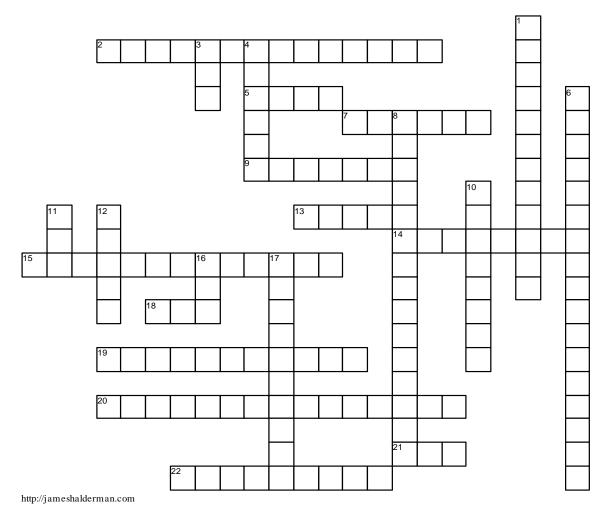
Computer and Network Fundamentals

Chapter 18



ACROSS

- 2 _____ is another name for a crystal oscillator.
- 5 Part of the ROM is built into the computer, and the rest is located in an IC chip called a _____
- 7 One of the names for the onboard automotive computer is the electronic control _____.
- **9** Engine _____ creates a three-dimensional performance graph that applies to a given vehicle and powertrain combination.
- 13 _____ conditioning is a process that includes amplifying voltage signals that are too small for the computer circuitry to handle.
- **14** An _____ is an electrical or mechanical device that converts electrical energy into heat, light, or motion.
- **15** The PCM switches are actually transistors, and are often called ______.
- **18** _____ is a method of controlling an output using a digital signal.
- 19 _____ RAM can retain its information even when the battery is disconnected.
- 20 A digital computer changes the analog input signals to digital bits of information through an _____-___ converter circuit.
- 21 Temporary memory is called ____
 - HALDERMAN

22 The ratio of on-time relative to the period of the cycle is referred to as _____.

DOWN

- 1 The number system containing only 0s and 1s is called the
- 3 A type of volatile RAM called ____ can be wired directly to battery power.
- 4 Most program chips since the early 1990s, called _____ can be reflashed.
- 6 The SAE bulletin J1930 standardizes the _____ module as the name of the onboard automotive computer.
- 8 The _____ can process thousands of digital signals per second because its circuits are able to switch voltage signals on and off in billionths of a second.
- 10 The computer's speed is called the _____.
- 11 The ____ can be considered the brain of a computer.
- 12 ______ is a signal from a device that can be as simple as a button or a switch on an instrument panel, or a sensor on an engine.
- 16 Permanent memory is called____.
- 17 One of the names for the onboard automotive computer is the _____ control assembly.