

A

B

C

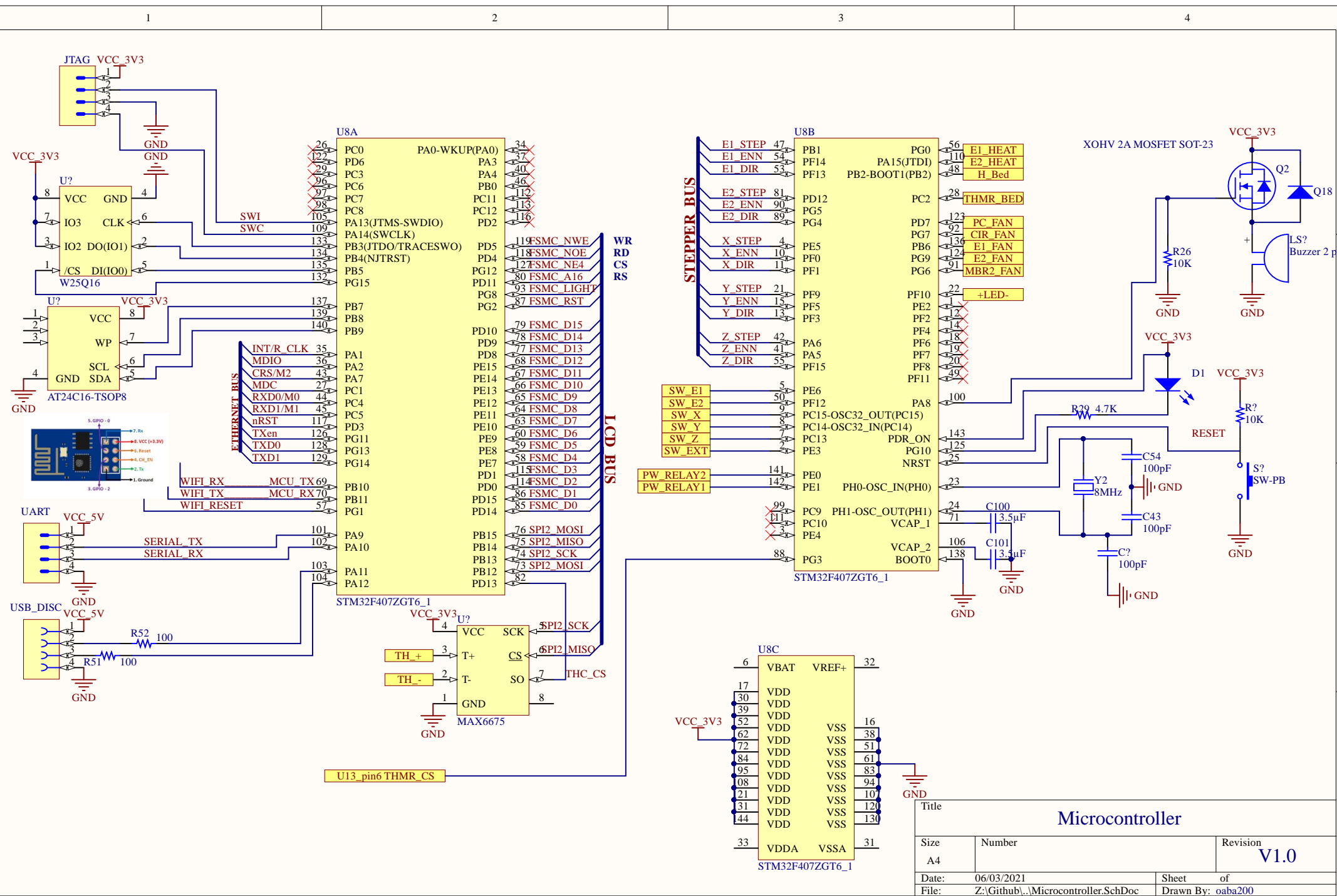
D

A

B

C

D



| Title | | |
|-----------------|--------------------------------------|-------------------|
| Microcontroller | | |
| Size | Number | Revision |
| A4 | | V1.0 |
| Date: | 06/03/2021 | Sheet of |
| File: | Z:\Github\...\Microcontroller.SchDoc | Drawn By: oaba200 |

| Comment | Description | Designator | Footprint | LibRef | Quantity |
|----------------------------------|---|--|--|---|----------|
| Heated Bed | | | | Heater coil | 1 |
| S8050 | | | SOT23 | S8050 | 1 |
| =Family | Connector 2 Male, Connector 4 Male, Connector 2 Female, Connector 40 Female, Connector 40 Male, Connector 4 Female, Connector 8 Female, Connector 8 Male | +LED-, BED, C,FAN, E-, E2_FAN, E2_Heater, EXT=, HOT_BED, J7, JP2, JP35, JTAG, MBR2,FAN, U3, UART, USB_DISC, X- -, Y-, Z- | | Connector 2 Male, Connector 4 Male, Connector 2 Female, Connector 40 Female, Connector 40 Male, Connector 4 Female, Connector 8 Female, Connector 8 Male | 29 |
| Cap Pol3 | Polarized Capacitor (Surface Mount) | C10, C99 | C0805 | Cap Pol3 | 2 |
| 1nF /2000V/10%/X7R/C1 206 | | C7 | C_1206_5MIL_DWS_ISO | C | 1 |
| 2.2uF /6.3V/10%/X5R/C0 603 | | C7 | C_0603_5MIL_DWS | C | 1 |
| 10uF /6.3V/20%/X5R/C0 603 | | C7 | C_0603_5MIL_DWS | C | 1 |
| 22uF /6.3V/20%/X5R/C0 603 | | C7 | C_0603_5MIL_DWS | C | 3 |
| 100nF /50V/20%/V5V/C0 603 | | C7 | C_0603_5MIL_DWS | C | 5 |
| NA(1nF /2000V/10%/X7R /C1206) | | C7 | C_1206_5MIL_DWS_ISO | C | 1 |
| Cap Semi | Capacitor (Semiconductor SIM Model) | C7, C1, C18, C43, C54, C100, C101 | C1206 | Cap Semi | 10 |
| LED3 | Typical BLUE SMC LED | D7, D1 | 3.5X2.8X1.9 | LED3 | 2 |
| Diode 1N4148 | High Conductance Fast Diode | D7, Q18 | DO-35 | Diode 1N4148 | 3 |
| FB0805/600R/2A | | L7 | L_0805_5MIL_DWS | L | 1 |
| RJLBC- 060TC1(LPJ4013EDNL) | | LAN7 | RJLBC-060TC1 | RJLBC-060TC1_GND | 1 |
| Buzzer 2 pin | | LS7 | | Buzzer 2 pin | 1 |
| Opened | | PHY_RST7 | SJ | SJ | 1 |
| XOHV 2A MOSFET SOT- 23 | | Q2 | | XOHV 2A MOSFET SOT- 23 | 1 |
| WSF40N06 | N-Ch MOSFET 40V 220A | Q4, Q15 | TO263 | WSK220N04 | 2 |
| XOHV 2A | N-Channel JFET | Q8 | TO-254-AA | JFET-N | 1 |
| ? | N-Ch MOSFET 40V 220A | Q13, Q17 | TO263 | WSK220N04 | 2 |
| 1k | RES SMD 10K OHM 5% 1/10W 0402 | R3 | SMD-0402-RES | ERJ-2GEJ103X | 1 |
| 0 | SMT Resistor | R6 | RES 0805_2012 | Resistor | 1 |
| 0.1 | RES SMD 0.11 OHM 1% 1/6W 0402 | R15, Rr69 | SMD-0402-RES | ERJ-2BSFR11X | 2 |
| 510 | SMT Resistor | R24 | RES 0805_2012 | Resistor | 1 |
| 1K | SMT Resistor | R39, R40 | | Resistor | 2 |
| 100 | SMT Resistor | R51, R52 | RES 0805_2012 | Resistor | 2 |
| 10k | RES SMD 10K OHM 5% 1/10W 0402, RES SMD 20K OHM 5% 1/10W 0402 | R65, R117 | SMD-0402-RES | ERJ-2GEJ103X, ERJ- 2GEJ203X | 2 |
| 0R(board_mounted) | | R7 | 0R_0603 | R | 1 |
| 2.2k/R0603 | | R7 | R_0603_5MIL_DWS | R | 1 |
| 10k/R0603 | | R7 | R_0603_5MIL_DWS | R | 1 |
| 12.1k/1%/R0603 | | R7 | R_0603_5MIL_DWS | R | 1 |
| 49.9R/1%/R0603 | | R7 | R_0603_5MIL_DWS | R | 4 |
| 220R/R0603 | | R7 | R_0603_5MIL_DWS | R | 3 |
| =VALUE | SMT Resistor | R7 | RES 0805_2012 | Resistor | 2 |
| NA(R0603) | | R7 | R_0603_5MIL_DWS | R | 1 |
| 10K | SMT Resistor | R7, R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R16, R18, R25, R26, R27, R31, R32, R34, R42, R48, R49, R50, R100, RN1/3 | RES 0805_2012 | Resistor | 34 |
| 4.7K | SMT Resistor | R7, R29, R43 | RES 0805_2012 | Resistor | 3 |
| RA1206_(4X0603)_4B8_4 7k | | RM7 | R_MATRIX_4 | RA1206_(4x0603)_4B8_5 mashed | 4 |
| SW-PB | Switch | S7 | SPST-2 | SW-PB | 1 |
| SW-SPDT | SPDT Subminiature Toggle Switch, Right Angle Mounting, Vertical Actuation | S7 | TL36WW15050 | SW-SPDT | 1 |
| STM32F407ZGT6_1 | V2 ARM Cortex-M4 32- bit MCU+FPU, 210 DMIPS, 1024 kB Flash, 192 kB Internal RAM, 114 uOs, 144-pin LQFP, 40 to 85 degC, Tray | U8 | STM-LOFP144_N | STM32F407ZGT6_1 | 1 |
| NOT installed | | U13 | SOIC8 | MAX6675 | 1 |
| AT24C16-TSOP8 | 1Kbit (128 x 8), 2-wire Bus Automotive Serial EEPROM with Write Protect, 2.5V, 8-Pin TSSOP, Bulk | U7 | 8A2_N | AT24C16-TSOP8 | 1 |
| LAN8720 | | U7 | QFN32_EP(33)_5.00x5.00 x0.90mm_Pitch_0.50mm | LAN8720 | 1 |
| MAX6675 | | U7 | SOIC8 | MAX6675 | 1 |
| TMC2208-LA | | U7 | | TMC2208-LA | 1 |
| W25Q16 | FLASH - NOR Memory IC 16Mb _2M x 8, SPI 104MHz 8-SOIC | U7 | SOIC8 | W25Q16 | 1 |
| 8MHz | SMT Crystal | Y2 | | Abracon Crystal ABS06 | 1 |
| WSK220N04 | N-Ch MOSFET 40V 220A | [NoValue], Q7, Q3, Q5, Q11 | TO263 | WSK220N04 | 5 |