CAR
ID: 126
47.40m

CAR
ID: 47
14.35m

AUTOMATED RESEARCH
DEVELOPMENT PLATFORMS

AS AutonomouStuff

Bringing Together the World's Best Technologies™

www.AutonomouStuff.com

The **Automated Research Development Platform** includes three core components:
The By-Wire Vehicle | Perception Kits | Harbrick's Software Platform, PolySync™

1. By-Wire Vehicle, *Based on the Lincoln MKZ*

The Platform begins with a fully integrated by-wire vehicle based on the Lincoln MKZ.
Standard software and hardware include:

- Throttle and brake by-wire controller module
- Steering and shifting by-wire controller module
- Power distribution panel
- Center console switch box for controlling the power distribution panel
- 600 Watt true sine wave inverter for AC loads
- PolySync compatible

- Trunk-mounted instrumentation plate
- Touchscreen controller for monitoring & controlling individual power channels
- USB/CAN converter for use with ROS
- USB joystick
- ROS compatible
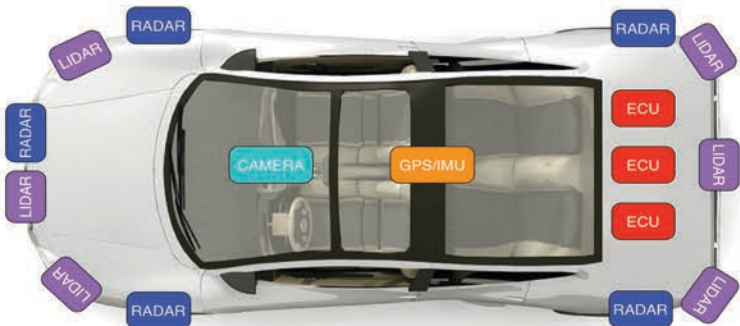- dSPACE blockset to control system w/a MicroAutoBox

AutonomouStuff is proud to provide advanced automated research development platforms. These vehicles (like our demo car, pictured here) are commonly used for advanced driver assistance systems (ADAS), advanced algorithm development and automated driving initiatives.

2. Perception Kits, *Customized to meet customers' needs*

The second component of our **Automated Development Research Platform** is our fully **customizable perception kits**. We put together flexible vehicle kits for advanced safety and robotic research vehicles based on our years of experience providing technology solutions to thousands of customers throughout the world. These kits are designed to comply with our customer's requirements, whatever they may be.

Kits can be as basic or as sophisticated as desired.

This sample package includes RADAR, LIDAR, a camera, GPS/IMU and ECU. Options, however, are unlimited. We are happy to install sensors to meet your needs. For more information visit www.AutonomyKit.com.

3. PolySync, *The Autonomy Operating System*

Harbrick built **PolySync** after working with some of the world's most advanced automated driving developers. They saw a common problem: customers spent a lot of time building the back-end software infrastructure for their systems, leaving less resources to design and test the advanced algorithms that made their vehicles do amazing things.

PolySync is an entire software platform specially made to help developers build, test and deploy automated vehicle applications quickly. PolySync applications are developed similarly to mobile applications on iOS or Android, by calling a set of well-defined and standardized APIs. **The rest of the back-end is handled for you.**

We believe that for **PolySync** to be a core component of your development process, it needs to be simple to understand and use.

Polysync covers three major concepts:
- Distributed Middleware
- Abstracted Data Model
- PolySync SDK

Autonomous vehicles require a host of sensors and processes to be conducted in perfect harmony. PolySync provides convenient and versatile methods for any of these components to talk to each other ... and keep talking even in demanding real world environments.

Three Takeaways

1. *FAST* - Intuitive, modular development with the API lets you try out any hardware with almost no overhead.
2. *CONVENIENT* - Included infrastructure and low-level tasks (sync, parsing, logging, messaging) taking care of the critical but boring stuff.
3. *VERSATILE* - One tool from the lab to deployment. Enables code reuse and portability to let autonomy programs grow over time.

PolySync Studio

PolySync Studio is a gift for engineers. It's an elegant interface that **enables engineers to interface with the data on the PolySync bus**. It features: *3D visualization, record/replay, sensor configuration, analytics, trace log viewer, custom widgets, customizable workspaces and more.*

For more informaiton visit:
www.AutonomyKit.com

AutonomouStuff

The vision at AutonomouStuff is *to provide the world's best products, software and engineering services that enable robotics and autonomy. We call this*
BRINGING TOGETHER THE WORLD'S BEST.

AutonomouStuff is the world's leader in supplying COMPONENTS AND SERVICES THAT HELP ENABLE AUTONOMY. We offer this service to a wide range of industries including **automotive, mining, agriculture, military, academic, aerospace, maritime** and even **startups**.

We are proud to offer our customers the best products available in the industry. We work only with the best of the best. Our partners are continuously working to change the world, and we are pleased to do our part to help.

Bringing Together the World's Best Technologies™ is our mission for our customers. We help make our customers successful by taking advantage of today's most innovative industrial and automotive technologies. We make it easy to source all the perception, computing, GPS and interface components necessary for their projects from a SINGLE SOURCE.

AutonomouStuff strives to research & implement the lastest product TECHNOLOGIES to help our customers remain at the forefront of these exciting and innovative markets.

"AutonomouStuff is our first choice for cutting edge automation hardware and solutions. Their highly trained technical staff is always happy to work with us to find a sensor or system to meet our needs." -Anonymous mining customer

Bringing Together the World's Best Technolgies™

Single Source Supplier For Autonomy Systems

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