



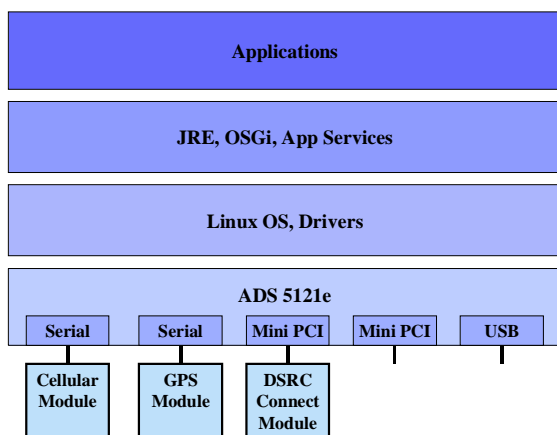
# VPlus

## Advanced Telematics Platform

Designed for development of next generation vehicle communications

### Features:

- Automotive Grade Electronics
- Automotive Grade Software
- Based on Freescale's MPC5121E
- Secure wireless broadband connectivity
- DSRC for Remote Interconnectivity
- GPS & Data to Application Software
- Embedded Linux with Rich Graphics
- USB for personal devices
- CAN for vehicle interconnect



The VPlus is designed by G4 Apps Inc and Silicon Turnkey Express. G4 Apps provides the integration and verification of mobile broadband based automotive safety and fuel economy software. Silicon Turnkey Express provides the integration of the ADS512101 with hardware peripherals in an automotive grade of electronics.

**Available 1Q2009 at \$4995.00**

Contact STx to order or for more information

Also see STx's store at [store.silicontkx.com](http://store.silicontkx.com)

### Contact

Silicon Turnkey Express  
749 Miner Rd.  
Highland Hts., OH 44143

**info@silicontkx.com**

[www.silicontkx.com](http://www.silicontkx.com)  
PH: 440 461 4700 119  
FX: 440 461 4329

## **Technologies**

### **Dedicated Short Range Communications (DSRC) –**

DSRC is the short to medium range wireless Protocol specifically designed for automotive use in vehicle-to-vehicle, and vehicle-to-infrastructure communications. The FCC has reserved the 5.9 GHz band expressly for the purpose. DSRC is highly secure and contains specific channels for rapid real time data transfer of safety and control information, as well as channel for Internet Protocol based general data communication. The VPlus contains the industry standard DSRC, antenna and complete software stack.

### **Cellular Data Connectivity –**

The VPlus contains a cellular data module and software that presents cellular connection services to software applications. Equipment manufacturers can rely on the compatible evolution of Wavecom modules to support data services on a wide variety of network providers and their evolution to next generation networks.

### **GPS –**

The Ublox Antares V state-of-the-art GPS chip is included in the VPlus, along with software that provides the data to applications.

### **System Software –**

The VPlus arrives with embedded Linux, IBM J9 Run Time Environment and Prosynt OSGi. These, along with the DSRC software and GPS, are the building blocks used in the USDOT sponsored VII developments and trials. All software elements have been integrated and tested so that developers can begin applications development immediately.

## **Applications**

### **General**

Advanced graphics operator interfaces  
GPS location  
CAN and Flexray interfaces  
Cellular data connection

### **On-Site**

Secure broadband connectivity between vehicles  
A single vehicle (and back up vehicle) can serve as the communications gateway for all vehicles  
Secure high speed data messaging among vehicles  
Autonomous vehicles real time control (and/or operator warning)

- Vehicle-to-vehicle collision avoidance
- Vehicle-to-obstacle collision avoidance
- Vehicle-to-person collision avoidance
- Vehicle convoys

Data transmission to/from central control

### **Over the Road**

Automatically adjusted for size and load  
Full interaction with USDOT program for light and commercial vehicles and roadside equipment for:

- Collision avoidance forward, rear & intersection.
- Merge assistant, passing assistant
- Approaching emergency vehicle warning
- Emergency electronic braking
- Curve speed warning
- Overhead clearance warning
- Traffic signal warning, coordination
- Stop sign warning
- Automated crash notification
- In-vehicle signage
- Electronic tolling
- Vehicle safety inspections

Fuel economy

- Operator advice/intelligent drive train control
- GPS terrain based
- Stop signs and signals
- Vehicles and traffic ahead