

[illegible]

# Mounting Holes

The diagram illustrates four mounting holes arranged horizontally. Each hole is represented by a large blue circle. Above each large circle is a label: MH1, MH2, MH3, and MH4. Inside each large circle is a smaller blue circle, and inside each of these smaller circles is the label MH.

2. change ferrite to 120R at 100mhz

## MCU & USB

pinout was made by stm32 cube IDE

The diagram illustrates the hardware connections for an STM32F103C8T6 microcontroller. Key components and their connections include:

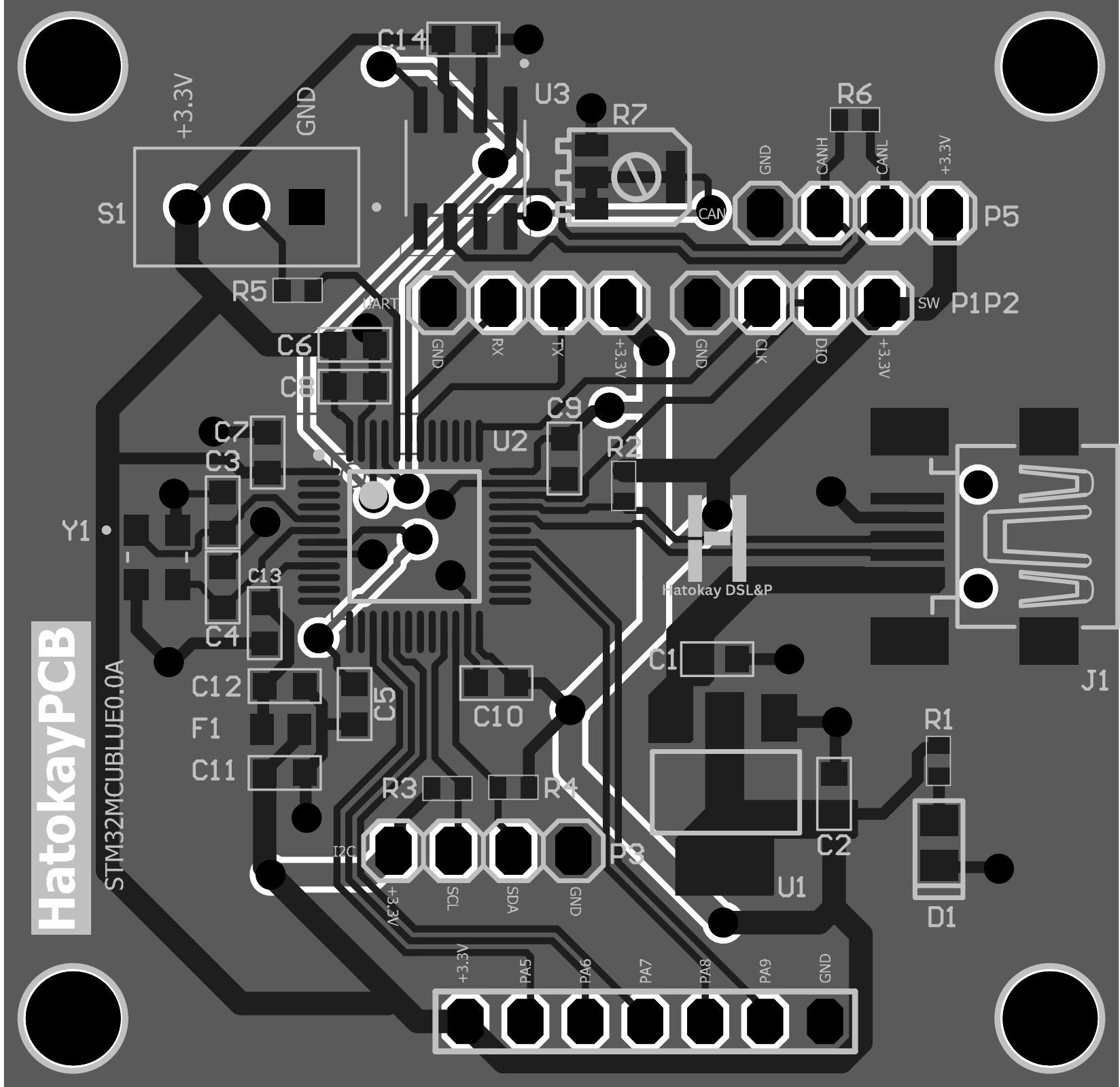
- MCU (U2):** STM32F103C8T6, with pins for power, ground, clock, and various peripherals.
- Power Regulation:** A 3.3V regulator (U1) is used to provide a stable power supply. Decoupling capacitors (C3, C4, C6-C10, C11-C13, C14) are placed at various points in the power distribution network.
- USB Interface:** A Mini\_USB connector (J1) is connected to the MCU via a USB-to-UART bridge (U2). The bridge handles the USB communication and provides a serial interface to the MCU.
- Clock Source:** A 16MHz crystal oscillator (Y1) provides the clock signal for the MCU.
- CAN Bus Interface:** A MAX30S1ESA-T transceiver (U3) is used to interface the MCU's CAN pins with a CAN controller (P5).
- Other Components:** A boot button (S1), a reset button (S2), and various passive components like resistors (R1-R7) and capacitors (C1-C14) are included for proper circuit operation.

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Title H-DSL&PSTM32MCU Board			
Size A3	Number STM32MCUBLUE0.0A	Revision 0.0A	
Date: 2/12/2024	Sheet of		
File: C:\Users\... \STM32MCUBLUE0.0A.SchDoc	Drawn By: Hatokav N		

# HatokayPCB

STM32MCBLUE0.0A



Comment	Description	Designator	Footprint	LibRef	Quantity
100uF	None polar capacitor	C1	MY_0603	Cap ceramic	1
10uF	None polar capacitor	C2, C6	MY_0603	Cap ceramic	2
10pF	None polar capacitor	C3, C4	MY_0603	Cap ceramic	2
100nF	None polar capacitor	C5, C7, C8, C9, C10	MY_0603	Cap ceramic	5
1uF	None polar capacitor	C11, C12	MY_0603	Cap ceramic	2
10nF	None polar capacitor	C13	MY_0603	Cap ceramic	1
0.1uF	None polar capacitor	C14	MY_0603	Cap ceramic	1
RED	Typical INFRARED GaAs LED	D1	MY_LED_0805	LED	1
220R		F1	0805	BLM21PG221SN1D	1
Mini_USB	USB 2.0, Right Angle, SMT, B Type, Receptacle, 5 Position, Black	J1	My_USB	Mini_USB	1
3mm Mounting Hole	3mm MH	MH1, MH2, MH3, MH4	3mm Mouning Hole	3mm Mounting Hole	4
Header 4	Header, 4-Pin	P1, P2, P3, P5	My_1X04	Header 4	4
Header 7	Header, 8-Pin, Dual row	P?	MY_FE07	Header 7	1
1K5	Standard resistor	R1, R2, R3, R4	MY_0402	Res	4
10K	Standard resistor	R5	MY_0402	Res	1
120R	Standard resistor	R6	MY_0402	Res	1
1K	Potentiometer	R7	My_Pot	Variable Resistor	1
ATE1D-2M3-10-Z	Toggle Switch SPDT Through Hole	S1	SW_ATE1D-2M3-10-Z	ATE1D-2M3-10-Z	1
LM1117-S/T-3.3	Low Drop Voltage Reg	U1	MY_SOT223	LM1117	1
STM32F103C8T6	STM32 ARM-based 32-bit MCU with 64 Kbytes Flash, 48-pin LQFP, Industrial Temperature	U2	LQFP48_N	STM32F103C8T6	1
MAX3051ESA+T	CAN 1Mbps Shutdown/Standby 3.3V 8-Pin SOIC N T/R	U3	SOIC127P600X175-8N	MAX3051ESA+T	1
16MHZ 10PF		Y1	XTAL_ABM8-16.000MHZ-10-1-U-T	ABM8-16.000MHZ-10-1-U-T	1