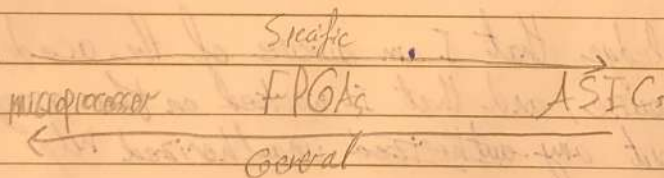AbdelRahman Adel
17OL2296

Sheet 1

① • Microprocessors is an integrated circuit that only includes CPU only

• Microcontroller is a processor with memory and many other components integrated in one chip

② • Microprocessors is generally for general computing tasks that can be used for multiple tasks

• FPGAs, they are a kind of programmable integrated circuit that can be more efficient than a General usage microprocessors

• ASICs are integrated circuits that are specifically designed integrated circuit for a specific task

```
                Specific
microprocessor      FPGAs          ASICs
                General
```

③ a) n → Region C
      m → Region C
      a → Region D

b) Program will print 0

c) if will be a stack over flow . the recussion doesn't stopped.

④ Memory isolation techniques aren't used by default because of sensitive deadlines.

But that can decrease the security and stability of the program.

According to the paper it's very very common to have this issue to meet the deadlines

⑤ The program will lock every 5 seconds & the lock should be initialized in the setup
And it's always asking about the password should also be initialized in the setup.

I acknowledge that I am aware of the academic integrity of this course, and that I worked on this assignment independently without any ~~authorized~~ unauthorized help.

عبدالرحمن عادل بن عبدالله باهمام

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