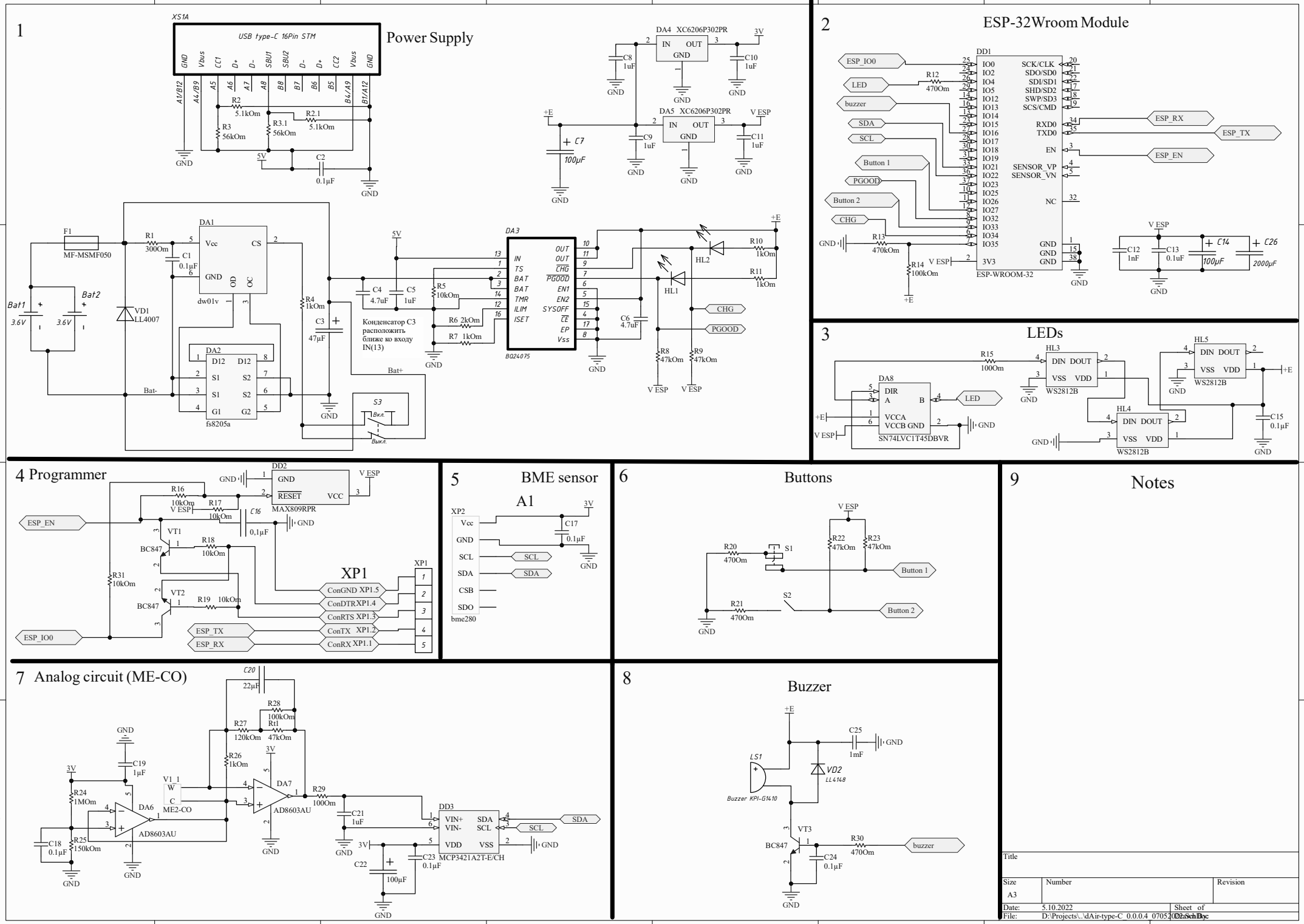
1
Power Supply
XS1A
USB type-C 16Pin STM
GND Vbus CC1 D+ D- SBU1 SBU2 D- D+ CC2 Vbus GND
A1/B12 A4/B9 A5 A6 A7 A8 B8 B7 B6 B5 B4/A9 B1/A12
R2 5.1kOm
R2.1 5.1kOm
R3 56kOm
R3.1 56kOm
C2 0.1µF
5V
GND
DA4 XC6206P302PR
IN OUT GND
3V
C8 1uF
C10 1uF
DA5 XC6206P302PR
V ESP
C9 1uF
C11 1uF
+E
C7 100µF
F1 MF-MSMF050
R1 300Om
C1 0.1µF
DA1
Vcc CS GND OD OC
dw01v
Bat1 3.6V
Bat2 3.6V
VD1 LL4007
R4 1kOm
C3 47µF
DA2
D12 D12 S1 S1 G1 S2 S2 G2
fs8205a
Bat-
Bat+
S3
Вкл.
Выкл.
C4 4.7uF
C5 1uF
R5 10kOm
R6 2kOm
R7 1kOm
Конденсатор C3 расположить ближе ко входу IN(13)
DA3
IN TS BAT BAT TMR ILIM ISET
OUT OUT CHG PGOOD EN1 EN2 SYSOFF CE EP Vss
B024075
C6 4.7uF
HL1
HL2
R10 1kOm
R11 1kOm
CHG
PGOOD
R8 47kOm
R9 47kOm
2
ESP-32Wroom Module
DD1
ESP_IO0
LED
buzzer
SDA
SCL
Button 1
PGOOD
Button 2
CHG
R12 470Om
R13 470kOm
R14 100kOm
IO0 IO2 IO4 IO5 IO12 IO13 IO14 IO15 IO16 IO17 IO18 IO19 IO21 IO22 IO23 IO25 IO26 IO27 IO32 IO33 IO34 IO35 3V3
SCK/CLK SDO/SD0 SDI/SD1 SHD/SD2 SWP/SD3 SCS/CMD
RXD0 TXD0 EN SENSOR_VP SENSOR_VN NC GND GND GND
ESP_RX
ESP_TX
ESP_EN
ESP-WROOM-32
C12 1nF
C13 0.1uF
C14 100µF
C26 2000µF
3
LEDs
R15 100Om
DA8
DIR A B VCCA VCCB GND
SN74LVC1T45DBVR
LED
HL3
HL4
HL5
DIN DOUT VSS VDD
WS2812B
C15 0.1µF
4 Programmer
DD2
GND RESET VCC
MAX809RPR
R16 10kOm
R17 10kOm
C16 0,1µF
ESP_EN
VT1 BC847
R18 10kOm
R31 10kOm
VT2 BC847
R19 10kOm
ESP_IO0
ESP_TX
ESP_RX
XP1
ConGND XP1.5
ConDTR XP1.4
ConRTS XP1.3
ConTX XP1.2
ConRX XP1.1
5 BME sensor
A1
XP2
Vcc GND SCL SDA CSB SDO
bme280
C17 0.1µF
6 Buttons
R20 470Om
R21 470Om
R22 47kOm
R23 47kOm
S1
S2
Button 1
Button 2
9 Notes
7 Analog circuit (ME-CO)
C20 22µF
R28 100kOm
R27 120kOm
Rt1 47kOm
R26 1kOm
C19 1µF
R24 1MOm
R25 150kOm
C18 0.1µF
DA6 AD8603AU
DA7 AD8603AU
V1 W C ME2-CO
R29 100Om
C21 1uF
C22 100µF
C23 0.1µF
DD3 MCP3421A2T-E/CH
VIN+ VIN- VDD SDA SCL VSS
8 Buzzer
LS1 Buzzer KPI-G1410
C25 1mF
VD2 LL4148
VT3 BC847
R30 470Om
C24 0.1µF
Title
Size A3
Number
Revision
Date: 5.10.2022
Sheet of
File: D:\Projects\..\dAir-type-C_0.0.0.4_07052022.SchDoc