

GPIO_LH					GPIO_RH				
	+3.3V	2	1	+3.3V		+3.3V	2	1	+3.3V
GPIO_02	PD4	4	3	PD5	GPIO_01	GND	4	3	GND
GPIO_04	PD6	6	5	PD7	GPIO_03	GPIO_08	PD3	6	5
	NC	8	7	NC		GPIO_10	PD2	8	7
GPIO_06	PD0	01	9	PC0	GPIO_05	GPIO_12	PC6	01	9
	GND	01	01	GND		GPIO_14	PC4	01	01
	GND	01	01	GND		GPIO_16	PC2	01	01

Prog				
swclk	2	1	rx	
swdio	4	3	tx	
gnd	6	5	tdo	
33V	8	7	tdi	
5V	01	9	rst	

Main characteristics	
Microcontroller	CH32V003-F4P6
Core / Arch.	RISC-V EC instruction set
Clock	Built-in 24 Mhz - PLL 48 Mhz
Power supply	3.3V and 5V
Flash	16k
SRAM	2k
GPIO	01
Output current	8 mA

Headers	Pin	Port	Function	Alternates	Wiring informations
GPIO_LH	1	+3.3V	Supply		From Header pin, prog port or derived from external Vs
	2	+3.3V	Supply		From Header pin, prog port or derived from external Vs
	3	PD5	UTX	A5/UTX/T2CH4_/URX_	Wired to prog and serial headers. Pin may be used if not conflicting.
	4	PD4	User	A7/UCK/T2CH1ETR/OPO/T1CH4ETR_	User pin available
	5	PD7	NRST	NRST/T2CH4/OPP1/UCK_	Reset (board and prog port). Pin may be used if not conflicting.
	6	PD6	URX	A6/URX/T2CH3_/UTX_	Wired to prog and serial headers. Pin may be used if not conflicting.
	7	NC	Not used		Header pin not wired
	8	NC	Not used		Header pin not wired
	9	PC0	User	T2CH3/UTX_/NSS_/T1CH3_	User pin available
	10	PD0	User	T1CH1N/OPN1/SDA_/UTX_	User pin available
	11	GND	Ground		
	12	GND	Ground		
	13	GND	Ground		
	14	GND	Ground		
GPIO_RH	1	+3.3V	Supply		From Header pin, prog port or derived from external Vs
	2	+3.3V	Supply		From Header pin, prog port or derived from external Vs
	3	GND	Ground		
	4	GND	Ground		
	5	PD1	Prog	SWIO/AETR2/T1CH3N/SCL_/URX_	SWDIO from Prog port. Pin may be used if not conflicting.
	6	PD3	User	A4/T2CH2/AETR/UCTS/T1CH4_	
	7	PC7	User	MISO/T1CH2_/T2CH2_/URTS_	
	8	PD2	User	A3/T1CH1/T2CH3_/T1CH2N	
	9	PC5	User	SCK/T1ETR/T2CH1ETR_/SCL_/UCK_/T1CH3_	
	10	PC6	User	MOSI/T1CH1CH3N_/UCTS_/SDA_	
	11	PC3	User	T1CH3/T1CH1N_/UCTS_	
	12	PC4	User	A2/T1CH4/MCO/T1CH1CH2N_	
	13	PC1	User	SDA/NSS/T2CH4_/T2CH1ETR_/T1BKIN_/URX_	
	14	PC2	User	SCL/URTS/T1BKIN/AETR_/T2CH2_/T1ETR_	
PROG	1	rx	Prog RX	PD6	USB / UART RX
	2	swclk	Not used		
	3	tx	Prog TX	PD5	USB / UART TX
	4	swdio	Prog DIO	PD1	Program Data Pin
	5	tdo	Not used		
	6	gnd	Prog		
	7	tdi	Not used		
	8	33V	Prog 3.3V		3.3V supply
	9	rst	Prog Reset	PD7	Reset pin
	10	5V	Prog 5V		5V supply (not used)