

## 32 or 64-bit Microcontrollers

**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. Research 32 and 64-bit controllers and present an oral report on your findings.

### **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.

32 and 64-bit controllers are used because micros with larger word sizes can process more data faster as required by many modern applications.

### **Procedure**

- Search the web or magazines for articles on 32 or 64-bit microcontrollers.
- Choose one of the articles to share with your class.
- Prepare an oral report that includes information on the specifications, uses, and rationale for the use of the controller.

**Deliverables:** The student should present an oral report on an article from the Internet or magazines on the specifications, uses, and rationale for the use of the controller.

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