Nathan Caron

Digital Circuits

05 September 2014

Digital circuit: A digital circuit is an electronic device that is often used to supply power signals to devices. They are chosen for high speed and accuracy that they are able to provide. Often time they also contain smaller analog components. The analog components must also be designed so that they can’t perform analog functions, so logic gates are used both before and after the analog parts.

Interface: Interfaces are made to interact with a computer or program, or for devices or programs to interact and communicate with each other. They can be created as programs or as physical equipment.

Electronics: Electronics are devices that use electricity to perform a vast variety of tasks. They can obtain their power from either a direct electricity line such as a plug on the wall, or from a battery. They often contain wires to attain their power, or charge their battery.

Voltage: Voltage is the possible difference in energy from electricity. It’s often measured in volts.

Current: A current is a flow of electricity. The current is usually carried in a wire by electrons.

Resistance: Resistance is a measurement of how an electrical current is opposed.

Amps: Amps are a unit of measurement used to measure the flow of electricity.

Volts: Volts are a unit of measurement used to show the potential electric difference.

Ohms: Ohms are a unit used to measure electrical resistance.

Watts: Watts are a unit used to express energy conversion rates.

Waveform: A waveform is the shape a signal. Oftentimes the waveform refers to the representation of a wave shown in a graph.

Schematic: A schematic is a visual representation of an electronic circuit.

Conventional current vs electron flow: Conventional current is the notation that suggests electrons move from the positive side of a power source, such as a battery, to the negative side. In conventional current the labels make sense, but the direction of flow is technically incorrect since the negative side is actually the side with the surplus of power. Electron flow is the notation that shows electrons moving from the negative side of the battery to the positive, which is how the electricity really flows.