WeAct Studio USB-C STM32F4x1Cx v2.0+ Connector Legend NSS₂ SCK3 **Pinout Diagram** T1_BKIN SMBA2 PB12 25 **POWER** NSS4 (F411) GND (23) SCK4 T1_CH1N SCK₂ PB13 26 **GROUND** (F411) ▥ **3V3** EXT_SD2 T2_CH2N MISO₂ SD_D6 PB14 27 **CPU PIN** (24)RTC_50Hz T1 CH3N MOSI2 SD_CK PB15 28 21 PB10 SCL₂ SD_D7 SCK2 T2_CH3 PIN NAME RTC REFIN **USB** A8 SD_D1 T1_CH1 CK1 SCL3 PA8 29 20 PB2 **BOOT1** CONTROL FS_SOF USB/OTG NSS5 T1_CH3N T1_CH2 SD_D2 TX1 SMBA3 PA9 19 PB1 ANALOG 30 ADC9 6 FS_VBUS (F411) T3_CH4 SCK5 T1 CH2N MOSI5 TIMER & USB FS_ID T1_CH3 RX1 PA10 31 10 PB0 ADC8 (F411) (F411) T3_CH3 **CHANNEL USB FS** MISO4 T1_CH1N CTS1 T1_CH4 PA11 32 17 PA7 ADC7 MOSI1 **USART** DM(-) (F411) TX6 T3_CH2 MISO5 RTS1 T1_BKIN **USB FS** T1_ETR PA12 33 16 PA6 ADC₆ MISO1 SPI / I2S (F411) **DP(+)** RX6 CMD T3_CH1 T2_CH1 NSS1 TX1 A15 T2_CH1 SDIO JTDI PA15 38 15 PA₅ ADC5 SCK1 NSS3 T2_ET T2_ETR (F411) (F411 Only) SCK1 RX1 NSS1 ВЗ JTDO-SWO T2_CH2 SDA2 PB3 39 14 PA4 ADC4 CK2 I2C SCK3 (F411) NSS3 T2_CH4 MISO1 **JTRST** T3_CH1 SD_D0 SDA3 PB4 40 13 PA3 ADC₃ RX2 T5_CH4 **CAN BUS** MISO3 T9 CH2 T2 CH3 MOSI1 SD D3 12 PA2 T3_CH2 SMBA1 PB5 41 ADC₂ TX2 T5 CH3 USB MOSI3 T9 CH1 MOSI4 T2_CH2 42 PA1 T4_CH1 TX1 SCL1 PB6 ADC1 RTS2 MISC (F411) T5 CH2 T2_CH1 BOARD SD_D0 T4_CH2 RX1 SDA1 PB7 43 10 PA0 ADC0 CTS2 WKUP1 T2 ET **HARDWARE** T5 CH1 **T4 CH3** MOSI5 SCL1 ← 5V → SD_D4 PB8 45 NRST T10_CH1 (F411) (SDA3) Tolerant T4_CH4 SDA1 OSC32 ← 3.3V → NSS2 SD_D5 PB9 46 PC15 T11 CH1 (SDA2) OUT (F411) |5C OSC32 F PWM ❤ PC14 IN Notes: Pin RTC AMP GND LED TIM6 & 7 are only used by 2 PC13 RTC_OUT RTC_TS G (47) DAC and don't have any pins **BLUE** All pins are 5V tolerant on F401 **VBAT** Pins 10 and 41 on F411 are 3.3V only. 34 37 **GND** 29 MCO1 PA13 PA14

JTMS /

SWDIO

JTCK /

SWCLK

Updated: 2020-03-16 Richard Balint