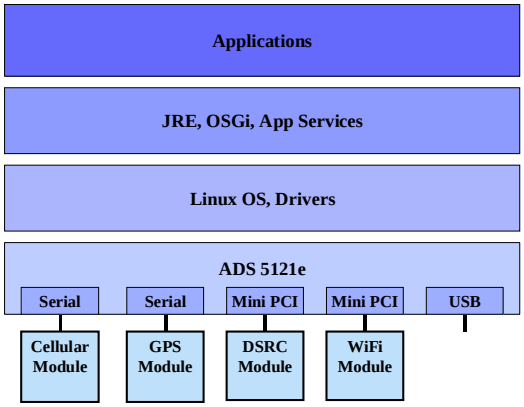
VPlus

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 safety and tolling
- GPS to application software
- Embedded Linux
- 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

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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 hardware and complete software stack.

Cellular Data Connectivity –

The VPlus offers optional cellular data modules and software that presents cellular connection services to software applications. Equipment manufacturers can rely on the evolution of compatible 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, an application Run Time Environment and OSGi framework. 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
DSRC connection
Cellular data connection

On-Site

Secure broadband connectivity between vehicles
A single vehicle (and back up vehicles) can serve as the WAN communications gateway for all vehicles on the site wireless LAN.
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 and intersection.
- Merge assistant, passing assistant
- Highway entry 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