

NUCLEO STM32F103

STM32F103RB Pins: Platform Availability / Main Functions / Alternate Functions																							
PIN		Available?	Nucleo64 Headers			FT Pin ?	Main Function	Alternate Functions (without Remap)														Remap	
			Morpho	Arduino	Arduino Label			USART1	USART2	USART3	I2C1	I2C2	ADC1 ADC2	TIM1	TIM2	TIM3	TIM4	SPI1	SPI2	CAN	USB	OTHER	
x	PA0		CN7-28	CN8-1	A0		PA0		CTS				IN0		CH1_ETR							WKUP	
x	PA1		CN7-30	CN8-2	A1		PA1		RTS				IN1		CH2								
x	PA2	STLINK	CN10-35	CN9-2	D1		PA2		TX				IN2		CH3								
x	PA3	STLINK	CN10-37	CN9-1	D0		PA3		RX				IN3		CH4								
x	PA4		CN7-32	CN8-3	A2		PA4		CK				IN4					NSS					
x	PA5	Green LED	CN10-11	CN5-6	D13		PA5						IN5					SCK					
x	PA6		CN10-13	CN5-5	D12		PA6						IN6			CH1		MISO					TIM1_BKIN
x	PA7		CN10-15	CN5-4	D11		PA7						IN7			CH2		MOSI					TIM1_CH1N
x	PA8		CN10-23	CN9-8	D7	✓	PA8	CK						CH1								MC0	
x	PA9		CN10-21	CN5-1	D8	✓	PA9	TX						CH2									
x	PA10		CN10-33	CN9-3	D2	✓	PA10	RX						CH3									
x	PA11		CN10-14			✓	PA11	CTS						CH4						RX	DM		
x	PA12		CN10-12			✓	PA12	RTS						ETR						TX	DP		
x	PA13	TMS	CN7-13			✓	JTMS/SWDIO																PA13
x	PA14	TCK	CN7-15			✓	JTCK/SWCLK																PA14
	PA15		CN7-17			✓	JTDI																TIM2_CH1_ETR/ PA15/ SPI1_NSS
x	PB0		CN7-34	CN8-4	A3		PB0						IN8			CH3							TIM1_CH2N
x	PB1		CN10-24				PB1						IN9			CH4							TIM1_CH3N
x	PB2		CN10-22			✓	Port B2/Boot1																
	PB3	SWO	CN10-31	CN9-4	D3	✓	JTDO																TIM2_CH2/ PB3/ TRACESWO/ SPI1_SCK
	PB4		CN10-27	CN9-6	D5	✓	JNTRST																TIM3_CH1/ PB4/ SPI1_MISO
x	PB5		CN10-29	CN9-5	D4		PB5				SMBAI												TIM23_CH2/ SPI1_MOSI
x	PB6		CN10-17	CN5-3	D10	✓	PB6				SCL						CH1						USART1_TX
x	PB7		CN7-21			✓	PB7				SDA						CH2						USART1_RX
x	PB8		CN10-31	CN5-10	D15	✓	PB8										CH3						I2C1_SCL/ CANRX
x	PB9		CN10-5	CN5-9	D14	✓	PB9										CH4						I2C1_SDA/ CANTX
x	PB10		CN10-25	CN9-7	D6	✓	PB10			TX		SCL											TIM2_CH3
x	PB11		CN10-18			✓	PB11			RX		SDA											TIM2_CH4
x	PB12		CN10-16			✓	PB12			CK		SMBAI		BKIN				NSS					
x	PB13		CN10-30			✓	PB13			CTS				CH1N					SCK				
x	PB14		CN10-28			✓	PB14			RTS				CH2N					MISO				

NUCLEO STM32F103

x	PB15		CN10-26			✓	PB15							CH3N					MOSI				
x	PC0		CN7-38	CN8-6	A5		PC0						IN10										
x	PC1		CN7-36	CN8-5	A4		PC1						IN11										
x	PC2		CN7-35				PC2						IN12										
x	PC3		CN7-37				PC3						IN13										
x	PC4		CN10-34				PC4						IN14										
x	PC5		CN10-6				PC5						IN15										
x	PC6		CN10-4			✓	PC6																TIM3_CH1
x	PC7		CN10-19	CN5-2	D9	✓	PC7																TIM3_CH2
x	PC8		CN10-2			✓	PC8																TIM3_CH3
x	PC9		CN10-1			✓	PC9																TIM3_CH4
x	PC10		CN7-1			✓	PC10																USART3_TX
x	PC11		CN7-2			✓	PC11																USART3_RX
x	PC12		CN7-3			✓	PC12																USART3_CK
x	PC13	USER Button	CN7-23				PC13																Tamper-RTC
x	PC14	32.768KHz	CN7-25				PC14																OSC32_IN
x	PC15	32.768KHz	CN7-27				PC15																OSC32_OUT
x	PD2		CN7-4			✓	PD2									ETR							
x	OSC_IN	8MHz	CN7-29				OSC_IN																PD0
x	OSC_OUT	8MHz	CN7-31				OSC_OUT																PD1
	BOOT0		CN7-7				Boot0																
	NRST	Reset Button	CN7-14	CN6-3			NRST																

STM32F103RB/STM32F103Nucleo-64 : This list supplied as a courtesy. This list may contain errors and it's your responsibility to verify the connections before using. UPDATED APRIL 2023, DD

5.0 Volt
Tolerant Inputs

3.3 Volt Only
Inputs

DO NOT USE

Probably Avoid