SECTON

The Best Vehicle-to-Everything (V2X) Hardware Add-On Solution

- Uncompromised Security
- Simple Integration
- Architected for Autonomous Driving
- Lowest Cost Hardware Add-On
- Worldwide Compliant

SECTON integrates a mobility optimized IEEE802.11p modem ultra-low-latency V2X Hardware Security Module (eHSM) and powerful hardware acceleration engines for line-rate message verification. In addition, SECTON supports IEEE 802.11a/b/g/n/ac to enable external WiFi for supplementary value-added services, like constant cloud connectivity. This integration level, inherently gives any SECTON-based V2X system a significant cost advantage compared with any V2X system based on an alternative add-on.

SECTON is the most secure, cost-optimized V2X hardware add-on chipset available today. It offers simple integration with any external host CPU. SECTON delivers full V2X communication, security and management services to the host CPU, through a lean OS-agnostic host library that is part of SECTON standard offering. Autotalks' unified API, allows for seamless software migration from SECTON to CRATON2 based solution.

Uncompromised Security

SECTON is the most secure V2X hardware add-on available today. It embedded powerful security engines enables timely handling of road safety events and can therefore support sensor-fusion and autonomous driving applications. SECTON includes multiple defense layers, such as secure boot, secure low-latency signing and line-rate verification of the entire V2X communication link. These defense layers minimize the cyber surface of attack and allow the application developer on the host side to focus on application reliability rather than cybersecurity vulnerability. In addition, Autotalks' cryptographic-agile security engines support field upgrade of future ECDSA curves while maintaining safety-grade performance levels.

Features:

- Dual channel/diversity IEEE 802.11p mobility optimized modem
- IEEE 802.11a/b/g/n/ac operation at 2.4GHz / 5GHz, up to 433 Mbps
- Concurrent 802.11p/WLAN connectivity
- Line-rate ECDSA and V2X embedded HSM (Hardware Security Module)
- AEC Q-100 grade 2 (-40°C to +105°C ambient operation)
- Minimal thermal constraints benefiting from high-temperature manufacturing process
- USB 2.0 device interface
- Provided with host drivers for Linux, QNX

PLUTON
RF Transceiver

SECTON
Secure V2X
Hardware Add on

GNSS

ECU Processor

Vehicle Bus