Microprocessor Systems – Quadcopters

# Introduction

Quadcopters are becoming more and more popular. They come in all shapes and sizes and can be used for a wide range of tasks.

Quadcopters are surprisingly straightforward from a hardware point of view – they consist of a Microprocessor connected to a sensor and 4 actuators. Software running on the microprocessor uses input from the sensor to decide how fast each of the actuators need to turn.

# Accelerometers

The primary sensor in use on a Quadcopter is an Accelerometer. Your task is to find out what accelerometers can do and how they help a Quadcopter to fly.

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| What do Accelerometers do |
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| How does this help a Quadcopter fly? |
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# Ultrasonic Sensors

Another type of sensor which some Quadcopters use (particularly autonomous ‘copters, called Drones) is an Ultrasonic Sensor.

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| What is an ultrasonic sensor, and how would it help a Quadcopter Drone? |
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