MCU: AT32F403ACGT7 External crystal oscillator: 8MHz

NAME	IO	Function	Ext_PU_R	Ext_PD_R	Ext_CAP	Description
U.PWR_I	PA0	ADC12_IN0	/	/	10nF	ADC12_IN0_Val*660*20/4096 = U.PWR Current(uint: mA)
M.PWR_I	PA1	ADC12_IN1	/	/	10nF	ADC12_IN1_Val*660*20/4096 = M.PWR Current(uint: mA)
U.PWR_V	PA2	ADC12_IN2	/	/	10nF	ADC12_IN2_Val*3300*16/4096 = U.PWR Voltage(uint: mV)
M.PWR_V	PA3	ADC12_IN3	/	/	10nF	ADC12_IN3_Val*3300*16/4096 = M.PWR Voltage(uint: mV)
BAT_OUT_V	PA4	ADC12_IN4	/	/	10nF	ADC12_IN4_Val*3300*16/4096 = BAT_OUT Voltage(uint: mV)
BAT_OUT_I	PA5	ADC12_IN5	/	/	10nF	ADC12_IN5_Val*660*20/4096 = BAT_OUT Current(uint: mA)
BAT_CHG_V	PA6	ADC12_IN6	/	/	10nF	ADC12_IN6_Val*3300*16/4096 = BAT_CHG Voltage(uint: mV)
BAT_CHG_I	PA7	ADC12_IN7	/	/	10nF	ADC12_IN7_Val*660*20/4096 = BAT_CHG Current(uint: mA)
INPUT_CHG_V	PB0	ADC12_IN8	/	/	10nF	ADC12_IN8_Val*3300*16/4096 = INPUT_CHG Voltage(uint: mV)
VCC_5V_I	PB1	ADC12_IN9	/	/	10nF	ADC12_IN9_Val*165*20/4096 = VCC_5V Current(uint: mA)
SPI2_NSS	PB12	SPI2_NSS	/	/	/	Connect to "GD25Q127CSIG" CS Pin
SPI2_SCK	PB13	SPI2_SCK	/	/	/	Connect to "GD25Q127CSIG" SCK Pin
SPI2_MISO	PB14	SPI2_MISO	/	/	/	Connect to "GD25Q127CSIG" MISO Pin
SPI2_MOSI	PB15	SPI2_MOSI	/	/	/	Connect to "GD25Q127CSIG" MOSI Pin
OSC32_OUT	PC15	OSC32_OUT	/	/	/	Connect to 32768 crystal oscillator No.2 Pin
OSC32_IN	PC14	OSC32_IN	/	/	/	Connect to 32768 crystal oscillator No.1 Pin
WIRE_SIG	PA8	GPIO	10K	/	/	Level Low means Wire Charger Input
SW_STATE	PB3	GPIO	10K	/	1uF	If BAT_OUT_V ≥ 12V, short-out "PWR_SW" connector's No.2 pin and No.3 pin will make PB3 to be Low level, otherwise PB3 is High level
I2C_SCL	PB6	I2C1_SCL	4.7K	/	/	Connect to "M117B" and "I2C" connector's SCL Pin
I2C_SDA	PB7	I2C1_SDA	4.7K	/	/	Connect to "M117B" and "I2C" connector's SDA Pin
M.PWR_EN	PB8	TIM4_CH3	/	10K	/	Set Low--->M.PWR Disable Set High--->M.PWR Enable
U.PWR_EN	PB9	TIM4_CH4	/	10K	/	Set Low--->U.PWR Disable Set High--->U.PWR Enable
USART1_TX	PA9	USART1_TX	/	/	/	Connect to "UART" Connector TXD Pin
USART1_RX	PA10	USART1_RX	/	/	/	Connect to "UART" Connector RXD Pin
USART3_TX	PB10	USART3_TX	/	/	/	Connect to "485 Transceiver" TX Pin
USART3_RX	PB11	USART3_RX	/	/	/	Connect to "485 Transceiver" RX Pin
CAN_RX	PA11	CAN1_RX	/	/	/	Connect to "CAN Transceiver" RX Pin
CAN_TX	PA12	CAN1_TX	/	/	/	Connect to "CAN Transceiver" TX Pin
VBAT_EN	PB4	GPIO	/	10K	/	Set Low--->Battery Input Disable Set High--->Battery Input Enable
CHG_EN	PB5	GPIO	/	10K	/	Set Low--->Charge Disable Set High--->Charge Enable
M485_DE	PC13	GPIO	/	/	/	Set Low--->485 on RX Set High--->485 on TX
SYS_LED	PA15	GPIO	/	/	/	Set Low--->LED ON Set High--->LED OFF

SWCLK	PA14	SWCLK	/	/	/	Connect to "SWD" Connector CLK Pin
SWDIO	PA13	SWDIO	/	/	/	Connect to "SWD" Connector DIO Pin
NRST	NRST	NRST	10K	/	100nF	Connect to "SWD" Connector RST Pin
BOOT0	BOOT0	BOOT0	/	10K	/	Connect to "UART" Connector BOOT Pin
BOOT1	PB2	BOOT1	/	10K	/	

注意： 如果充电电流≥5A 或者 放电电流大于5A，请确保底层的MOS管和二极管具有良好的散热，
例如覆盖导热硅胶，或者安装散热风扇！

Caution : If Charge Current ≥ 5A || Discharge Current ≥ 5A, please make sure the bottom-layer's MOS and Diode have good heat dissipation,
Such as cover with thermal conductive silica gel, or install the colling fan!

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