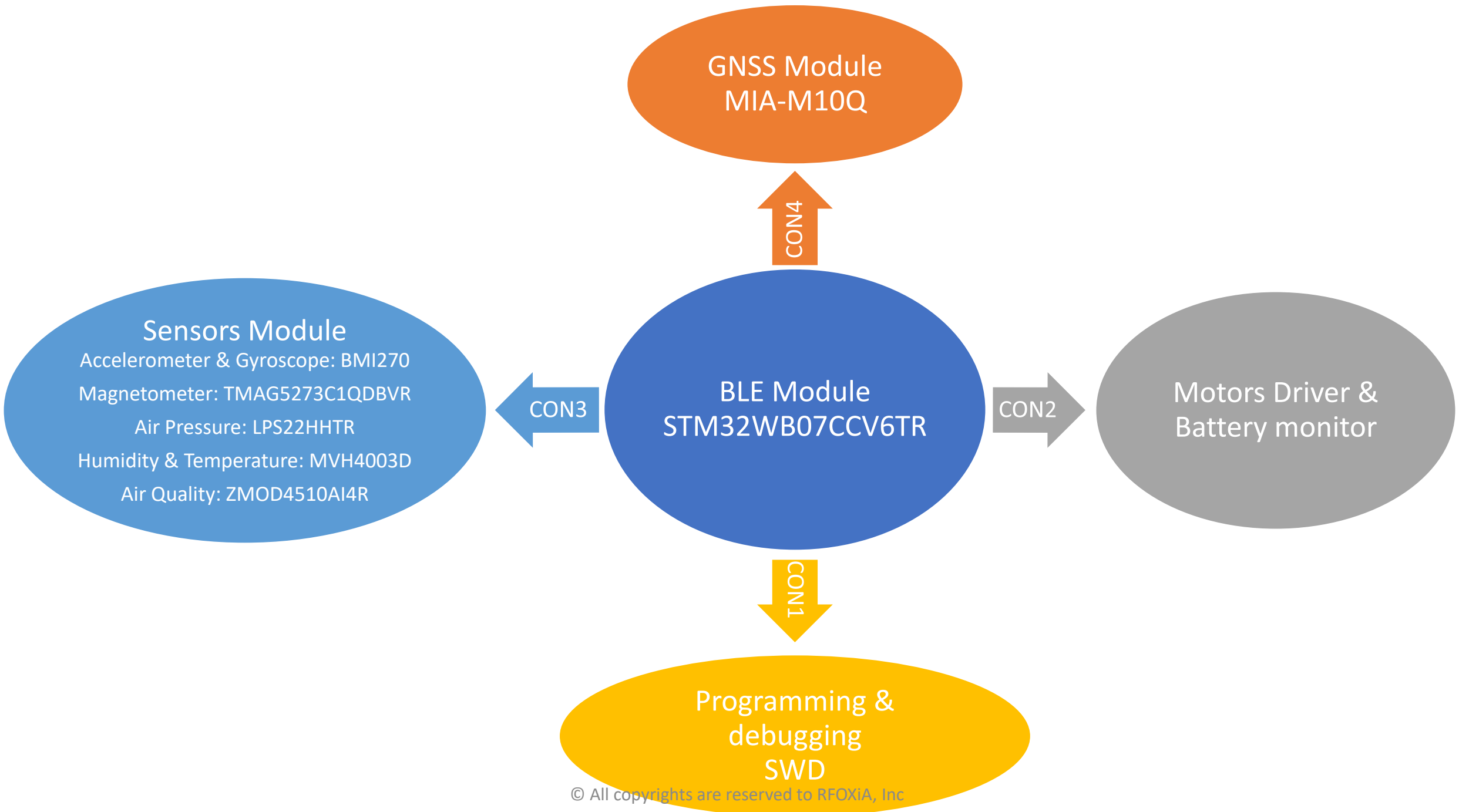




BLE Module <CON4> GNSS Module

STM32WB07CCV6TR	MIA-M10Q
PB14 (USART1_RX)	TX
PB15 (USART1_TX)	RX
PA1 (I2C1_SDA)	SDA
PA0 (I2C1_SCL)	SCL
PB6 (GPIO_EXTI6)	TIME_PULSE/SAFEBOOT
PB7 (GPIO_EXTI7)	INT
PA9 (GPIO_OUTPUT)	RESET
PB9 (GPIO_OUTPUT)	VOL_SEL (VOLTAGE SELECT: 3.3V OPEN - 1.8V GND)

BLE Module <CON3> Sensors Module

STM32WB07CCV6TR	Sensors
PA14 (I2C2_SDA)	SDA
PA13 (I2C2_SCL)	SCL
PB0 (GPIO_EXTI0)	GYR2 (BMI270 > INT2)
PA11 (GPIO_EXTI11)	HUM (MVH4003D > ALERT)
PB4 (GPIO_EXTI4)	MAG (TMAG5273C1QDBVR > INT)
PB5 (GPIO_EXTI5)	PRS (LPS22HHTR > DRDY)
PA12 (GPIO_EXTI12)	GYR1 (BMI270 > INT1)
PB8 (GPIO_EXTI8)	AIR QLTY (ZMOD4510AI4R > INT)

BLE Module <CON2> Motors Driver & Battery Monitor

STM32WB07CCV6TR	Motors Driver & Battery Monitor
PA5 (SPI2_SCK)	SCK
PA7 (SPI2_MISO)	MISO
PA6 (SPI2_MOSI)	MOSI
PA4(SPI2_NSS)	CS
PA15 (ADC1_VINP2)	BATTERY1 VOLTAGE
PB1 (ADC1_VINP1)	TEMPERATURE SENSOR VOLTAGE
PB2 (TIM1_CH3)	MOT1 PWM
PB3 (TIM1_CH4)	MOT2 PWM
PB10 (TIM1_CH2)	MOT3 PWM
PB11 (TIM1_CH1)	MOT4 PWM

BLE Module <CON1> Programmer / Debugger

STM32WB07CCV6TR	STLink V2/V3
PA3 (SWCLK)	SWCLK
PA2 (SWDIO)	SWDIO

BLE Module <> HSE 32MHz OSC

BLE Module <> LSE 32.768Hz OSC

BLE Module <> RF Front-End

STM32WB07CCV6TR	Front-End
PA8 (RADIO_RX_SEQUENCE)	LNA Enable
PA10 (RADIO_TX_SEQUENCE)	External AMP Enable

Note: Soldering a jumper (R0Ω 0402) at R5 on Bottom Layer disables external AMP and LNA and directly bypassing signal between the BLE chip RF1 port and the antenna

STM32WB07CCV6TR External Interrupts	Modules
EXTI0 >> PB0	Sensors Module (BMI270 > INT2)
EXTI1 >>	
EXTI2 >>	
EXTI3 >>	
EXTI4 >> PB4	Sensors Module (TMAG5273C1QDBVR > INT)
EXTI5 >> PB5	Sensors Module (LPS22HHTR > DRDY)
EXTI6 >> PB6	GNSS Module (TIME_PULSE/SAFEBOOT)
EXTI7 >> PB7	GNSS Module (INT)
EXTI8 >> PB8	Sensors Module (ZMOD4510AI4R > INT)
EXTI9 >>	
EXTI10 >>	
EXTI11 >> PA11	Sensors Module (MVH4003D > ALERT)
EXTI12 >> PA12	Sensors Module (BMI270 > INT1)
EXTI13 >>	
EXTI14 >>	
EXTI15 >>	