UNIVERSITY OF CAPE TOWN
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD
DEPARTMENT OF ELECTRICAL ENGINEERING

EEE3095S/EEE3096S Practical 3 Demonstrations/Solutions 2024

Total Marks Available: 15

Group No.		
	Stn 1	**Stn2**
Student no.	DWDZA001	HWKLAW001
Name	Zainodine Dawood	Lawrence Hawke
Signature	Dawood	LHawke

NB Please take a photo of this mark sheet and submit it with your report!

Action + Mark Allocation	Mark
Pressing PA0 should toggle the flashing frequency of LED PB7 from 0.5 seconds to 1 second, or from 1 second back to 0.5 seconds.	2 /2
The LCD should display the "EEPROM byte" with the correct formatting. This should vary between the values 10101010, 01010101, 11001100, 00110011, 11110000, and 00001111 — changing every 1 second. Check code: SPI **must** be used for this; if not, student gets **zero** for this task.	4 /4
The brightness of LED PB0 should vary based on the current value being read from POT1, i.e., off when POT1 is turned fully anticlockwise and maximum brightness when POT1 is turned fully clockwise.	3 /3
Check code: PA0 should have some form of debouncing enabled (see Marking Notes).	1 /1
Check code: an EXTI interrupt is used to handle PA0 presses.	1 /1
Check code: CRR is calculated correctly (see Marking Notes).	2 /2
Check code: "pollADC" and "writeLCD" functions are correctly implemented and used.	2 /2

Tutor Name:	MSIMAMISI LUSHABA
Tutor Signature:	