Microcontroller

U1
STM32F030F4P6

+3V3

- BT0 — 1 BOOT0
- PF0 — 2 PF0-OSC_IN(PF0)
- PF1 — 3 PF1-OSC_OUT(PF1)
- RST — 4 NRST
- 5 VDDA

- PA0 — 6 PA0
- PA1 — 7 PA1
- PA2 — 8 PA2
- PA3 — 9 PA3
- PA4 — 10 PA4

- 20 PA14(SWCLK) — PA14
- 19 PA13(SWDIO) — PA13
- 18 PA10 — PA10
- 17 PA9 — PA9
- 16 VDD
- 15 VSS
- 14 PB1 — PB1
- 13 PA7 — PA7
- 12 PA6 — PA6
- 11 PA5 — PA5

+3V3   +3V3

C1 100n   C2 10u

GND   GND   GND

Breakout Header

H1 H2

+3V3

- BT0 — 1   10
- PF0 — 2   9
- PF1 — 3   8
- RST — 4   7
- PA0 — 5   6
- PA1 — 6   5
- PA2 — 7   4
- PA3 — 8   3
- PA4 — 9   2
-       10   1

- PA14
- PA13
- PA10
- PA9
- PB1
- PA7
- PA6
- PA5

GND   GND

MicroUSB Port

USB1
Micro Input

+5V

- VCC — 1
- D- — 2
- D+ — 3
- ID — 4
- GND — 5
- EH — 6

DM
DP

GND

Voltage Regulator

U2
AP2112K-3.3TRG1

+5V   +3V3

- 1 VIN   VOUT 5
- 2 GND
- 3 EN   NC 4

C3 1u   C4 1u

GND   GND   GND

LEDs and Buttons

+3V3   +3V3   +3V3   +3V3

LED1 PWR   LED2 PB1   SW2 BOOT0   R3 10k

R1 1k   R2 1k   BT0   RST

            PB1   R4 10k   SW1 RST

GND   GND   GND   GND

USB to Serial Converter IC

U3
CH340E

+3V3   +3V3

- DP — 1 UDP   V3 10
- DM — 2 UDM   RXD 9
-      3 GND   TXD 8
-      4 RTS#   VCC 7
-      5 CTS#   TNW 6

R5 1k   PA9 PA10

C5 100n

GND   GND

Programming Header

+3V3

H3
PROG

- 1
- PA13 — 2
- PA14 — 3
- 4

GND

open source hardware
CC-BY-SA

嘉立创EDA

TITLE: STM32F030 F4P6 Development Board	REV: 1.0
Company: wagiminator	Sheet: 1/1
Date: 2023-10-13 Drawn By: Stefan Wagner	