

## 5435\_Lecture 5 WiFi Links for Home, Auto, and Microcontrollers

### Basic Video:

#### Z-Wave vs. Zigbee vs. Wi-Fi! Smart Home Basics: How To Pick The Right Protocol

142,151 views • Feb 12, 2020 15:31

<https://www.youtube.com/watch?v=v8-VNIQQiQE>

### Z Wave Vs ZigBee: Which Is Better For Your Smart Home?

<https://thesmartcave.com/z-wave-vs-zigbee-home-automation/>

### Home Device



WeMo smart plug is a good IoT product which helps to turn on your lights, turn appliances on/off and provides the ability to monitor them from anywhere remotely.

**Cost:** US \$ 49.99

**YouTube Link:** [WeMo smart plug](#)

#### Top Features:

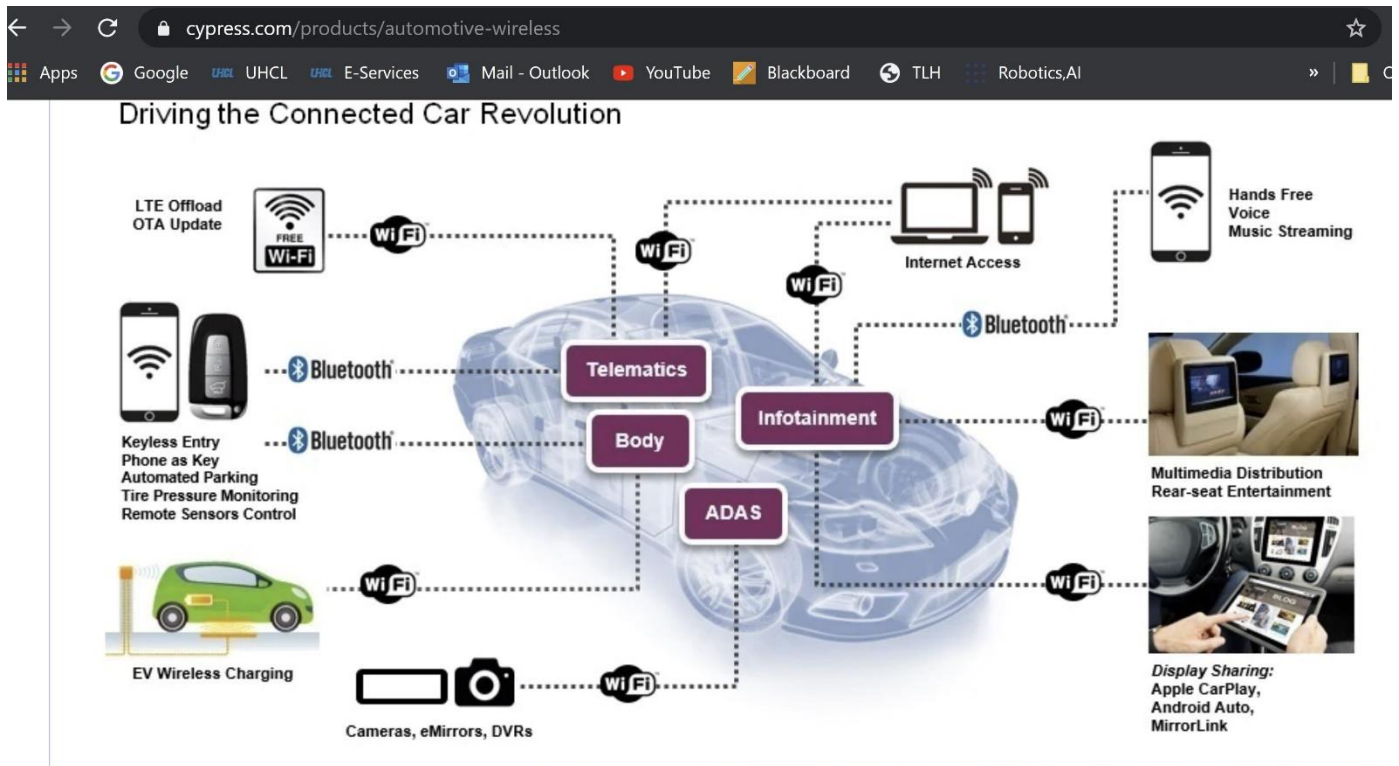
- It gets insight into home energy usage and is easy to use and install.
- It also creates rules, schedules and receives notifications.
- Compatible with both IOS and Android devices.
- It integrates with Alexa or Google voice for hands-free voice control.

### Another approach – data through power lines.

[https://en.wikipedia.org/wiki/X10\\_\(industry\\_standard\)](https://en.wikipedia.org/wiki/X10_(industry_standard))

### Automobile Applications of Wireless

<https://www.cypress.com/products/automotive-wireless>



## V2V

<https://www.nhtsa.gov/technology-innovation/vehicle-vehicle-communication>

Video 2:43

<https://youtu.be/3z09fCqmILU>

<https://www.youtube.com/watch?v=3z09fCqmILU&feature=youtu.be>

## Microcontrollers and WiFi

PIC32MZ-W1 Wi-Fi® SoC and Module Family  
 High-Performance 32-bit Microcontroller Core, Wi-Fi Connectivity and  
 Proven Security for Internet of Things Applications

<https://www.microchip.com/design-centers/wireless-connectivity/embedded-wi-fi/pic32mz-w1>

<https://www.microchip.com/en-us/products/wireless-connectivity/embedded-wi-fi/pic32mz-w1-wi-fi-soc-and-module-family>