## ESP32s3 GPIO Control (I) - Low-level handling

Preparation questions about the ESP32s3 GPIO low-level handling.

Correct!

You should answer in the question order as most of the questions rely on the previous answer.

You have to read some parts of Section 6 of the reference manual to answer the questions. The subsections are specified in each questions.

Question 1: Number of GPIOs on ESP32s3 Soc.  ** Correct! **  Read Section 6.1 of the reference manual and provide the number of GPIOs available on the ESP32s3 Soc.  45  Question 2: GPIO registers base address  ** Correct! **  Read Section 4.3.5.1 and provide the base address of the GPIO registers.  9x6989_4089  Question 3: Control register of the GPIOS  ** Correct! **  Read Section 6.5.3 of the reference manual and provide the offset of the GPIO 15 control register w.r.t base address provided in the previous question.  **Hint: The onswer is expected in decimal**  1424  Question 4: Simple GPIO output field name  ** Correct! **  Read Section 6.5.3 of the reference manual and provide the name of the field that must be set to configure a GPIO as a simple output.  GPIO FUNCX OUT SEL.		
Read Section 6.1 of the reference manual and provide the number of GPIOs avalaible on the ESP32s3 Soc.  45  Question 2: GPIO registers base address  Correct!  Read Section 4.3.5.1 and provide the base address of the GPIO registers.  9x6000_4000  Question 3: Control register of the GPIOs  Correct!  Read Section 6.5.3 of the reference manual and provide the offset of the GPIO 15 control register w.r.t base address provided in the provious question.  Hint: The answer is expected in decimal  424  Question 4: Simple GPIO output field name  Correct!  Read Section 6.5.3 of the reference manual and provide the name of the field that must be set to configure a GPIO as a simple output.	Question 1: Number of GPIOs on ESP32s3 SoC.	
Question 2: GPIO registers base address  Variet   Question 4.3.5.1 and provide the base address of the GPIO registers.  Question 3: Control register of the GPIOs  Variet   Question 3: Control register of the GPIOs  Variet   Question 6.5.3 of the reference manual and provide the offset of the GPIO 15 control register w.r.t base address provided in the previous question.  Hint: The onswer is expected in decimal  Question 4: Simple GPIO output field name  Variet   Correct   Xaread Section 6.5.3 of the reference manual and provide the name of the field that must be set to configure a GPIO as a simple output.	✓ Correct!	×
Question 2: GPIO registers base address   Correct:  Corr	Read <b>Section 6.1</b> of the reference manual and provide the number of GPIOs avalaible on the ESP32s3 SoC.	
Correct!  Read Section 4.3.5.1 and provide the base address of the GPIO registers.  Question 3: Control register of the GPIOs  Correct!  Read Section 6.5.3 of the reference manual and provide the offset of the GPIO 15 control register w.r.t base address provided in the previous question.  Hint: The answer is expected in decimal  Question 4: Simple GPIO output field name  Correct!  Correct!  Correct!  Correct!  X  Read Section 6.5.3 of the reference manual and provide the name of the field that must be set to configure a GPIO as a simple output.	45	
Correct!  Read Section 4.3.5.1 and provide the base address of the GPIO registers.  Question 3: Control register of the GPIOs  Correct!  Read Section 6.5.3 of the reference manual and provide the offset of the GPIO 15 control register w.r.t base address provided in the previous question.  Hint: The answer is expected in decimal  Question 4: Simple GPIO output field name  Correct!  Correct!  Correct!  Correct!  X  Read Section 6.5.3 of the reference manual and provide the name of the field that must be set to configure a GPIO as a simple output.		
Read Section 4.3.5.1 and provide the base address of the GPIO registers.   Ox6000_4000  Question 3: Control register of the GPIOs  **  Read Section 6.5.3 of the reference manual and provide the offset of the GPIO 15 control register w.r.t base address provided in the previous question.  Hint: The answer is expected in decimal  Question 4: Simple GPIO output field name  **  Correct!  **  Read Section 6.5.3 of the reference manual and provide the name of the field that must be set to configure a GPIO as a simple output.	Question 2: GPIO registers base address	
Question 3: Control register of the GPIOs  Correct!  Correct!  Correctl   Cor	✓ Correct!	×
Question 3: Control register of the GPIOs  Correct!  Read Section 6.5.3 of the reference manual and provide the offset of the GPIO 15 control register w.r.t base address provided in the previous question.  Hint: The answer is expected in decimal  Question 4: Simple GPIO output field name  Correct!  Read Section 6.5.3 of the reference manual and provide the name of the field that must be set to configure a GPIO as a simple output.	Read <b>Section 4.3.5.1</b> and provide the base address of the GPIO registers.	
Correct!  Read Section 6.5.3 of the reference manual and provide the offset of the GPIO 15 control register w.r.t base address provided in the previous question.  Hint: The answer is expected in decimal  Question 4: Simple GPIO output field name  Correct!  Read Section 6.5.3 of the reference manual and provide the name of the field that must be set to configure a GPIO as a simple output.	0×6000_4000	
Read Section 6.5.3 of the reference manual and provide the offset of the GPIO 15 control register w.r.t base address provided in the previous question.  Hint: The answer is expected in decimal  1424  Question 4: Simple GPIO output field name  Correct!  Read Section 6.5.3 of the reference manual and provide the name of the field that must be set to configure a GPIO as a simple output.	Question 3: Control register of the GPIOs	
Print: The answer is expected in decimal  1424  Question 4: Simple GPIO output field name  Correct!  Read Section 6.5.3 of the reference manual and provide the name of the field that must be set to configure a GPIO as a simple output.	✓ Correct!	×
Question 4: Simple GPIO output field name  Correct!  Read Section 6.5.3 of the reference manual and provide the name of the field that must be set to configure a GPIO as a simple output.		
Question 4: Simple GPIO output field name  Correct!  Read Section 6.5.3 of the reference manual and provide the name of the field that must be set to configure a GPIO as a simple output.	Hint: The answer is expected in decimal	
Correct!  Read Section 6.5.3 of the reference manual and provide the name of the field that must be set to configure a GPIO as a simple output.	1424	
Correct!  Read <b>Section 6.5.3</b> of the reference manual and provide the name of the field that must be set to configure a GPIO as a simple output.	Question 4: Simple GPIO output field name	
	✓ Correct!	×
GPIO_FUNCX_OUT_SEL	Read <b>Section 6.5.3</b> of the reference manual and provide the name of the field that must be set to configure a GPIO as a simple output.	
	GPIO_FUNCx_OUT_SEL	
Question 5: Simple GPIO output field value		

	×
Read <b>Section 6.5.3</b> of the reference manual and provide the value to set in the field defined in the previous question to configure a GPIG a simple output.	O as
Hint: The answer is expected in hexadecimal	
0x100	
Question 6: GPIO write register - set operation	
✓ Correct!	×
Read <b>Section 6.5.3</b> of the reference manual and provide the name of <b>the recommended</b> register used to <b>set</b> a GPIO output value.	
GPIO_OUT_W1TS_REG	
Question 7: GPIO write register - clear operation	
✓ Correct!	×
Read <b>Section 6.5.3</b> of the reference manual and provide the name of <b>the recommended</b> register used to <b>clear</b> a GPIO output value.	

Soumettre

GPI0\_OUT\_W1TC\_REG

Fourni par INGInious v.0.8.6 © 2014-2023 Université catholique de Louvain. <u>INGInious est distribué sous licence AGPL</u>