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The image shows a detailed PCB layout for an STM32G070C8T6 microcontroller. The layout is organized into several functional blocks:

- MCU:** The central component is the STM32G070C8T6 microcontroller. Its pins are connected to various peripherals:
 - PA0-PA15:** Connected to various pins of the microcontroller.
 - PA16-PA17:** Connected to the TX-EN and TX-OUT pins of the LED driver.
 - PA18-PA19:** Connected to the OSC_IN and OSC_OUT pins of the oscillator.
 - PA20-PA21:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA22-PA23:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA24-PA25:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA26-PA27:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA28-PA29:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA30-PA31:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA32-PA33:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA34-PA35:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA36-PA37:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA38-PA39:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA40-PA41:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA42-PA43:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA44-PA45:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA46-PA47:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA48-PA49:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA50-PA51:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA52-PA53:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA54-PA55:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA56-PA57:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA58-PA59:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA60-PA61:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA62-PA63:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA64-PA65:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA66-PA67:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA68-PA69:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA70-PA71:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA72-PA73:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA74-PA75:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA76-PA77:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA78-PA79:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA80-PA81:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA82-PA83:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA84-PA85:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA86-PA87:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA88-PA89:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA90-PA91:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA92-PA93:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA94-PA95:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA96-PA97:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
 - PA98-PA99:** Connected to the PFI-OSC_IN and PFI-OSC_OUT pins of the oscillator.
- LED:** A 3.3V supply is connected to an LED through a resistor (R12) and a diode (D1).
- BAT Monitor:** A battery (BAT) is connected to the MCU through a resistor (R19) and a diode (D1).
- Protective resistance:** A resistor network (R17, R18, R19) is connected to the MCU.
- Debug:** A debug header (P1) is connected to the MCU.

PORT

J2 HDR1X7X1.27MM

1 MISO
2 DIO1
3 MOSI
4 SCK
5 BUSY
6 RF-RESET
7 BIND

J3 HDR1X7X1.27MM

1 3.3V
2 GND
3 GND
4 NSS_CTS
5 TX-EN
6 RX-EN
7 GND

Interface

P2 1 CH1
2 CH2
3 CH3

P3 1 CH2
2 CH3
3 CH4

P4 1 CH3
2 CH4
3 CH5/NPD

P5 1 CH4
2 CH5/NPD
3 CH6/NPC

P6 1 CH5/NPD
2 CH6/NPC
3 EXT-VCC

P7 1 CH6/NPC
2 EXT-VCC
3 VCC-IN

P8 1 EXT-VCC
2 VCC-IN
3 GND

P9 1 CH7/NPB
2 VCC-IN
3 GND

P10 1 CH8/NPA
2 VCC-IN
3 GND

CH1 56pF
CH2 56pF
CH3 56pF
CH4 56pF
CH5/NPD 56pF
CH6/NPC 56pF
CH7/NPB 56pF
CH8/NPA 56pF

C6 C8 56pF
C9 56pF
C28 56pF
C10 56pF
C31 56pF
C35 56pF
C36 56pF

RN2

RN1 RN402_1/16W-200+5%

CH5/NPD 1
CH4 3
CH6/NPC 5
CH8/NPA 7

2
4
6
8

PWM5/NPD
PWM4
PWM6/NPC
PWM8/NPA

U4 FS-LOGO-N

Title: FGr8B

Drawing No: **Version:** V1.2

Drawn By: zhuanghaibo **Date:** 2020-04-23

Size: **Sheet:** 1/1

PORT

J2 HDR1X7X1.27MM

- MISO
- DIO1
- MOSI
- CLK
- BUSY
- RF-RESET
- BIND

J3 HDR1X7X1.27MM

- 3.3V
- GND
- NSS_CTS
- TX-EN
- RX-EN
- GND

Interface

P2

- CH1
- CH2
- CH3
- CH4

P3

- CH5/NPD
- CH6/NPC
- EXT-VCC

P4

- VCC-IN

P5

- CH7/NPB
- CH8/NPA

P6

- CH1
- CH2
- CH3
- CH4
- CH5/NPD
- CH6/NPC
- CH7/NPB
- CH8/NPA

P7

- CH1
- CH2
- CH3
- CH4
- CH5/NPD
- CH6/NPC
- CH7/NPB
- CH8/NPA

P8

- CH1
- CH2
- CH3
- CH4
- CH5/NPD
- CH6/NPC
- CH7/NPB
- CH8/NPA

P9

- CH1
- CH2
- CH3
- CH4
- CH5/NPD
- CH6/NPC
- CH7/NPB
- CH8/NPA

P10

- CH1
- CH2
- CH3
- CH4
- CH5/NPD
- CH6/NPC
- CH7/NPB
- CH8/NPA

C6

- CH1
- CH2
- CH3
- CH4
- CH5/NPD
- CH6/NPC
- CH7/NPB
- CH8/NPA

C7

- CH1
- CH2
- CH3
- CH4
- CH5/NPD
- CH6/NPC
- CH7/NPB
- CH8/NPA

C8

- CH1
- CH2
- CH3
- CH4
- CH5/NPD
- CH6/NPC
- CH7/NPB
- CH8/NPA

C9

- CH1
- CH2
- CH3
- CH4
- CH5/NPD
- CH6/NPC
- CH7/NPB
- CH8/NPA

C10

- CH1
- CH2
- CH3
- CH4
- CH5/NPD
- CH6/NPC
- CH7/NPB
- CH8/NPA

C11

- CH1
- CH2
- CH3
- CH4
- CH5/NPD
- CH6/NPC
- CH7/NPB
- CH8/NPA

C12

- CH1
- CH2
- CH3
- CH4
- CH5/NPD
- CH6/NPC
- CH7/NPB
- CH8/NPA

C13

- CH1
- CH2
- CH3
- CH4
- CH5/NPD
- CH6/NPC
- CH7/NPB
- CH8/NPA

C14

- CH1
- CH2
- CH3
- CH4
- CH5/NPD
- CH6/NPC
- CH7/NPB
- CH8/NPA

C15

- CH1
- CH2
- CH3
- CH4
- CH5/NPD
- CH6/NPC
- CH7/NPB
- CH8/NPA

C16

- CH1
- CH2
- CH3
- CH4
- CH5/NPD
- CH6/NPC
- CH7/NPB
- CH8/NPA

RN1

RN2

RN3

RN4

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