



SENSORS

What is a Sensor?

- 1) A sensor is an input device that provides an output (signal) with respect to a specific physical quantity (input). The term "input device" in the definition of a Sensor means that it is part of a bigger system that provides input to the main control system (like a Processor or a Microcontroller).
- 2) Another unique definition of a Sensor is as follows: It is a device that converts signals from one energy domain to an electrical domain.

Classification of Sensors

There are two types of Sensors.

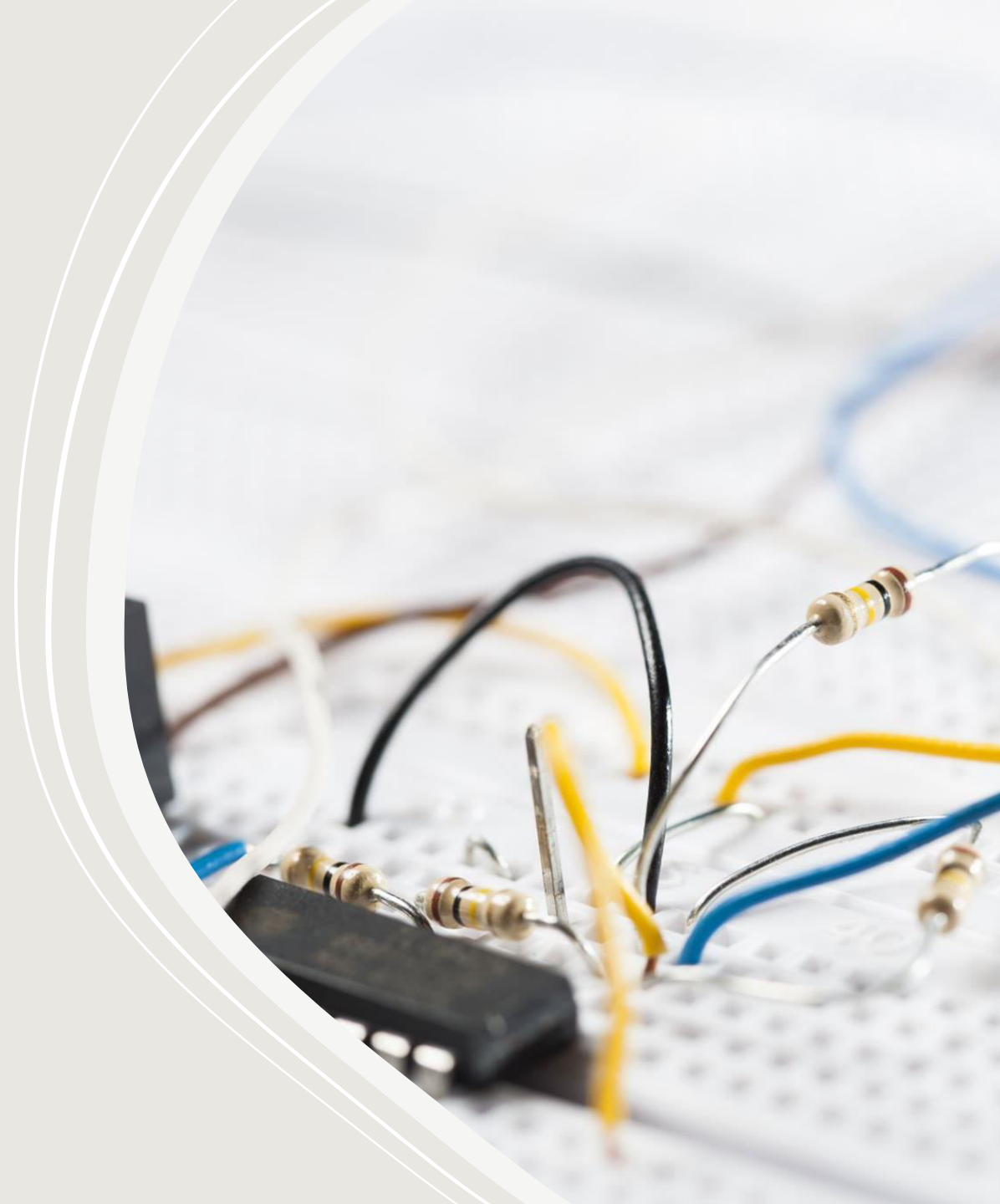
- 1) Analog Sensors: It produce an analog output i.e. a continuous output signal with respect to the quantity being measured.
- 2) Digital Sensors: It work with discrete or digital data. The data in digital sensors, which are used for conversion and transmission, is digital in nature.



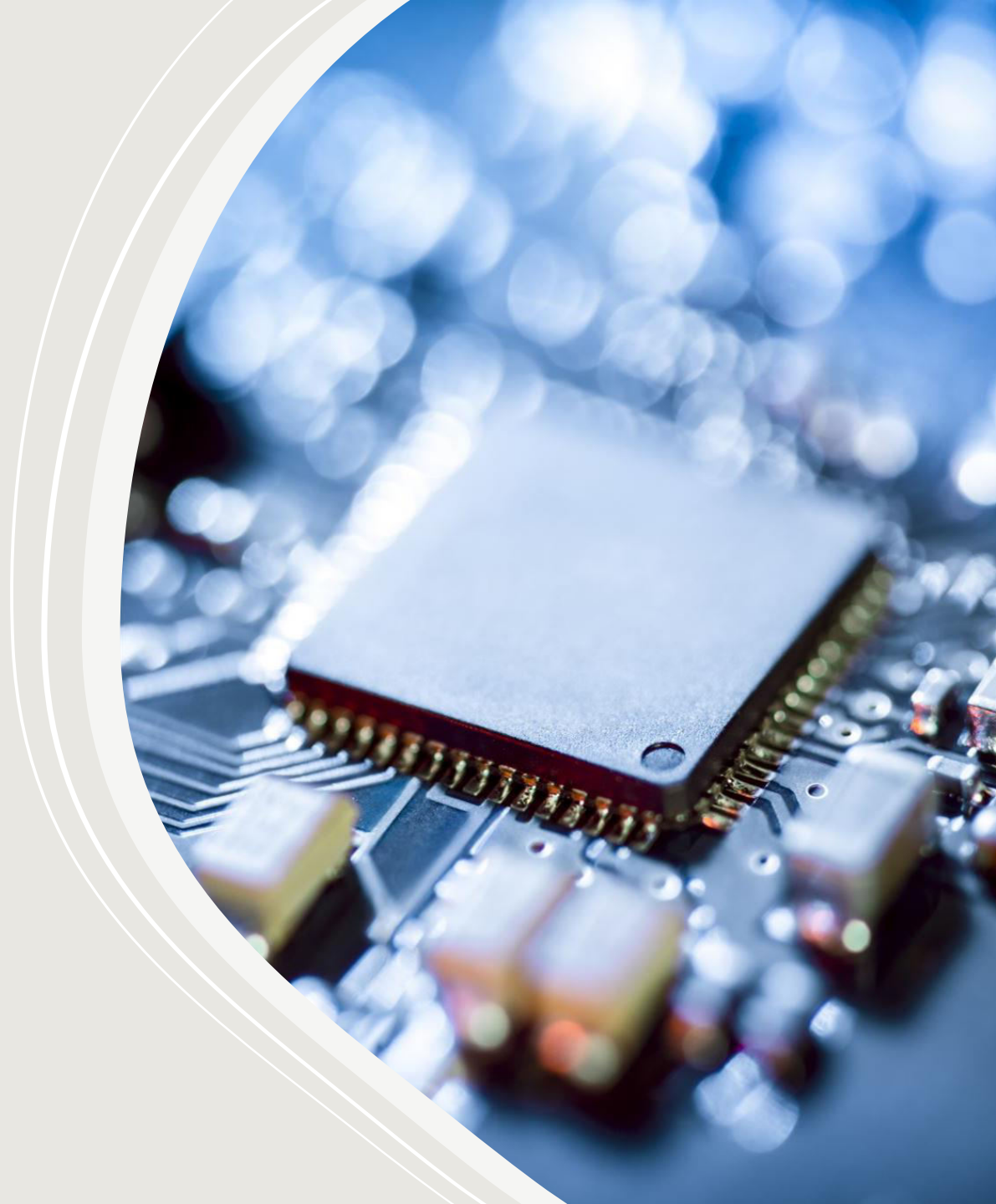
Different Examples of Sensors

All these sensors are used for measuring one of the physical properties like Temperature, Resistance, Capacitance, Conduction, Heat Transfer, etc.

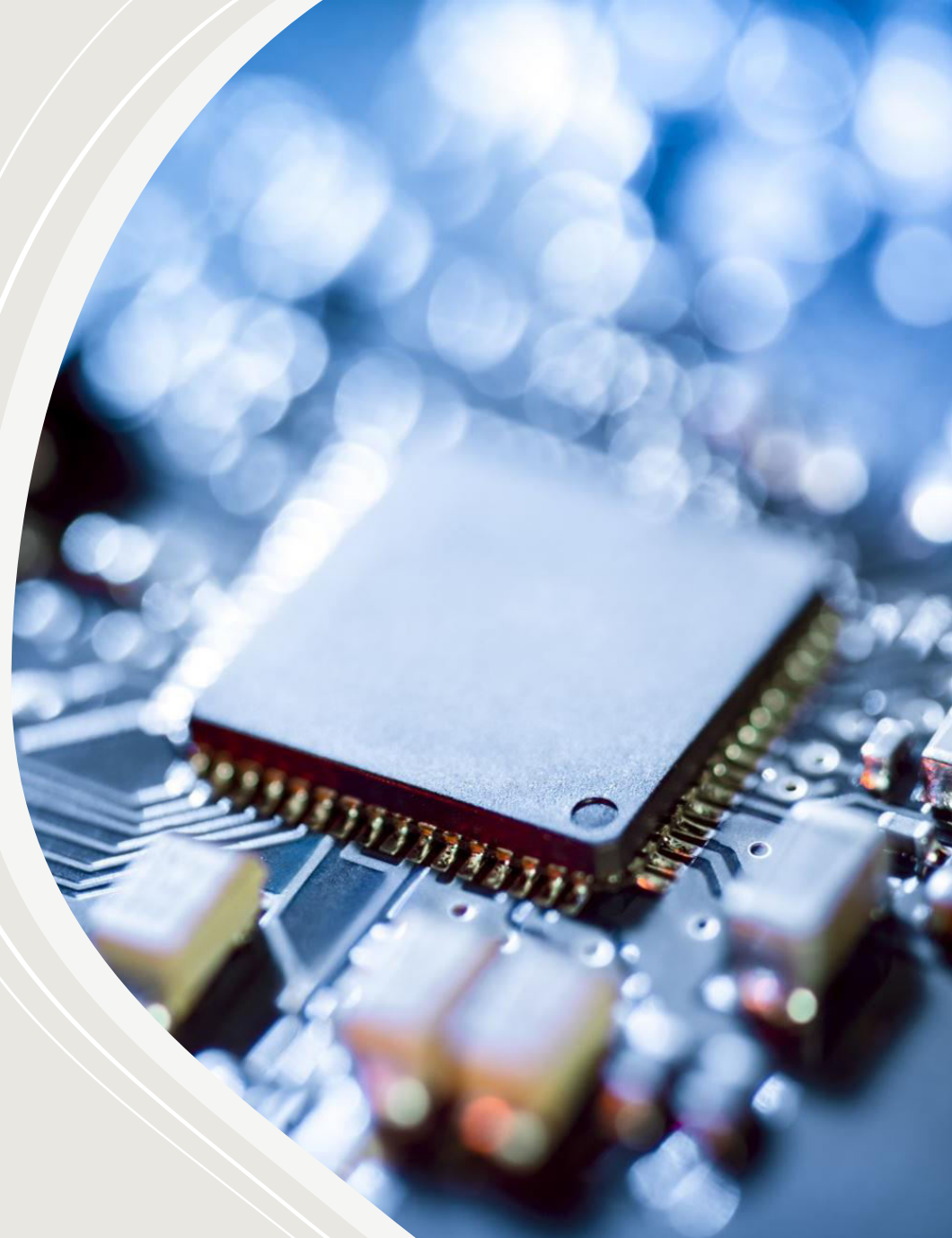
- Joystick
- Flame Sensor
- RGB LED
- Heartbeat Sensor
- Light Cup



- Hall Magnetic Sensor
- Relay
- Linear Hall Sensor
- SMD RGB
- 7 Color Flash
- Tilt Switch
- Temperature Sensor
- Big Sound Sensor
- Touch Sensor
- Two-Color LED
- Laser Emitter
- Ball Switch
- Analog Temperature Sensor



- Small Sound Sensor
- Digital Temperature Sensor
- Two-Color LED (small)
- Button
- Photoresistor
- IR Emission
- Tracking Sensor
- Buzzer
- Reed Switch
- Shock Sensor
- Temperature And Humidity Sensor
- IR Receiver
- Avoidance Sensor



- Passive Buzzer
- Mini Reed
- Rotary Encoders
- Analog Hall Sensor
- Tap Module
- Light Blocking
- Proximity Sensor
- Accelerometer
- IR Sensor (Infrared Sensor)
- Pressure Sensor
- Ultrasonic Sensor
- Smoke, Gas, and Alcohol Sensor
- Color Sensor
- Flow and Level Sensor
- Gyroscope Sensor
- Optical Sensor

