Embedded Controller Manufacturers' Websites

Acknowledgements: Developed by Phyllis J. Cooke

Time Required: 1 hour

Equipment & Tools
- Computer with Internet Connection
- Standard browsing (web surfing) capabilities

Team or Individual: This can be either an individual activity or a team activity.

Learning Objectives
1. Use the Internet to access embedded controller manufacturers' web sites.
2. Compare specifications for embedded controllers.

Introduction
A microcomputer can also be a microprocessor, or an embedded controller with memory, and I/O circuits all integrated on a single chip of silicon. Such a microcomputer is also called a microcontroller because it is most commonly used to monitor and control virtually all functions in other electronics products.

Another term for microcontroller is embedded controller. It is embedded or built into almost every electronic product.

Procedure
- Access websites for Freescale, Intel, and Microchip. Alternately try Atmel, NXP (formerly Philips Semiconductor, or Texas Instruments.)
- Search the company website for information on embedded controllers
- Choose one of the controllers offered by each manufacturer. Do not choose the one you studied in your micro class or a similar model.
- Complete the table comparing specifications for at least one embedded controller from three of the manufacturers.

Complete the table below with the information obtained in your research.

Specification	Manufacturer and web site			
	Product ID #			
	Internal flash (Bytes)			
	Internal RAM (Bytes)			
	Timers size and channel			
	Maximum clock frequency			
	Number of I/O pins and package type			
	Application			
	Type of architecture (Von Neumann or Harvard)			
	List type of serial I/O interfaces included			

Manufacturer and web site			
Other information or unique features			

Deliverables: The student should submit the completed table to his/her instructor.

Scoring or Grading Criteria: This is left to the discretion of the instructor.