

Edge2 MCU Register Description

Notes: 1、I2C slave device address is 0x18. 2、ROM could be saved when power off, but RAM couldn't.

Address	Register name	Byte	R/W	Store	Def Value	Register Description
0x12	VERSION1	1	R	ROM	-	MCU version Register. Read MCU firmware version.
0x13	VERSION2	1				
0x20	BOOT_MODE	1	R/W	ROM	0	Boot mode setting. 0x00: Boot from SPI Flash. 0x01: Boot from EMMC.
0x21	BOOT_DCIN	1	R/W	ROM	1	SYS power on while DC in. 0x00: Disable. 0x01: Enable.
0x22	BOOT_RTC	1	R/W	ROM	1	SYS power on while RTC trigger. 0x00: Disable. 0x01: Enable.
0x23	LED_ON	1	R/W	ROM	0	LED mode setting while power on. 0x00: Off. 0x01: Always on(0x25-0x27 registers determine RGB brightness). 0x02: Red breathing light mode(R). 0x03: Green breathing light mode(G). 0x04: Blue breathing light mode(B). 0x05: Yellow breathing light mode(RG). 0x06: Purple breathing light mode(RB). 0x07: Cyan breathing light mode(GB). 0x08: White breathing light mode(RGB). 0x09: Red heartbeat light mode(R). 0x0A: Green heartbeat light mode(G). 0x0B: Blue heartbeat light mode(B). 0x0C: Yellow heartbeat light mode(RG). 0x0D: Purple heartbeat light mode(RB). 0x0E: Cyan heartbeat light mode(GB). 0x0F: White heartbeat light mode(RGB).
0x24	LED_OFF	1	R/W	ROM	1	LED mode setting while power off 0x00: Off. 0x01: Always on(0x28-0x2A registers determine RGB brightness). 0x02: Red breathing light mode(R). 0x03: Green breathing light mode(G). 0x04: Blue breathing light mode(B). 0x05: Yellow breathing light mode(RG). 0x06: Purple breathing light mode(RB). 0x07: Cyan breathing light mode(GB). 0x08: White breathing light mode(RGB). 0x09: Red heartbeat light mode(R). 0x0A: Green heartbeat light mode(G). 0x0B: Blue heartbeat light mode(B). 0x0C: Yellow heartbeat light mode(RG). 0x0D: Purple heartbeat light mode(RB). 0x0E: Cyan heartbeat light mode(GB). 0x0F: White heartbeat light mode(RGB).
0x25	RGB_ON_R	1	R/W	ROM	0xFF	Set the brightness of the red light (take effect when LED_ON(0x23) is always on). Parameter range: 0x00-0xFF.
0x26	RGB_ON_G	1	R/W	ROM	0xFF	Set the brightness of the green light (take effect when LED_ON(0x23) is always on). Parameter range: 0x00-0xFF.
0x27	RGB_ON_B	1	R/W	ROM	0xFF	Set the brightness of the blue light (take effect when LED_ON(0x23) is always on). Parameter range: 0x00-0xFF.
0x28	RGB_OFF_R	1	R/W	ROM	0xFF	Set the brightness of the red light (take effect when LED_OFF(0x24) is always on). Parameter range: 0x00-0xFF.
0x29	RGB_OFF_G	1	R/W	ROM	0x00	Set the brightness of the green light (take effect when LED_OFF(0x24) is always on). Parameter range: 0x00-0xFF.
0x2A	RGB_OFF_B	1	R/W	ROM	0x00	Set the brightness of the blue light (take effect when LED_OFF(0x24) is always on). Parameter range: 0x00-0xFF.
0x2C	REST_CONF	1	W	RAM	-	EEPROM Reset. 0x00: Reset EEPROM configuration parameter.
0x2E	SLEEP_EN	1	R/W	ROM	0	MCU sleep after SYS power off. 0x00: Disable. 0x01: Enable.
0x2F	BOOT_IR	1	R/W	ROM	0	SYS power on while IR remote trigger. 0x00: Disable. 0x01: Enable.
0x30	IR1_CUST1	1	R/W	ROM	0	Custom infrared button 1 address code high register. Note: Registers 0x30-0x37 allow users to customize two infrared key.
0x31	IR1_CUST2	1	R/W	ROM	0	Custom infrared button 1 address code low register.
0x32	IR1_ORDER1	1	R/W	ROM	0	Custom infrared button 1 data code high register.
0x33	IR1_ORDER2	1	R/W	ROM	0	Custom infrared button 1 data code low register.
0x34	IR2_CUST1	1	R/W	ROM	0	Custom infrared button 2 address code high register.
0x35	IR2_CUST2	1	R/W	ROM	0	Custom infrared button 2 address code low register.
0x36	IR2_ORDER1	1	R/W	ROM	0	Custom infrared button 2 data code high register.
0x37	IR2_ORDER2	1	R/W	ROM	0	Custom infrared button 2 data code low register.
0x89	LED_ON_RAM	1	W	RAM	-	LED mode setting while power on(setting not save while power off). 0x00: Off. 0x01: Always on(0x25-0x27 registers determine RGB brightness). 0x02: Red breathing light mode(R). 0x03: Green breathing light mode(G). 0x04: Blue breathing light mode(B). 0x05: Yellow breathing light mode(RG). 0x06: Purple breathing light mode(RB). 0x07: Cyan breathing light mode(GB). 0x08: White breathing light mode(RGB). 0x09: Red heartbeat light mode(R). 0x0A: Green heartbeat light mode(G). 0x0B: Blue heartbeat light mode(B). 0x0C: Yellow heartbeat light mode(RG). 0x0D: Purple heartbeat light mode(RB). 0x0E: Cyan heartbeat light mode(GB). 0x0F: White heartbeat light mode(RGB).
0x8A	FAN_CTRL	1	W	RAM	-	Fan speed setting register (Note: the parameter value of fan normally open is 0x1E-0x64). Parameter range: 0x00-0x64.
0x8B	WDT_EN	1	W	RAM	-	WDT Enable or disable 0x00: Disable WDG detection. 0x01: Enable WDG detection(System set at 500ms, MCU detects at 1000ms.)
0x91	SYS_RST	1	W	RAM	-	System reset (Single operation not saved). 0x00: System reset and start from SPI Flash. 0x02: System reset and start from EMMC. 0x01: System reset.

Version	Edit	Review	Revision content
V1.0	David	Kenny	Initial version-230520