Final Year Project: Bringing the Internet of Things to cleanroom instrumentation

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1 Introduction

1.1 Objectives

1.2 The Internet of Things

1.3 Cleanroom Instrumentation

1.4 Covid-19 and its effects

2 Hardware components

The decision of the microcontroller board and the sensors will be crucial for the best possible and most efficient system. Therefore, we need to be able to define which of them are the most adequate for this project.
At the moment, there have been sketches for the use of an Arduino compatible microcontroller board (ESP32) and a DHT22 temperature and humidity sensor. We will consider those choices plus others in the comparison.

2.1 Microcontroller

ESP32

2.2 Sensors

3 Data collection

4 Data reduction

5 Data transfer