

# EEE3096S Practical 4

GVNKHA001 and NRTKAM001

GitHub link:

[https://github.com/norton-kam/EEE3096S\\_EmbeddedSystemsII/tree/main/3096-Pracs-NRTKAM001/Prac%204](https://github.com/norton-kam/EEE3096S_EmbeddedSystemsII/tree/main/3096-Pracs-NRTKAM001/Prac%204)



**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	GOVIND	NORTON
STUDENT FIRST NAME	KHAVESH	KAMRYN
STUDENT NUMBER	GVNKHA001	NRTKAM001
STUDENT SIGNATURE		

TUTOR NAME + SIGNATURE	
DATE [YYYY-MM-DD]	17/10/22

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]	9
PB	The pushbutton can be used to cycle through the waveforms. [3 Marks]	3
General	Well-written, well commented code. Code uploaded to Git. Sensible variable names, functions in correct places etc. Overall preparedness for demo. [3 Marks]	2
TOTAL		28