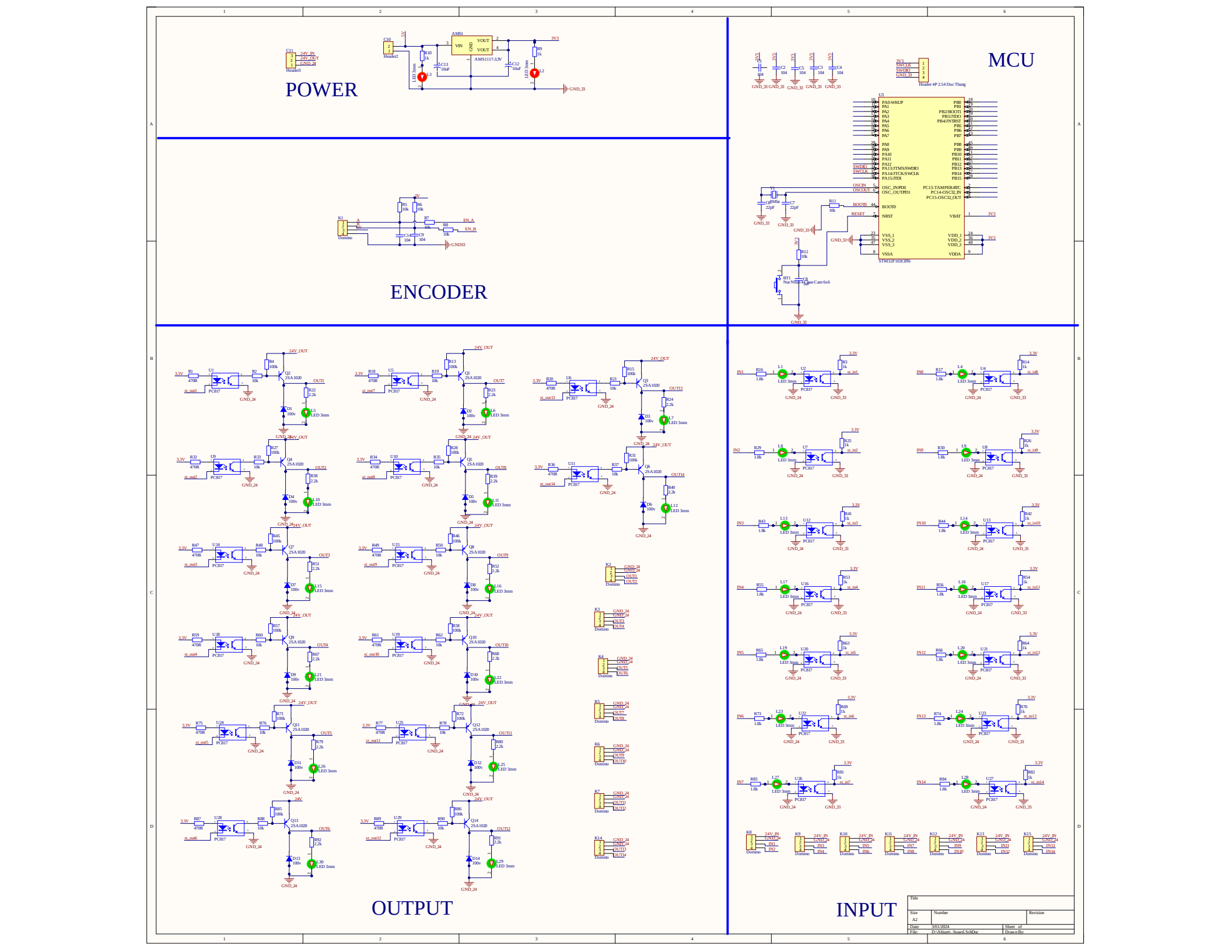
POWER
ENCODER
MCU
OUTPUT
INPUT
24V_IN
24V_OUT
GND_24
3V3
GND_33
AMS1
AMS1117-3.3V
VIN
VOUT
GND
STM32F103C8T6
Header3
Header2
Header 4P 2.54 Duc Thang
Domino
Title
Size
A2
Number
Revision
Date: 3/01/2024
Sheet of
File: D:\Altium\...board.SchDoc
Drawn By:

| Comment | Description | Designator | Footprint | LibRef | Quantity |
|---|---|---|---|---|---|
| AMS1117-3.3V | Dán | AMS1 | SOT223 | AMS1117 SMD | 1 |
| Nut Nhan 4 Chan Cam 6x6 | Nut Nhan 4 Chan 6x6mm | BT1 | Nut Nhan 4 Chan Cam 6x6 | Nut Nhan 4 Chan Cam 6x6 | 1 |
| 104 | Cắm | C1, C2, C3, C4, C5, C9, C14 | tu gom | Tu gom 104 50V | 7 |
| 22pF | Cắm | C6, C7 | tu gom | Tu gom 22pF 50V | 2 |
| 1uF | Cắm | C8 | tu tantalum dip5.08 | Tu tantalum 1uF DIP5.08 | 1 |
| Header2 | Header IDC, 2 x 1 Pin Vertical 2.54mm Pitch (Non-Boxed, Male) | C10 | HDR2 | Header2 | 1 |
| Header3 | Header IDC, 3 x 1 Pin Vertical 2.54mm Pitch (Non-Boxed, Male) | C11 | HDR3 | Header3 | 1 |
| 10uF | Cắm | C12, C13 | tu hoa 4mm | Tu Hoa 10uF 25V 4x7 | 2 |
| 100v | Cắm | D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14 | DIODE 1A | Diode 1N4007 | 14 |
| Header 4P 2.54 Duc Thang | Cắm | H1 | XH2.54M-4 | Header 4P 2.54 Duc Thang | 1 |
| Domino | Domino | K1, K2, K3, K4, K5, K6, K7, K8, K9, K10, K11, K12, K13, K14, K15 | KF128HL_2P | KF128HL_2P | 15 |
| LED 3mm | Cắm | L1, L4, L5, L6, L7, L8, L9, L10, L11, L12, L13, L14, L15, L16, L17, L18, L19, L20, L21, L22, L23, L24, L25, L26, L27, L28, L29, L30 | LED-3MM-GREEN | LED 3mm Xanh La | 28 |
| LED 3mm | Cắm | L2, L3 | LED-3MM-RED | LED 3mm Do | 2 |
| 2SA1020 | PNP 600mW, ECB | Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14 | TO92-123 | 2SA1015 | 14 |
| 470R | Cắm | R1, R18, R20, R32, R34, R36, R47, R49, R59, R61, R75, R77, R87, R89 | tro vach 1/4w | Tro Vach 1/4W 5% 470R | 14 |
| 10k | Căm, Cắm | R2, R7, R8, R11, R12, R19, R21, R33, R35, R37, R48, R50, R60, R62, R76, R78, R88, R90 | tro vach 1/4w | Tro Vach 1/4W 5% 10k, Tro Vach 1/4W 1% 10k | 18 |
| 1k | Cắm | R3, R9, R10, R14, R25, R26, R41, R42, R53, R54, R63, R64, R69, R70, R81, R82 | tro vach 1/4w | Tro Vach 1/4W 5% 1k | 16 |
| 100k | Dán | R4 | tro smd 0805 | Tro 0805 1% 10k | 1 |
| 10k | Dán | R5, R6 | tro smd 0805 | Tro 0805 1% 10k | 2 |
| 100k | Cắm | R13, R15, R27, R28, R31, R45, R46, R57, R58, R71, R72, R85, R86 | tro vach 1/4w | Tro Vach 1/4W 5% 100k | 13 |
| 1.8k | Cắm | R16, R17, R29, R30, R43, R44, R55, R56, R65, R66, R73, R74, R83, R84 | tro vach 1/4w | Tro Vach 1/4W 5% 1.8k | 14 |
| 2.2k | Cắm | R22, R23, R24, R38, R39, R40, R51, R52, R67, R68, R79, R80, R91, R92 | tro vach 1/4w | Tro Vach 1/4W 5% 2.2k | 14 |
| PC817 | Single Opto | U1, U2, U4, U5, U6, U7, U8, U9, U10, U11, U12, U13, U14, U15, U16, U17, U18, U19, U20, U21, U22, U23, U24, U25, U26, U27, U28, U29 | DIP4 | PC817 | 28 |
| STM32F103C8T6 | STM32 ARM-based 32-bit MCU with 64 Kbytes Flash, 48-pin LQFP, Industrial Temperature | U3 | LQFP48_L | STM32F103C8T6 | 1 |
| 8Mhz | Crystal For all Crystal 2pin. | Y1 | Thach Anh 2 chan cam | Thach Anh 2 chan Cam | 1 |