

MCU: AT32F403ACGT7

External crystal oscillator: 8MHz

NAME	IO	Function	Ext_PU_R	Ext_PD_R	Ext_CAP	Description
MCU_TIO_1	PA0	TIM2_CH1	4.7k	/	/	Connect to "RGB" Connector TIO1 Pin
MCU_TIO_2	PA1	TIM2_CH2	4.7k	/	/	Connect to "RGB" Connector TIO2 Pin
MCU_AIO_1	PB0	TIM3_CH3	4.7k(NC)	/	680pF	Connect to "CN1" Connector AIO1 Pin
MCU_AIO_2	PB1	TIM3_CH4	4.7k(NC)	/	680pF	Connect to "CN2" Connector AIO2 Pin
SPI1_CS	PA4	SPI1_NSS	/	/	/	Connect to "LSM6DSL" CS Pin
SPI1_SCK	PA5	SPI1_SCK	/	/	/	Connect to "LSM6DSL" SCK Pin
SPI1_MISO	PA6	SPI1_MISO	/	/	/	Connect to "LSM6DSL" MISO Pin
MCU_MOSI	PA7	SPI1_MOSI	/	/	/	Connect to "LSM6DSL" MOSI Pin
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
M485_DE	PC15	GPIO	/	/	/	Set Low--->485 on RX    Set High--->485 on TX
IMU_INT1	PC14	GPIO	/	/	/	Connect to "LSM6DSL" INT1 Pin
BEEP_CTRL	PA8	TIM1_CH1	/	/	/	Output 3.1K Hz PWM--->Buzzer Beep    Set Low--->Buzzer OFF
CAN_RX	PB5	CAN_RX	/	/	/	Connect to "CAN Transceiver" RX Pin
CAN_TX	PB6	CAN_TX	/	/	/	Connect to "CAN Transceiver" TX Pin
PWR_SIG	PB7	GPIO	4.7K	/	100nF	Connect to "POWER" Connector SIG Pin
I2C1_SCL	PB8	I2C1_SCL	4.7K	/	/	Connect to "SPL06-001" SCL Pin
I2C1_SDA	PB9	I2C1_SDA	4.7K	/	/	Connect to "SPL06-001" SDA Pin
EMG_SIG	PB3	GPIO	4.7K	/	100nF	Connect to "EMG" Connector EMG Pin
BKP_SIG	PB4	GPIO	4.7K	/	100nF	Connect to "BKP" Connector BKP Pin
USART1_TX	PA9	USART1_TX	/	/	/	Connect to "UART" Connector TXD Pin
USART1_RX	PA10	USART1_RX	/	/	/	Connect to "UART" Connector RXD Pin
USART2_TX	PA2	USART2_TX	/	/	/	Connect to "485 Transceiver" TX Pin
USART2_RX	PA3	USART2_RX	/	/	/	Connect to "485 Transceiver" RX Pin
USART3_TX	PB10	USART3_TX	/	/	/	Connect to "ESP32_C3" RX Pin
USART3_RX	PB11	USART3_RX	/	/	/	Connect to "ESP32_C3" TX Pin
USB_FS_N	PA11	USB_DM	1.5K(NC)	/	/	Connect to "USB" Connector DM Pin
USB_FS_P	PA12	USB_DP	1.5K	/	/	Connect to "USB" Connector DP Pin
ESP32_EN	PC13	GPIO	10K	/	/	Set Low--->ESP32_C3 Disable    Set High--->ESP32_C3 Enable
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	/	

ESP32\_BOOT Button : Press down ESP32\_BOOT Button before ESP32\_C3 powerup then ESP32\_C3 enter firmware download mode.

ESP32\_EN Button : Press down ESP32\_EN Button to disable ESP32\_C3.

ESP32\_C3 SSID : Aixcel\_Tiny\_Recon\_System\_C3

ESP32\_C3 Password : 12345678

ESP32 Console Connector : Download ESP32 Firmware / Debug ESP32 / Console Communication

Model Name: Aixcel_Mini_Drive_Board_IO_Form_SchDoc			Aixcel Limited	
Size: A3	Number:	Revision:	Dihao Rd.Ai Weidu	
Date: 2022/12/22	Time: 20:53:09	Sheet of	Xuchang China +86	
			www.aixcel.net	

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