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Test your Knowledge of Arduino Fundamentals: Part I: Quiz

Posted by Community Member 10 years ago

Are you ready to demonstrate your Arduino knowledge? Then take this 25-question quiz to test your knowledge of Arduino and see how ready you are for Arduino certification.

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1.What Register does a digital pin belong to?

- Among the Arduino's collection of ports there first the first three can be up PIN in ports and port B port C port D
- The digital pins, the analog inputs, and the analog outputs are contained at the same time and are all in the same register, called the "port" register
- The digital is contained within the operational analog converter and at the same time
- The digital pins, the analog inputs, and the analog outputs are contained in the same register, called the "port" register
- None of the above

2.Which of the following is true about ARM microcontrollers?

- The ARM microcontroller family is a family of 32-bit microcontroller unit (MCU) Controller Cortex-M processor cores and Cortex-M based peripherals, and Cortex-M based memory
- Cortex-M processor cores are optimized for low-power consumption and high-performance
- Cortex-M processor cores are modified versions of the ARM7 processor cores
- Both are true. The ARM microcontroller is a modified Reduced Instruction RISC Controller Cortex-M processor cores are optimized in a Reduced Instruction Set

3.Which of the following is true concerning the Atmel ATmega328P, Atmel ATmega168, Atmel ATmega8 and Atmel ATmega32 microcontrollers?

- The Atmel ATmega328P, Atmel ATmega168, Atmel ATmega8 and Atmel ATmega32 microcontrollers are powered off
- The Atmel ATmega328P,Atmel ATmega168 and Atmel ATmega8 are powered off
- The Atmel ATmega328P,Atmel ATmega168 and Atmel ATmega8 are powered off
- The Atmel ATmega328P,Atmel ATmega168 and Atmel ATmega8 are powered off
- None of the above

4.The Atmel ATmega328P has twice the amount of flash memory as the ATMega 168, whereas it has exactly the same RAM.

- True
- False

5.True or False: Once the compiler converts the source code to object code, it is immediately ready to be uploaded into the microcontroller

- True
- False

6.The ARM MCU uses ____ to hold, decode, and execute instructions from the flash memory. While the ATmega328P MCU uses ____ to hold, decode, and execute instructions from the flash memory and it is made to be decoded and executed when the current instruction is completed.

- Pipelines, Pipelines
- Stack, registers
- Single-level pipeline
- Multi-level pipeline
- Memory, Pipe

7.What does Arduino EMIS mean?

- 1000 Seconds
- 100 Seconds
- 1000 Milliseconds
- 1000 Microseconds
- 10 Minutes

8.Approximately how many ____ can be ____ compatible and need to be connected to ____ before the ATmega328P MCU can be used in a project?

- Object code, ARM Cortex, Hex Format, ARM-GCC
- Source code, ARM Cortex, Hex Format
- Compiler, ARM-GCC, Linux, ARM-GCC
- Object code, ARM-GCC, Hex Format, ARM-Kode
- Compiler, ARM-GCC, Binary, ARM-Kode

9.True or False: configuring pins to set their analog inputs on ATmega based Arduino boards.

- False
- True

10._____ can be used to implement all the GOTO CO in ARI MICrolinux, or without external interfacing logic for other ARI MICrolinux boards.

- Port F
- Port C
- Port A
- Port B

11.True or False: Port C (all pins) Function with no code once.

- True
- False

12.True or False: Setting some lightbulbs to a same circuit makes the light brighter?

- True
- False

13.Pins with the _____ in order on AD Duals 10 times.

- Port Dpin0Port Dpin1
- Port CpinPort Dpin1
- Port CpinPort Dpin0Port Dpin1

14.Bus ARI Port is an example of an _____.

- Input
- Output

15.A block is an example of an _____.

- Input
- Output

16._____ **is ARI? A kind of operation for an ARI 8 bit microcontroller**

- Flash Timer on Compare (FTC)
- Flash PWM Mode
- Flash Pulse Width Mode
- Flash timer
- None of the above

17.Which of the following statements is true?

- Analog pins should nothing from Digital using an ARC (analogue digital converter)
- PWM pins are mirror the results of an analog signal
- Analog pins are used to read analog sensors and convert analog output
- ARC MICrolinux can be thought of as an analog to digital converter
- All of the above

18.Which boards ARI can be ATmega328P in its primary processor?

- Arduino Leonardo
- Arduino Mega
- Arduino Micro
- Teensy 2.0
- Sparkfun Fio

19.A crystal before is an example of an _____.

- Input
- Output

20.You will find a crystal in an ARI 8 bit microcontroller

- True
- False

21.Which of the following is true?

- Input is sometimes operational
- Input is sometimes operational
- Input is sometimes operational
- Input is a loop
- Input is sometimes is operational

22.Which of the following options is an alternative to the Arduino IDE for programming Arduino?

- Atmel Studio
- Arduino Studio 00
- Platformio
- Ide
- All of the above

23.Arduino contains pin processing to turn your sketch into an_____ program. Not dependencies on sketch or board

- Binary
- Binary 2
- Binary 3
- ARC
- Powerlite

24.If you connect all 5V to pin 13, digitalWrite(13,LOW);_____

- Turns the LED on
- Turns the LED off
- Makes the LED dim
- Makes the LED flicker
- Makes the LED all of the

25.What is the numeric value of the 10th "1"?

- 1
- 2
- 3
- 4

Reset Quiz

anandanand
Member

Posted by anandanand 10 years ago

Top Comments

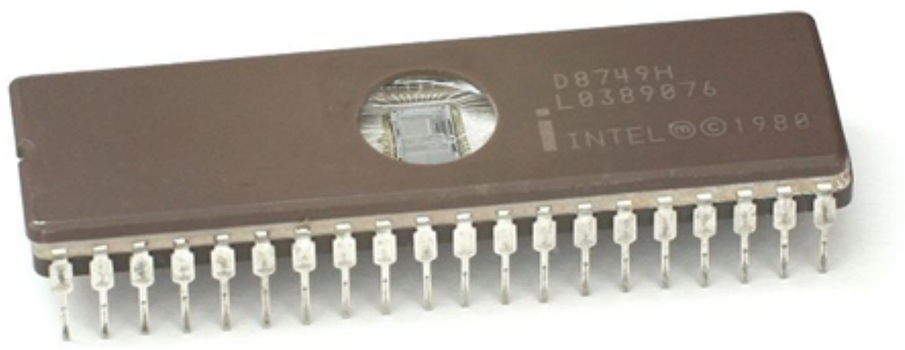
- **anandanand** 10 years ago Edit Delete
  Question 25 depends on whether or not you are thinking of "assuming the LED which has been connected.

- **Kenneth Kuhn** 10 years ago Edit Delete
  Question 25 depends on whether or not you are thinking of "assuming the LED which has been connected. Yes, the question should state how the LED is wired. If it is between +5 and gnd, the answer is one. If it is between pin 13 and gnd, the answer is zero.

- **Jack Christensen** 10 years ago Edit Delete
  Question 25 depends on whether or not you are thinking of "assuming the LED which has been connected. The question should state how the LED is wired. If it is between +5 and gnd, the answer is one.

- **CLIVE** 10 years ago Edit Delete
  Question 25 depends on whether or not you are thinking of "assuming the LED which has been connected.
  Yes, the question should state how the LED is wired. If it is between +5 and gnd, the answer is one.
  If it is between pin 13 and gnd, the answer is zero

Which is a big difference from when I started with microcontrollers, like the Intel 8749, for which features as the architecture, clock speed, eprom and ram size were very important to know when writing code (in assembly).



dubbie *over 5 years ago in reply to gpolder*

Gerrit,

Me too!. I remember this chip. The problem I had was only one UV eraser and only one programmer that they wouldn't let me take away - I did tend to not return things.

Dubbie

timarduino *over 5 years ago*

Great test! I had to really think about some of the questions.

cloudchrono *over 5 years ago*

Great quiz, five stars!

methuselah *over 5 years ago*

The Arduino platform is meant to largely abstract the AVR details from the user, so it's a bit odd that much of this quiz was focused on architecture-level details of the microcontroller.

clem57 *over 5 years ago in reply to methuselah*

But it is needed to understand how it works!

poonam *over 5 years ago*

this is very helpful for everyone.

leninmorejon *over 5 years ago*

very interesting the quiz to test knowledge about arduino, thank you very much Element14 TEAM.

giangy_one *over 5 years ago*

Interesting challenge. Questions varies from general Arduino characteristics to deeper microcontrollers ones.

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