Automotive portfolio



From headlights to taillights and all systems in between, Texas Instruments (TI) offers a wide range of innovative technologies for the modern automobile. From solutions in infotainment, critical active and passive safety and advanced driver assistance systems to emerging solutions for hybrid/electric power train systems and wireless connectivity technology, TI is changing the way the industry thinks of mobile innovation.

INFOTAINMENT

TI provides a multitude of analog and embedded processing products for rich, dedicated HMI environments complementing multimodal applications.

- · Voice, gesture and face recognition
- · Consumer multimedia systems such as video games, audio, digital radio and portable electronics
- · Curved high definition cluster and center console imaging with DLP® technology
- · DLP augmented reality and Head Up Displays (HUD)
- · Telematics, emergency call (E-Call) and rear-seat entertainment
- · Highly efficient Class-D Audio solutions
- · SoCs that deliver rich multimedia, high integration and extended lifecycle
- · Comprehensive Internet access, dynamic navigation, media sharing and multi-zone applications supported by *Bluetooth®/Bluetooth* low energy, near field communications, GPS/GNSS and Wi-Fi® solutions
- · Complete infotainment solutions augmented by software suites developed in close partnership with leading operating systems such as Android, QNX, Microsoft and Linux

ADVANCED DRIVER ASSISTANCE SYSTEMS

The latest technology advancements for driver assistance and safety can be found in Tl's analog and embedded processing portfolio.

- · Processors with DSP enable multiple vision and radar systems for applications such as lane departure warning, rearview and surround view camera systems, collision warning and avoidance as well as blind spot detection.
- · Integrated front ends for radar and LIDAR data conversion enable high performance and integration at lower costs
- · Fully-integrated SoC for ultrasonic park assist
- · FPD-Link connects standard cameras and megapixel cameras via thin, light and cost-optimized cables, which reduce weight and complexity of the wiring harness without sacrificing performance
- · Flexible power management solutions including Power over Coax

CONNECTIVITY

TI technologies enable connectivity systems eliminating wires within the vehicle. Systems enable comprehensive Internet access, dynamic navigation, media sharing and multi-zone applications for infotainment, telematics, E-Call, rear seat entertainment and other portable electronics.

 Support for Bluetooth®, Bluetooth low energy, Near Field communications (NFC), GPS/GNSS, FM and Wi-Fi® solutions



SAFETY

SafeTI[™]-designated products offer fast safety certification for critical systems requiring compliance with standards including ISO 26262, IEC60730 and IEC61508.

- · Stability control and anti-lock braking systems
- · Electric power steering systems
- · Airbag, occupant detection and alarm systems
- · Advanced Driver Assistance Systems

HYBRID/ELECTRIC POWER TRAIN SYSTEMS

TI provides analog and embedded processing solutions for improved performance and safety throughout the hybrid/electric power train systems. TI is the world's leading battery management solutions provider with technologies in:

- · Battery management and charging systems
- · Fully integrated plug-in electric vehicle management systems
- · Start/stop functionality





Design resources and references

Texas Instruments (TI) is committed to unmatched support, service and delivery. Combine this with leading-edge products and you'll discover how TI is redefining innovation in automotive technology.

Support — TI has a wide variety of support for its products, see your local rep for more details.

- · Critical response team
- · 50+ design centers worldwide
- · Local technical (FAE) support
- · Tools and software
- · PPAP documentation available
- TI E2E™ community

Quality, reliability and safety

- · AEC-Q100 and TS16949 compliant designated parts
- ISO 26262 for SafeTI™-designated parts
- · Compliance with ASIL requirements of ISO 26262
- · Zero DPPM objective
- · Automotive component experts available for support

Longevity

- · 30+ years of transportation experience
- · Low obsolescence
- · Product Change Notification (PCN) process

Join the Engineer to Engineer online community at e2e.ti.com



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