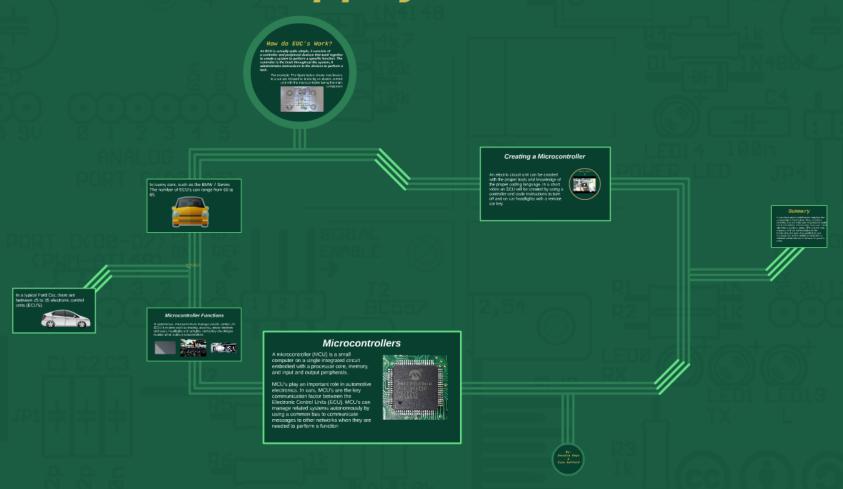
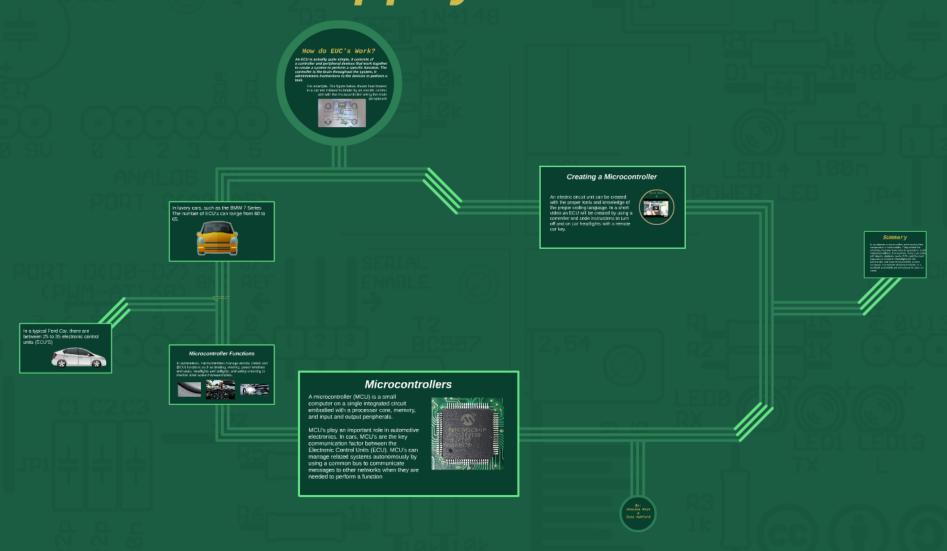
Renesas Electronics and the Automotive Microcontroller Supply Chain



TheCaseSolutions.com

Renesas Electronics and the Automotive Microcontroller Supply Chain



TheCaseSolutions.com

Microcontrollers

A microcontroller (MCU) is a small computer on a single integrated circuit embodied with a processor core, memory, and input and output peripherals.

MCU's play an important role in automotive electronics. In cars, MCU's are the key communication factor between the Electronic Control Units (ECU). MCU's can manage related systems autonomously by using a common bus to communicate messages to other networks when they are needed to perform a function



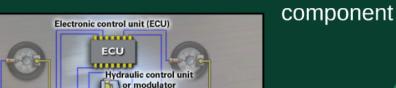
How do EUC's Work?

An ECU is actually quite simple, it consists of a controller and peripheral devices that work together to create a system to perform a specific function. The controller is the brain throughout the system, it administrates instructions to the devices to perform a task.

For example, The figure below shows how brakes in a car are initiated to brake by an electric control unit with the microcontroller being the main

Power booster &

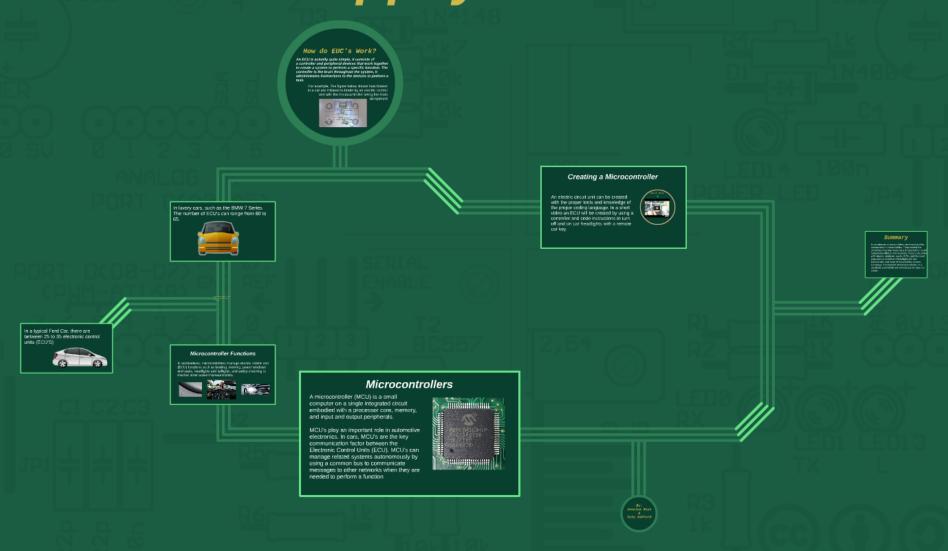
Wheel sensor unit master cylinder assembly



Summary

In conclusion microcontrollers are important key components in Automobiles. They control the amenities that one make take for granted or could not picture without. For example, many cars come with electric windows, seats, GPS, and the most important of all tail and headlights. As the functionality and ease of accessibility in cars increases, the number of microcontrollers in a standard automobile are to increase for years to come.

Renesas Electronics and the Automotive Microcontroller Supply Chain



TheCaseSolutions.com