with industry-leading image quality for increased safety.
- Device featured: TDA3x

https://youtu.be/o2NC7kpz7Zk

D3 Engineering ADAS Development Kit

- Learn about D3 Engineering's ADAS Development Kit based on TI's scalable family of TDA processors.
- Device featured: TDA3x, TDA2Ex, TDA2x

https://youtu.be/W1Zq5WYN3XQ?list=PLISmVLHAZbTSLjyH-Pz71QFh_6wIJiizV

Advanced 3-1-1 Camera Monitoring System using TDA

- Experience a panoramic viewing system using three cameras, one SoC & one display (3-1-1) that can also support ADAS functionality based on TDA's heterogeneous architecture.
- Device featured: TDA3x

https://youtu.be/unpVEjMiCEI

TDA Flicker Mitigation

- FLICK OFF THE FLICKER of LEDs using unique, industry-leading hardware & software solutions on TDA processors.
- Device featured: TDA3x

https://youtu.be/NNcqjSMppVo?list=PLISmVLHAZbTSLjyH-Pz71QFh_6wIJiizV

TDA Semantic Segmentation

- Observe deep learning-based semantic segmentation running on TI's neural network implementation on TDA SoCs.
- Device featured: TDA2x

https://youtu.be/-CH_0J_f5zA

TDA Front Camera Solution by KPIT

- See how KPIT can provide an alternative, production-ready front camera ADAS solution using TI's TDA family of processors.
- Device featured: TDA2x, TDA3x

1



https://youtu.be/jPjgtYKNJOU

TDA Front Camera Solution by Hella Aglaia

- See how Hella Aglaia can provide an alternative, production-ready front camera ADAS solution using TI's TDA family of processors.
- Device featured: TDA2x, TDA3x

https://youtu.be/ZPwKsfFLY0s?list=PLISmVLHAZbTSLjyH-Pz71QFh_6wIJiizV

TDA Fusion for Safety

- Learn how TI's TDA family of processors enables the fusion of multiple sensor modalities to increase safety & reliability in today's ADAS to tomorrow's autonomous systems.
- Device featured: TDA2x, TDA3x

https://youtu.be/ivBIYe-fj48

TDA Driver Monitoring & Identification

- See how Fotonation uses a TDA SoC to provide an advanced, automotive-grade driver monitoring & identification solution.
- Device featured: TDA3x

https://youtu.be/uzAe9jx3fjk

For more information about TDAx ADAS processors, visit TI.com/ADAS. For more information about TI's presence at CES 2017, visit TI.com/CES2017.

IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATA SHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, regulatory or other requirements.

These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you will fully indemnify TI and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI's products are provided subject to TI's Terms of Sale or other applicable terms available either on ti.com or provided in conjunction with such TI products. TI's provision of these resources does not expand or otherwise alter TI's applicable warranties or warranty disclaimers for TI products.

TI objects to and rejects any additional or different terms you may have proposed.

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265 Copyright © 2023, Texas Instruments Incorporated