## Blockdiagramm STM32 Nucleo Training Base-Shield M3 V3.3 suitable for Pinout of L152RE or F103RB HC-SR04 RCW-0001 Å ۰،0 PC 1 trig 10 PC\_0-GND PC\_00 PC\_02 PC\_04 PC\_06 PC\_08 PC\_10 PC\_12 PC\_14 PC\_01 PC\_03 PC\_05 PC\_07 PC\_09 PC\_11 PC\_13 PC\_15 <u>\_\_\_\_</u> **€** 3V3 PC 0 **C** B7 PC 1 **€** B6 C0 ( ) C4 **⊂** B6 20 В7 C1 ( ) C5 PC 2 Grove Connector GND C2 ( ) C6 PC 3 5V GND **C3V3** сз 🔾 Ст PC 4 **€** GND SND O GND StemmaQT **€** 3V3 PC 5 3V3 O 3V3 Connector DC Connectors 20Pin (male) PB\_00 PB\_02 PB\_04 PB\_06 PB\_01 PB 03 В9 PC 6 **€** B8 PMOD 12 Pin PB\_05 PB\_07 PC\_7 В9 Grove Connector 20 PB\_08 PB\_09 PA\_8 PA\_6 $PA_7$ PB\_09 PB\_11 PB\_13 PB\_15 5V PC\_8 GND PB\_10 PB\_12 **€3**V3 GND PB\_14 C3V3 PC\_10 StemmaQT GND GND Connector **€**B11 PC\_11 **€** B10 PA\_00 PA\_02 PA\_04 PA\_01 PA\_03 PA\_05 ← B10 PC\_12 **€** B11 **Grove Connector** PC13 PA\_05 PA\_07 PA\_09 PA\_11 PA\_13 PA\_15 PA\_06 PA\_08 Normally High GND Nucleo 20 OnBoard on PC\_14 OSC32\_OUT 32.768 kHz **€3**V3 PA\_10 PA\_12 PC 15 StemmaQT 3V3 GND 5V Connector Logic-Analyzer PB\_0 B3 B4 **B**4 PB 1 R7 Α4 荊 C8 C7 WIFI-ESP-01 PB 2 GND 뼦 1<u>5</u>[ V RxD PB\_10 PB 3 **NUCLEO** PB\_11 UART3\_RX PB 4 **L152RE** PB\_12 PB 5 **F130RB** PB\_13 CH PD PB 6 LM75B € FSP-12S PB\_14 GPI00 OSOYOO ESP8266 Wi-Fi Module PB 7 I²C compatible to Bluetooth Slot PB\_15 GPIO1 PB 8 RST - PA 7 2.4 GH: BT-HC-05 PB\_9 PB 10 E Rx -PB\_10 PB\_10 E Tx PB 11 -PB\_11 GND GND PB\_12 PB\_12 vcc 5V PB\_13 State PB 12 Kev Frequency Generator switchable I<sup>2</sup>C pull-up resistors PA\_1 **─**₩ f = 4...654 Hz UART TX PA2→ тмрз6 🌡 Indikator LED Analog PA 5 **(A7** PA 6 I<sup>2</sup>C-OLED OnBoard **(5**V Display PA 7 SSD1306 GND SH1106 - 1.3" PA 8 S-SCL SCL SDA PB 9 Servo PB\_8 S-SDA PB\_9 PA 10 PA\_11 S-SDA PA\_12 PA 12 SDA Display - PCF 8574 didactic onboard elements PH\_0/PD\_0 PH\_1/PD\_1 M.Schreger - 7/4/2025