

Datasheet:



AIR QUALITY SENSOR FOR MICRO:BIT KIT

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This board uses the CCS811 VOC sensor IC and a thermistor and provides analog outputs for temperature and eCO2 level using 10 bit PWM and an ATtiny microcontroller.

The board is designed for use with the BBC micro:bit.



Electrical

		Units
Absolute maximum supply voltage	3.6	V
Minimum supply voltage	2.5	V
Typical current consumption	35	mA
Maximum current consumption	70	mA

Formula for Temperature

Vcc - supply voltage
Vo - output voltage
T - temperature in deg. C

$$T = (Vo/Vcc) * 100 - 20$$

Sensor Characteristics

		Units
eCO2 minimum reading	400	ppm
eCO2 maximum reading	4095	ppm
eCO2 resolution	1	ppm
eCO2 accuracy	unspecified	
Temperature minimum reading	-20	deg. C
Temperature max reading	80	deg. C
Temperature resolution	1	deg. C
Temperature accuracy	+/- 3	deg. C

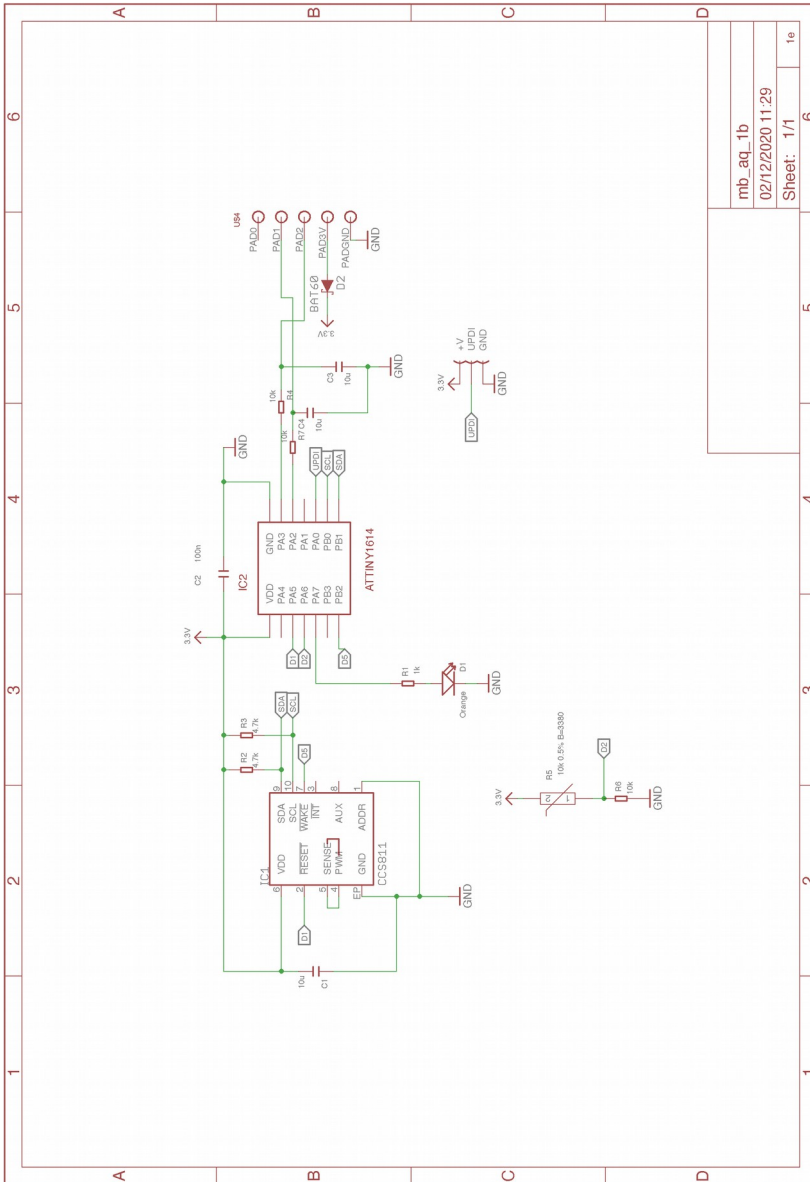
Formula for eCO2

Vcc - supply voltage
Vo - output voltage
eCO2 – eCO2 in ppm

$$eCO2 = (Vo/Vcc) * 4095$$



Schematic



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Mechanical

Actual size

