

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.