

Unit 6 - Week 4

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Assignment 4

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2020-10-14, 23:59 IST.

- 1) Which of the following is true about the MSP430 Microcontroller? 1 point
- MSP430 MCU has a 20 bit Data Bus
 - MSP430 CPU has 8 16-bit registers
 - MSP430 supports 2 Low Power Modes
 - Words are stored in memory in Little endian ordering

No, the answer is incorrect.
Score: 0

Accepted Answers:
Words are stored in memory in Little endian ordering

- 2) Which of the following is used to store the return addresses of the function calls? 1 point
- Program Counter
 - Status Register
 - Stack Pointer
 - Status Pointer

No, the answer is incorrect.
Score: 0

Accepted Answers:
Stack Pointer

- 3) Which of the following is not true about Flash information memory in MSP430G2553? 1 point
- The information memory has 512-byte sized segments.
 - The difference between the information memory and flash main memory is in the size of segments and the physical addresses.
 - The information memory stores calibration data of the Digitally Controlled Oscillator in one of its segments.
 - The information memory in MSP430G2553 occupies Address space from 0x1000 to 0x10FF of the Memory Map.

No, the answer is incorrect.
Score: 0

Accepted Answers:
The information memory has 512-byte sized segments.

- 4) Which of the following bits of the status register allows the MSP430 to operate in the power saving modes, i.e. Low power modes? 1 point
- CPUOFF, V, Z, N
 - CPUOFF, OSCOFF, SCG0, SCG1
 - CPUOFF, SCG0, SCG1, GIE
 - CPUOFF, SCG0, SCG1, V

No, the answer is incorrect.
Score: 0

Accepted Answers:
CPUOFF, OSCOFF, SCG0, SCG1

- 5) `_BIC_SR_IRQ()` is used to 1 point
- Set the particular bits of the SR
 - Reset the particular bits of the SR
 - Any of the above mentioned depending on the conditions
 - None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Reset the particular bits of the SR

- 6) Which of the following best explain why MSP430 is called an ultra low power MCU? 1 point
- The MSP430 CPU can be clocked with the help of an external crystal.
 - It can be powered by a lemon battery.
 - It is a 16 bit microcontroller which has a brownout detector.
 - It has been designed to easily operate in low power modes for most of the time and wake up very fast.

No, the answer is incorrect.
Score: 0

Accepted Answers:
It has been designed to easily operate in low power modes for most of the time and wake up very fast.

- 7) What is the output current range of any Digital I/O pin in MSP430G2553?: 1 point
- 15mA to +15mA
 - 10mA to +10mA
 - 6mA to +6mA
 - 4mA to +4mA

No, the answer is incorrect.
Score: 0

Accepted Answers:
-6mA to +6mA

- 8) Typical operating voltage range of MSP430 is: 1 point
- 0-5V
 - 5-7V
 - 1.8-3.6V
 - 5-12V

No, the answer is incorrect.
Score: 0

Accepted Answers:
1.8-3.6V

- 9) MSP430G2553 is referred as a 16-bit microcontroller because: 1 point
- It has 16-bit address bus
 - It has 16-bit data bus
 - It has maximum clock frequency of 16MHz
 - All of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
It has 16-bit data bus

- 10) When the microcontroller MSP430G2553 receives RESET, then the CPU goes to which of the following memory locations? 1 point
- FFFE
 - C000
 - FFC0
 - 0000

No, the answer is incorrect.
Score: 0

Accepted Answers:
FFFE