

## Pre-lab 2

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### 3.1.2

1. What is the CPU clock frequency of the ARM Cortex-A9 processor on myRIO?  
*667 MHz*
2. Electrical characteristics of myRIO:
  - a. What is the input voltage range for the controller power source?  
*6–16 VDC*
  - b. What is the analog input voltage range for single-ended measurements?  
*0–5 V*
  - c. What is the maximum current that may be sourced from a single DIO line?  
*4 mA*

### 3.2.2

1. What are the differences between a traditional ‘fixed’ processor, an FPGA, and a soft-core processor?
  - *An FPGA is a field programmable gate array – a configurable collection of logic which can be customized to behave in a variety of ways.*
  - *A soft-core processor is a processor implemented using the FPGA fabric – it is customizable.*
  - *A ‘fixed’ processor is physically implemented in silicon. It tends to be cheaper, smaller, lower-power and faster than a soft processor.*

### 3.3.2, 3.4.2

No prelab exercises