

Work Package 4 - Practical

STLTSE004 MVMAMA001
EEE3096S 2021

1 Introduction and Aim

In the following practical the aim is to convert an analog signal into a digital input signal using the MCP3008 ADC integrated circuit. A temperature sensor(MCP9700E) is used to capture the analog environmental temperature as a voltage that corresponds to a current sensed temperature which is then converted into degrees Celcius. A light reading is also captured by an LDR; this analogue data is then digitized to represent the amount of light received by the sensor. The MCP3008 is an 8 channel, 10-bit ADC which uses the SPI bus.

2 CIRCUIT DIAGRAM

