# LANTRONIX Automotive Solutions



Lantronix brings our expertise in engineering services and product development best practices to focus on the automotive market. This market has specific needs and demands. Automotive market needs go beyond solely focusing on automotive grade components, requiring a bringing together of hardware and software component solutions from a multitude of suppliers while ensuring a quality innovative product with longevity, durability, and reliability.

Our experience with various semiconductor manufacturers (Qualcomm, NXP, etc.) as well as multiple OS providers (QNX, Green Hills Software, Android & Linux) enable Lantronix to develop flexible designs for major automotive sub-systems including Infotainment, Cluster/Control and Telematics.

### **Areas of Focus:**



#### 1. Telematics

- Integrating range of technologies for vehicle communication and precise tracking.
- Wireless solutions; Cellular, Wi-Fi, Bluetooth, NFC & GNSS.
- Qualcomm<sup>®</sup> C-V2X technology.



#### 2. Digital Cockpit

- Infotainment & cluster systems.
- RTOS + hosted OSes.
- Passenger entertainment.
- Driver monitoring & vehicle status.



#### 3. Remote Device Management

- OTA updates.
- Feature & data management.
- Cloud connectivity.

## System Development & Integration:



1. Advanced system development leveraging the latest heterogenous SoCs from Qualcomm, NXP and others.

- End to end HW & SW support.
- i. Multi-core SoCs, with ML/Al.
- ii. Diverse communication systems; Bluetooth, Wi-Fi, GPS, Cellular & Radio.
- iii. Advanced power management.
- iv. Device security, data authentication and access control.



#### 2. System partitioning with HW virtualization and SW hypervisors

- Safety critical applications; secure, real-time.
- i. RTOS support of QNX & Integrity (Green Hills Software).
- ii. ISO26262 & ASIL compliant built on AutoSAR & μ-velOSity.
- · Infotainment applications; diverse, graphics heavy apps and UI.
- i. HLOS support of Android & Linux.

#### 3. Advanced multi-media solutions.



- Multi-display partitioning.
- i. Cluster.
- ii. HUD.
- iii. Rear/surround view mirror replacement.
- iv. Passenger/center console/rear-seat.
- · Multi-camera vision.
- i. Driver/occupant monitoring cameras.
- ii. Security/sentry/dash cameras.
- iii. Backup, surround view cameras.
- Advanced audio.
- i. Multi-user phone, voice integration.
- ii. Speech control.
- iii. Premium sound.

### Design Services:



1. Your Automotive development partner offering flexible engagement models and engineering services tailored to your needs.

#### 2. Comprehensive product development.

- a. HW design & manufacturing, from concept to volume production.
- b. SW development, from individual driver to full stack platform creation.
- c. ME & thermal design & manufacturing, from one off PoC to mass market turnkey devices.

#### **Americas**

800.422.7055 americas\_sales@lantronix.com www.lantronix.com NASDAQ: LTRX

#### Europe

+31 (0) 76.52.3.6.74 4 eu\_sales@lantronix.com

#### Asia/Pacific

+852 3428.2338

asiapacific\_sales@lantronix.com

China: +86.21.6237.8868 India: +91 994-551-2488

Indonesia: +91 994-551-2488 Japan: +81.8.50.1354.6201