

HARDWARE EXTERNAL PINOUT

Initially OpenXHC project based on cheap stm32 dev board (stm32f103c8 but can be runned on other stm32f1xx with hardware USB FS), you can find it on eBay, Aliexpress and so on market price is about ~\$8 US and base goal was make it simple and cheap as possible as result it almost solderless !



PIN	TYPE	DESCRIPTION
USB INTERFACE		
PA12		USB DP
PA11		USB DM
LCD INTERFACE [SPI BASED/IO BASED]		
PA2	PP	LCD RESET
PA3	PP	LCD D/C
PA4	PP	LCD CS
PA5	AF PP	LCD CLOCK
PA6	INPUT	LCD MISO
PA7	AF PP	LCD MOSI
PB0	AF PP/PP	LCD LED PWM [TIM3_CH3]/[OPTIONAL]
QUADRATURE ENCODER INTERFACE		
PA0	INPUT PU	ENCODER A
PA1	INPUT PU	ENCODER B
PC13	INPUT PU	ENCODER BTN [OPTIONAL]
HARDWARE EMULATION SELECTOR		
PB2	INPUT PU	SELECT HD03/HB04 DEVICE [BOOT1]
MATRIX KEYBOARD 5x4		
PB5	INPUT PU	MATRIX KBD COL1
PB6	INPUT PU	MATRIX KBD COL2
PB7	INPUT PU	MATRIX KBD COL3
PB8	INPUT PU	MATRIX KBD COL4
PB9	INPUT PU	MATRIX KBD COL5
PB12	INPUT PU	MATRIX KBD ROW1

PB13	INPUT PU	MATRIX KBD ROW2
PB14	INPUT PU	MATRIX KBD ROW3
PB15	INPUT PU	MATRIX KBD ROW4
ROTARY SWITCH INTERFACE		
PA8	INPUT PU	ROTARY SWITCH POS 1
PA9	INPUT PU	ROTARY SWITCH POS 2
PA10	INPUT PU	ROTARY SWITCH POS 3
PB10	INPUT PU	ROTARY SWITCH POS 4
PB11	INPUT PU	ROTARY SWITCH POS 5
PB1	INPUT PU	ROTARY SWITCH POS 6