

IP5209 寄存器文档

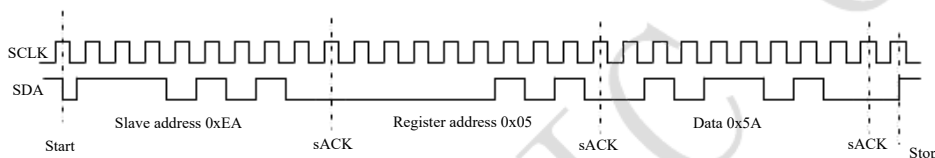
1 I2C interface

The i2c speed support 400Kbps. Support 8 bit address width and 8bit data width. Transmit and receive MSB first. The default slave address is 0Xea。

I2C acts as slave and is controlled by the master. The SCK line of the I2C interface is driven by the master. The SDA line could be pulled up to VCC by a 1.5Kohm resistor and pulled

down by either the master or the slave. A typical WRITE sequence for writing 8bits data to a register is shown in below figure. A start bit is given by the master, followed by the slave address, register address and 8-bit data. After each 8-bit address or data transfer, the IP5209 gives an ACK bit. The master stops writing by sending a stop bit. All 8 bits data must be written before the register is updated.

Example: Write 8bit data 0x5a to register 0x05, and the slave address is 0Xea



Note: Sack generated by Slave, Mack generated by Master, and Mnack is a NACK generated by Master

Figure26 I2C WRITE

A typical READ sequence is shown in below figure. First the master has to write the slave address, followed by the register address. Then a restart bit and the slave address specify that a READ is generated. The master then clocks out 8 bits at a time to read data.

Example: Read 8bit data 0x5A from register 0x05, and the slave address is 0Xea

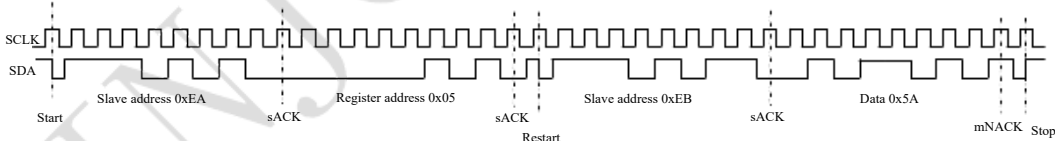


Figure 27 I2C Read

2 Register Description

1.1 SYS_CTL0

Offset = 0x01

Bit(s)	Name	Description	R/W	Reset
7 : 5		Reserved		
4	En_light_dt	Light LED 检测是否使能 1: enable 0: disable	RW	1
3	En_light	Light enable 0: disable 1: enable	RW	1
2	En_boost	Boost enable 0: disable 1:enable	RW	1
1	En_charge	Charger enable 0: disable 1:enable	RW	1
0		Reserved		

1.2 SYS_CTL2

Offset = 0x03

Bit(s)	Name	Description	R/W	Reset
7:6	Reserved			
5		1: 连续两次短按（两次短按在 1s 内）关机功能使能 0: 连续两次短按（两次短按在 1s 内）关机功能关闭	R/W	1
4: 0	Reserved			

1.3 SYS_CTL3

Offset = 0x04

Bit(s)	Name	Description	R/W	Reset
7:6		关机时间设定 11:63s 10:32s 01:16s 00: 8s	R/W	10
5: 0	Reserved			

1.4 ADC_DIG_CTL2

Offset = 0x0c

Bit(s)	Name	Description	R/W	Reset
7:3		电池电流小电流阈值设定 n * 12mA 当 BAT 电流小于设定阈值时，持续 32s 关机	RW	00100
2:0		reserved		

1.5 Charger_CTL4

Offset=0x24

Bit(s)	Name	Description	R/W	Reset
7		RESERVED		
6:5		BAT 电池类型选择 11: RESERVED 10: 4.35v 电池 01: 4.3 电池 00: 4.2 电池	RW	00
4: 0		RESERVED		