

## KNOWLEDGE PROBE 1: MICRO & EMBEDDED CONTROLLERS

### Part 1: Microcontroller Technology Update

#### How Micros Are Used

#### Learning Objectives

- Identify and distinguish between microprocessors, microcomputers, embedded controllers, and cores.
- Describe the importance and pervasiveness of microcontrollers.

1. What is the name given to a complete computer on a chip?
  - a. Embedded controller
  - b. Microcomputer
  - c. Microprocessor
  - d. Processors
2. Which of the following is the term that means a CPU on a chip?
  - a. Embedded controller
  - b. MCU
  - c. Microcomputer
  - d. Microprocessor
3. Which of the following does NOT have an internal embedded controller?
  - a. Automobile
  - b. Cell phone
  - c. iPod
  - d. TV set
  - e. None of the above
4. An embedded controller has I/O and memory on-chip.
  - a. True
  - b. False
5. Which of the following is NOT a general embedded controller application?
  - a. DSP
  - b. General digital logic operations
  - c. Monitor and control functions
  - d. RF signal amplification
6. A core is a(n)
  - a. DSP chip
  - b. Embedded controller integrated on a larger system chip
  - c. Microprocessor IC
  - d. Type of memory



7. What makes a generic embedded controller dedicated to the application?
- a. Software
  - b. Specific I/O
  - c. Type of processor
  - d. Use of both RAM and ROM