BluePill+

STM32F103C8T6-based development board
72Mhz,20KB RAM,64KB ROM

STM32F103
PINOUT DIAGRAM

LEGEND

- POWER
- GROUND
- MCU pin
- PIN NAME
- 12-bit ANALOG
- USB
- USART
- SPI
- I²C
- CAN BUS
- SWD
- JTAG
- TIMER & CHANNEL
- MISCELLANEOUS
- BOARD CIRCUITRY
- ARDUINO PIN

⚠ PC_13, PC_14, and PC_15:
- sink < 3 mA
- source 0 mA
- max 2 MHz
- max 30 pF

● 3.3V only pin
● 5V tolerant
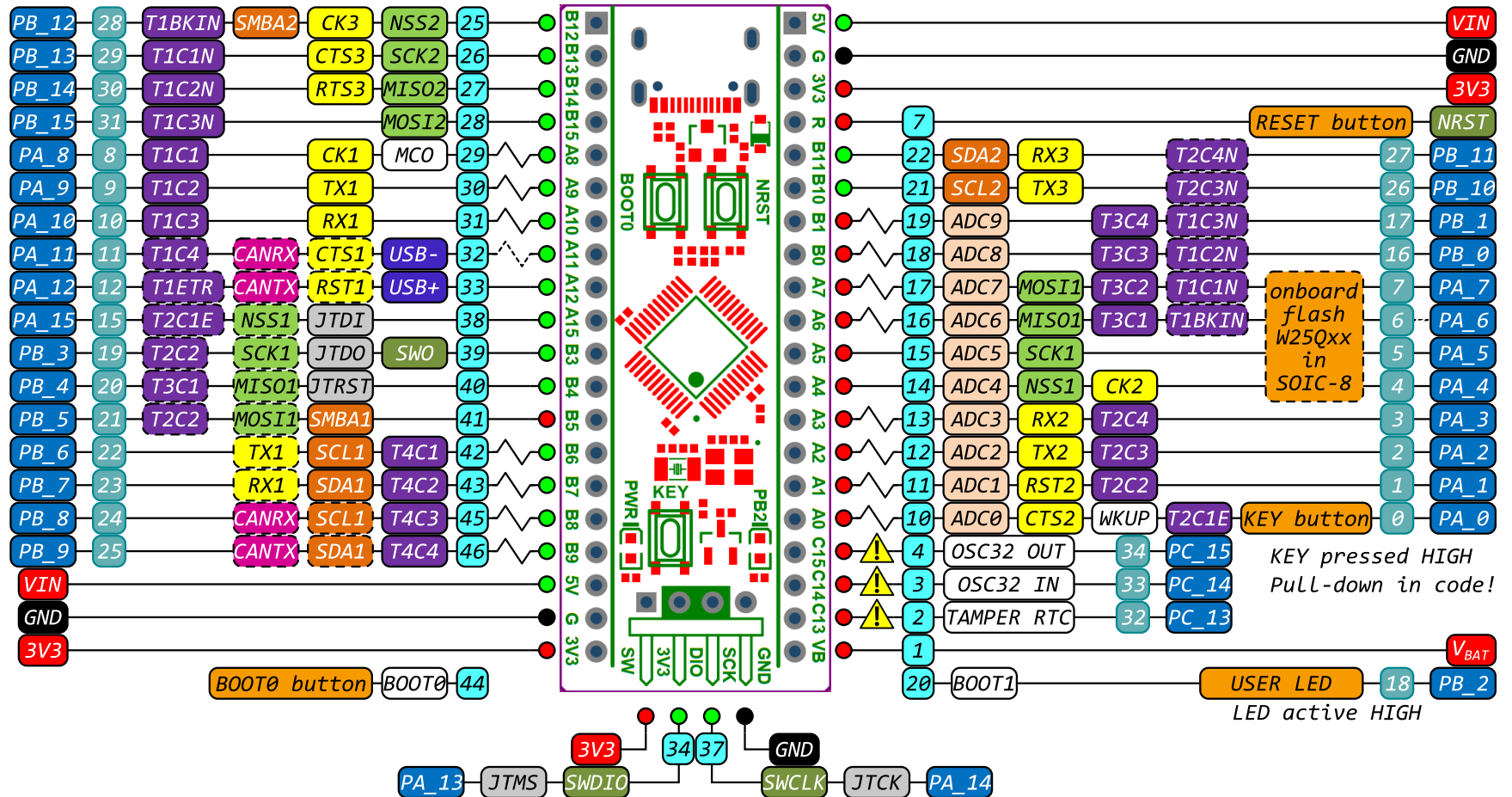PMW pin
- - - Alternative function

≤ 300mA source 3.3V
≤ 1A from USB (1N5819)
≤ 6V V$_{IN}$

Max 150 mA per MCU
Max ±20 mA per pin
±8 mA recommended

Left side pins

Arduino	Pin	Timer	Alt	Alt	Alt
PB_12	28	T1BKIN	SMBA2	CK3	NSS2	25
PB_13	29	T1C1N		CTS3	SCK2	26
PB_14	30	T1C2N		RTS3	MISO2	27
PB_15	31	T1C3N			MOSI2	28
PA_8	8	T1C1		CK1	MCO	29
PA_9	9	T1C2		TX1		30
PA_10	10	T1C3		RX1		31
PA_11	11	T1C4	CANRX	CTS1	USB-	32
PA_12	12	T1ETR	CANTX	RST1	USB+	33
PA_15	15	T2C1E	NSS1	JTDI		38
PB_3	19	T2C2	SCK1	JTDO	SWO	39
PB_4	20	T3C1	MISO1	JTRST		40
PB_5	21	T2C2	MOSI1	SMBA1		41
PB_6	22		TX1	SCL1	T4C1	42
PB_7	23		RX1	SDA1	T4C2	43
PB_8	24		CANRX	SCL1	T4C3	45
PB_9	25		CANTX	SDA1	T4C4	46
VIN						
GND						
3V3						

BOOT0 button — BOOT0 — 44

Right side pins

	Pin					Arduino
						VIN
						GND
						3V3
7				RESET button		NRST
22	SDA2	RX3	T2C4N		27	PB_11
21	SCL2	TX3	T2C3N		26	PB_10
19	ADC9		T3C4	T1C3N	17	PB_1
18	ADC8		T3C3	T1C2N	16	PB_0
17	ADC7	MOSI1	T3C2	T1C1N	7	PA_7
16	ADC6	MISO1	T3C1	T1BKIN	6	PA_6
15	ADC5	SCK1		onboard flash W25Qxx in SOIC-8	5	PA_5
14	ADC4	NSS1	CK2		4	PA_4
13	ADC3	RX2	T2C4		3	PA_3
12	ADC2	TX2	T2C3		2	PA_2
11	ADC1	RST2	T2C2		1	PA_1
10	ADC0	CTS2	WKUP	T2C1E	KEY button	0	PA_0
4	OSC32 OUT		34	PC_15		
3	OSC32 IN		33	PC_14		
2	TAMPER RTC		32	PC_13		
1						V$_{BAT}$
20	BOOT1		USER LED	18	PB_2

KEY pressed HIGH
Pull-down in code!

LED active HIGH

Bottom

PA_13 — JTMS — SWDIO — 3V3 — 34 — 37 — GND — SWCLK — JTCK — PA_14

Original artwork by Rasmus Friis Kjeldsen [http://reblag.dk/stm32/]
Re-created and modified by: Yehor Pererva

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