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

EEE3095S/EEE3096S Practical 4 Demonstrations 2022

Total Marks Available: 30

	STUDENT 1	STUDENT 2
STUDENT SURNAME	ABRAHAM	KEGAKILWE
STUDENT FIRST NAME	KARAN	OMOLEMO
STUDENT NUMBER	ABRKAR009	KGKOMO001
STUDENT SIGNATURE		O.Kegakilwe

Std 3
NJAMELA
BONGA
NJMLUN002

TUTOR NAME + SIGNATURE	Daniel Coert
DATE [YYYY-MM-DD]	18/10/2022

Section	Action + Mark Allocation	Mark
Intro	Introduce yourselves and briefly describe the purpose of the practical/demonstration. [3 marks]	3
LUTs	Verify that the LUTs correspond to the correct wave shapes. Wave should have a frequency of 1Hz and range from 0-1023. [3 Marks]	3
TIM2CLK	Ensure that the correct value for TIM2CLK has been used. [1 Mark]	1
TIM2_Ticks	Verify that TIM2_Ticks has been calculated correctly. [3 Marks]	3
Filter	Test low pass filter using Oscilloscope and function generator. Ensure that filter attenuated signals above the cutoff frequency. Signals below 5kHz should not be attenuated. [5 Marks]	4
DAC	The 3 waveforms (sine, triangle, sawtooth) can be generated with frequencies up to 5kHz. [9 Marks]	8
PB	The pushbutton can be used to cycle through the waveforms. [3 Marks]	1
General	Well-written, well commented code. Code uploaded to Git. Sensible variable names, functions in correct places etc. Overall preparedness for demo. [3 Marks]	3
	TOTAL	26