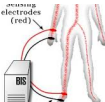
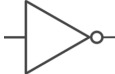
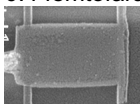
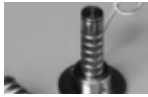


ELECTRICAL ORDERS OF MAGNITUDE

	Voltage (Volts)	Current (Amps)	Resistance (Ohms)	Power (Watts)
Sensors Signal Scale	 MEMS Accelerometer 10 Millivolts  pH Sensor 59 Millivolts	 Idle Microcontroller 50 Nanoamps  Thermocouple Sensor 20 Milliamps	 Speaker Wire 33 Milliohms  Contact Resistance 500 Microohms	 GPS Signal Received 0.1 Femtowatts  Wifi Signal Transmitted 100 Milliwatts
Consumer Electronics Scale	 iPhone Fast Charger 5.1 Volts  AA Battery 1.5 Volts	 PC USB Connection 500 Milliamps  Digital Camera 800 Milliamps	 Hot Wire Anemometer 6.0 Ohms  Motor Windings 800 Milliohms	 Wireless Security Camera 7.5 Watts  iPhone Flashlight 2.8 Watts
Household Device Scale	 US Household Outlet 120 Volts  Car Battery 12.6 Volts	 Tumble Dryer 11 Amps  Box Fan 2.8 Amps	 1000-Lumen Incandescent Lamp 144 Ohms  Stovetop Burner 45 Ohms	 Hair Dryer 1.5 Kilowatts  55" LED TV 57 Watts
Industrial Machinery Scale	 Electric Arc Furnace 900 Volts  Subway Rail 600 Volts	 Engine Starter Motor 230 Amps  Spot Welder 7.5 Kiloamps	 Human Body (wet skin) 1 kilohm  Strain Gauge 350 Ohms	 Diesel Generator 18 Kilowatts  Central Air Conditioner 3.5 Kilowatts

Power Generation Scale	 Hoover Dam Power Line 500 Kilovolts  Neon Sign Tube 12 Kilovolts	 Lightning Strike 30 Kiloamps  Aluminum Smelter Pot 200 Kiloamps	 Human Body (dry skin) 6 Megaohms  Cable Insulation 600 Megaohms	 Nuclear Power Plant 1.5 Gigawatts  Wind Turbine 2.5 Megawatts
------------------------	---	--	--	--

	Capacitance (Farads)	Inductance (Henries)	Energy (Joules)	Frequency (Hertz)
Very Small	 NOT Gate 0.4 femtofarads  DRAM Bit 15 femtofarads	 One Centimeter Wire 50 nanohenries  Printed Circuitboard Via 1.1 nanohenries	 Buck Converter 84 microjoules  Watch Mainspring 200 millijoules	 Magnetic Flow Meter 7.5 hertz  Insulation Testing 10 millihertz
Small	 Human Body 150 picofarads  Decoupling capacitor 100 nanofarads	 Walkie Talkie 310 nanohenries  RF choke 33 microhenries	 Defibrillator Shock 300 joules  One Pushup 400 joules	 USA Mains frequency 60 hertz  Human Ear Most Sensitive 2 kilohertz
Medium	 Motor Capacitor 200 microfarads  Piezo Actuator 30 microfarads	 Sprinkler Valve 63 millihenries  Phone Vibrator 250 microhenries	 9-Volt Battery 19 kilojoules  Sugar Cube 82 kilojoules	 AM Radio 620 kilohertz  FM Radio 99.5 megahertz
Big	 Power Supply 10 millifarads  Graphics Card 1.5 millifarads	 Guitar Pickup 6 henries  Motor Windings 500 millihenries	 Boat Battery 3.2 megajoules  Big Mac Meal 4.6 megajoules	 WIFI 2.4 gigahertz  Police Radar 24.1 gigahertz

Very Big



Vehicle Braking Supercap
300 farads



Camera Flash
400 millifarads



MRI magnet
40 henries



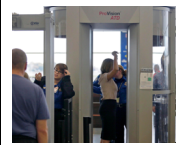
Transformer Primary
1.3 kilohenries



Grid Storage Flow Battery
28 gigajoules



Full Gas Tank
2 gigajoules



Airport Scanner
60 gigahertz



Thermal Imaging
20 terahertz