Digital Systems

EEE4084F

Homework 2: Digital Systems Schematic analysis

[50 marks]

Introduction

The objective of this assignment is for each student to understand and explain a complicated schematic for a digital system. The folder named "EEE4084F Homework 2 – Diagrams" in the VULA resources contains numbered pictures, each of a digital system schematic. Each student is assigned to interpret and explain two diagrams following, completing the two parts described below. The table on the next page indicates which student is assigned to what diagrams. This assignment counts for marks. The due date is shown in the assignment entry for Homework 2 on Vula.

Parts

1. In the given diagrams for this homework, some of the major processing blocks are identified only as acronyms but some as named blocks. Identify two major processing blocks in both diagrams A and B that were assigned to you. Provide a short one to two sentence summary of what each of these components does. [20]
2. Choose one of the diagrams and briefly summarize (in maximum one paragraph) what the system does. Then determine the main data flow for the diagram and provide a written explanation with illustrative flow diagram showing what processing is done. [30]

Submission

Submit a PDF of your answers. The first page must include your name, student number and the title "EEE4084F Homework 2" together with the date. Make sure you include the diagrams that you were assigned.

I expect this assignment will take +/- 1 hour to complete. You can use Google, textbooks and whatever other resources to formulate your answers.

Assignment of Diagrams to Students

Name	Diag A	Diag B
Abdallah, Yusuf	20	2
Aldum, Ruben	12	1
Asiimwe, Lynn	3	4
Bissett, Steven	7	13
Boleme, Mpati	10	15
Donaldson, Daniel	14	13
Dywili, Simplicity Sicelile	4	7
Engers, Ross	19	9
Esselaar, Jason	11	8
Galasko, Daniel	14	5
Hughes, Lloyd	1	10
Icely, Christopher	8	6
Ireland, Greg	3	12
Itanisa, Timiebi	20	2
Jermy, Stephen	1	6
Maposah, Brian	2	1
Mushabe, Victor	11	10
Phillips, Jared	9	15
Ramone, Moeko	12	5
Sinclair, Mason	13	19
Spoor, Matthew	20	16
Taljaard, Matthew	15	17
Tshililo, Israel	18	4
Tsoeunyane, Lekhobola	7	6
Wong, Leon	10	4
Moetsabi, Natasha	5	6
Arrah, Husayn	19	7
Mbia, Patrick	12	1
Mazibuko, Kiluan	11	9