

# "Black" STM32F4VET6 Board Pinouts

Ver 2.0 - 10 April 2017 - RP

## Row "U" - LEFT Connector (USB side) - Row "V"

USB	I2C	SPI	Serial	Analog	Timer PWM	Defined Fn / Special	Cube Black F407 v2	Port	5v Tolerant	Header Row	Port	Cube Black F407 v2	Defined Fn / Special	Timer PWM	Analog	Serial	SPI	I2C	USB
								5V		1		5v							
								5V		2		5v							
								3.3v		3		3.3v							
								3.3v		4		3.3v							
								GND		5		GND							
								37	PE 2	6		PE 3	0						
								38	PE 4	7		PE 5	1	9.1					
					9.2			39	PE 6	8		PC 13	2						
								40	PC 0	9		PC 1	3		A11				
		MISO2		A10				41	PC 2	10		PC 3	4		A13	MOSI2			
								VR-		11		VR+							
								42	PA 0	12		PA 1	5	2.2	A1	RX4			
								43	PA 2	13		PA 3	6	9.2, 2.4	A3	RX2			
								44	PA 4	14		PA 5	7	LED2	A5, A2		SCK1		
								45	PA 6	15		PA 7	8	8.1N, 3.2	A7		MOSI1		
								46	PC 4	16		PC 5	9		A15				
								47	PB 0	17		PB 1	10	3.4, 8.1N	A9				
								48	PE 7	18		PE 8	11	1.1N					
								49	PE 9	19		PE 10	12	1.2N					
								50	PE 11	20		PE 12	13	1.3N					
								51	PE 13	21		PE 14	14	1.4					
								52	PE 15	22		PB 10	15	2.3					
								53	PB 11	23		PB 12	16	1.BK					
								54	PB 13	24		PB 14	17	1.2N, 12.1					

## Row "S" - RIGHT Connector SD Card side Row "T"

USB	I2C	SPI	Serial	Analog	Timer PWM	Special	Cube Black F407 v2	Port	5v Tolerant	Header Row	Port	Cube Black F407 v2	Special	Timer PWM	Analog	Serial	SPI	I2C	USB
								3.3v		1		3.3v							
								3.3v		2		3.3v							
								BT 0		3		BT 1							
								GND		4		GND							
								GND		5		GND							
								18	PE 1	6		PE 0	55	4.ET					
								19	PB 9	7		PB 8	56	4.3, 10.1					
								20	PB 7	8		PB 6	57	4.1					
								21	PB 5	9		PB 3	58	JTDO					
								22	PD 7	10		PD 6	59						
								23	PD 5	11		PD 4	60						
								24	PD 3	12		PD 2	61	SDCMD					
								25	PD 1	13		PD 0	62						
								26	PC 12	14		PC 11	63	SDD3					
								27	PC 10	15		PA 15	64	JTDI					
								28	PA 12	16		PA 11	65						
								29	PA 10	17		PA 9	66	???					
								30	PA 8	18		PC 9	67	SDD1					
								31	PC 8	19		PC 7	68						
								32	PC 6	20		PD 15	69	4.4					
								33	PD 14	21		PD 13	70	4.2					
								34	PD 12	22		PD 11	71						
								35	PD 10	23		PD 9	72						
								36	PD 8	24		PB 15	73	1.3N, 8.3N, 12.2					

74    Total GPIOs

- 5v tolerant
- 5v tolerant except in ANALOG mode

LEDs		Mapped to Digital Pins (v2)	
D2 LED	PA6		D8
D3 LED	PA7		D45
Switches			
RST	NRST - IC Pin 14		
WK_UP	PA0	PULL DOWN	D42
K0	PE3	PULL UP	D38
K1	PE4	PULL UP	D0