"Black" STM32F4VET6 Board Pinouts

Ver 3.0 – 14 May 2017 - RP — **Outside - Row "U" - LEFT J2 Connector (USB side) - Row "V" – Inside**

Special + USB	I2C	SPI	Serial	Analog	Timer PWM	Defined Fn / Special	Arduino Pin	Port	5v Tolerant	Header Row	5v Tolerant	Port	Arduino Pin	Defined Fn / Special	Timer PWM	Analog	Serial	SPI	I2C	Special + USB
								5V		1		5v								
								5V		2		5v								
								3.3v		3		3.3v								
								3.3v		4		3.3v								
								GND		5		GND								
							64	PE2	O	6	O	PE3	65							
							66	PE4	O	7	O	PE5	67		9.1					
						9.2	68	PE6	O	8	O	PC13	45							
				A10			32	PC0	O	9	O	PC1	33			A11				
	MISO2			A12			34	PC2	O	10	O	PC3	35			A13		MOSI2		
								VR-		11		VR+								
			TX4	A0	5.1		0	PA0	O	12	O	PA1	1		2.2	A1	RX4			
			TX2	A2	2.3		2	PA2	O	13	O	PA3	3		9.2, 2.4	A3	RX2			
		NSS1		A4, O1			4	PA4	O	14	O	PA5	5		2.1	A5, O2		SCK1		
		MISO1		A6	3.1, 3.1, 1.B	LED1	6	PA6	O	15	O	PA7	7	LED2	8.1N, 3.2	A7		MOSI1		
				A14			36	PC4	O	16	O	PC5	37			A15				
F_CS				A8	3.8, 8.2		16	PB0	O	17	O	PB1	17		3.4, 8.1N	A9				
					1.ET		69	PE7	O	18	O	PE8	70		1.1N					
					1.1		71	PE9	O	19	O	PE10	72		1.2N					
					1.2		73	PE11	O	20	O	PE12	74		1.3N					
					1.3		75	PE13	O	21	O	PE14	76		1.4					
					1.BK		77	PE15	O	22	O	PB10	26		2.3		TX3	SCK2	SCL2	
	SDA2		RX3		2.4		27	PB11	O	23	O	PB12	28		1.BK		CK3	NSS2	SMBA2	
HS_VBUS		SCK2	CTS3		1.1N		29	PB13	O	24	O	PB14	30	SPI3_CS_FLASH	1.2N, 12.1		RTS3	MISO2		

Inside - Row "S" – RIGHT J3 Connector SD Card side Row "T" – Outside

Special + USB	I2C	SPI	Serial	Analog	Timer PWM	Special	Arduino Pin	Port	5v Tolerant	Header Row	5v Tolerant	Port	Arduino Pin	Special	Timer PWM	Analog	Serial	SPI	I2C	Special + USB
								3.3v		1		3.3v								
								3.3v		2		3.3v								
								BT 0		3		PB2		BT1	Link to 3.3v/Gnd (default)					
								GND		4		GND								
								GND		5		GND								
							63	PE1	O	6	O	PE0	64		4.ET					
	SDA1	NSS2			4.4		25	PB9	O	7	O	PB8	24		4.3, 10.1				SCL1	
	SDA1		RX1		4.2		23	PB7	O	8	O	PB6	22		4.1		TX1		SCL1	
	SDA3, SMBA1	MOSI1, MOSI3					21	PB5	O	9	O	PB3	19	JTDO	2.2			SCK1, SCK3		
			CK2				53	PD7	O	10	O	PD6	52				RX2			
			TX2				51	PD5	O	11	O	PD4	50				RTS2			
			CTS2				49	PD3	O	12	O	PD2	48	SDCMD	3.ET		RX5			
							47	PD1	O	13	O	PD0	46							
	SD3	MOSI3	CK3, TX5			SDCK	44	PC12	O	14	O	PC11	43	SDD3			RX4, RX3	MISO3		
		SCK3	TX4, TX3			SDD2	42	PC10	O	15	O	PA15	41	JTDI	2.1ET			NSS1, NSS3		
FS DP			RTS1				12	PA12	O	16	O	PA11	11		1.4		CTS1			FS DM
		RX1			1.3		10	PA10	O	17	O	PA9	9	???	1.2		TX1		SMBA3	FS VB
FS SOF	SCL3		CK1		1.1		8	PA8	O	18	O	PC9	41	SDD1	3.4				SDA3	

CK6	8.3	SDD0	40	PC8	O	19	O	PC7	39		3.2		RX6
TX6	8.1, 3.1		38	PC6	O	20	O	PD15	61		4.4		
	4.3		60	PD14	O	21	O	PD13	59		4.2		
RTS3	4.1		58	PD12	O	22	O	PD11	57			CTS3	
CK3			56	PD10	O	23	O	PD9	55			RX3	
TX3			54	PD8	O	24	O	PB15	31	1.3N, 8.3N, 12.2		MOSI2	