1W FM TRX DRA818V Power Supply SMA-Con. & LC-LP 1W FM Module VCC VCC VCC VCC VCC DRA818V-RX D1 C3 1N4004 🛡 U1 100nF R6 18 2k L LED1 MIC-IN MIC_IN VBAT fc = 150MHz ≴^V red C8 VBUS1 D-1 D+1 D+1 ID1 GND1 C1 C2 X1 PTT-OUT PTT RXD 17 PD TXD DRA818V-TX 100nF ANT) 10uF 100nF SQ RX-LED 60nH R7 3 R1 RF-OUT DRA818V-AF H/L H/L AF_OUT C6 C7 4.7k 470R 1W @ 50R 22pF 22pF 9*2 ANT ANT GND DRA818V GND GND RX-LED GND GND GND GND GND GND GND 60mA @ RX-Mode 550mA @ Low Power TX-Mode 750mA @ High Power TX-Mode AF-OUT C4 Never use Arduino USB & Micro USB! DRA818V-AF PTT-OUT Arduino Nano uC 100nF PTT-OUT U2 VCC 000 GND GND TX1 DRA818V-RX VIN 000 17 14 DRA818V-TX RX0 GND 18 19 ICSP O_{12}^{13} RESET RESET HC-05 & OLED Display MIC. & Speaker Con. GND 5V 20 11 D2 Α7 VCC C5 21 10 9 VCC VCC VCC PTT-IN D3 A6 HC05-RX A5 SCL SDA 100nF 8 RESET A4 7 6 R3 BUTTON А3 D6 R2 25 2k EN D7 PTT-OUT A2 MIC-IN 10R SCL 26 27 5 4 GND (E1 PD H/L D8 A1 C9 Mini-B PTT-IN D9 Α0 28 HC05-TX USB 100nF _{R4} 3.5mm HC05-TX D10 C10 29 HC05-RX D11 3V3 STATE 1 4.7k D12 D13 100nF AF-OUT HC-05 Arduino Nano GND GND GND GND GND GND GND $2.5 \, \text{mm}$ GND Rotary Encoder + Switch SW1 SW1ENCODER ¬ SW1SW TITLE: 1W FM TRX DRA818V -⊐ EC11E EC11E **Document Number:** REV: GND **GND** Date: 24/06/2020 17:51 Sheet: 1/1