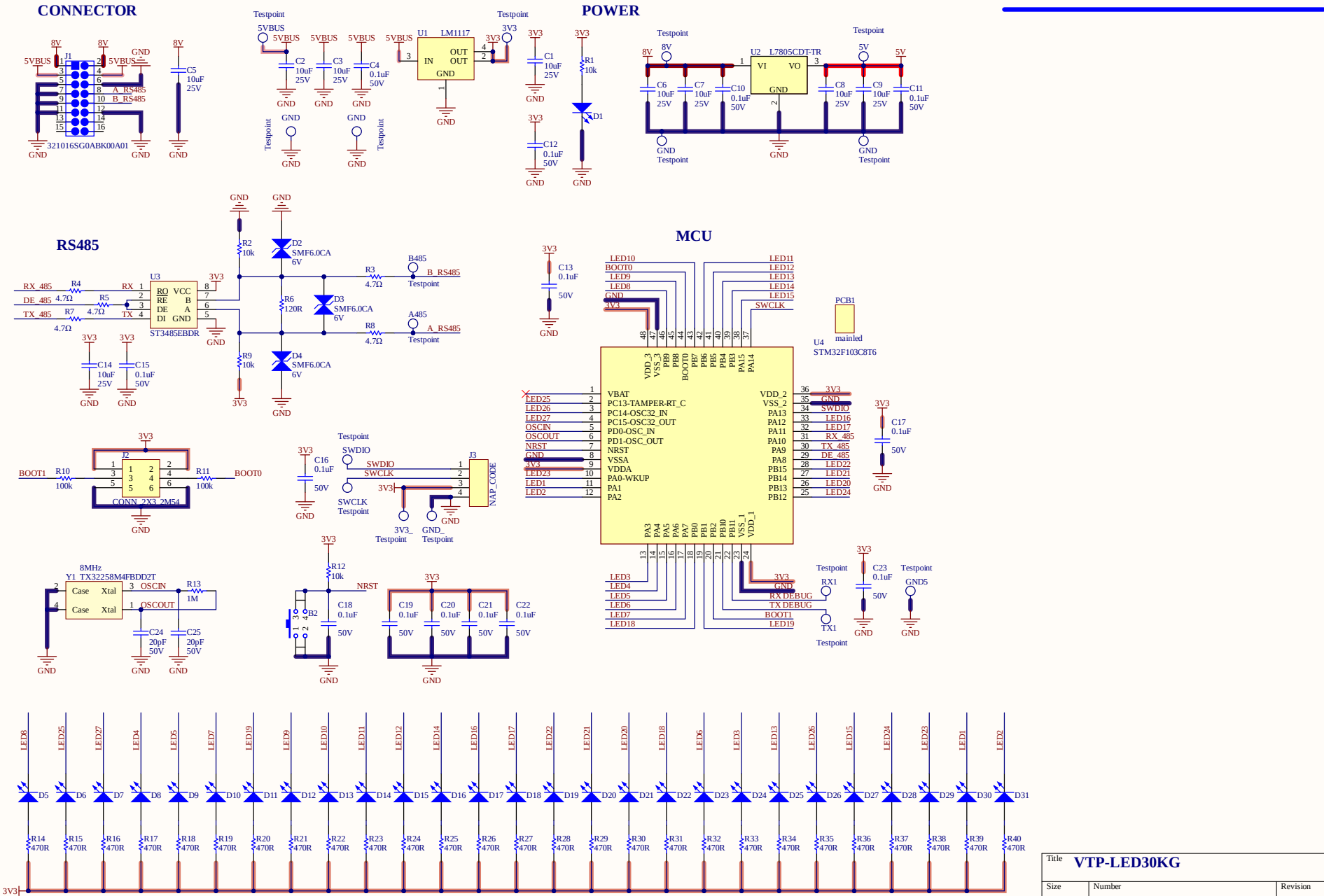
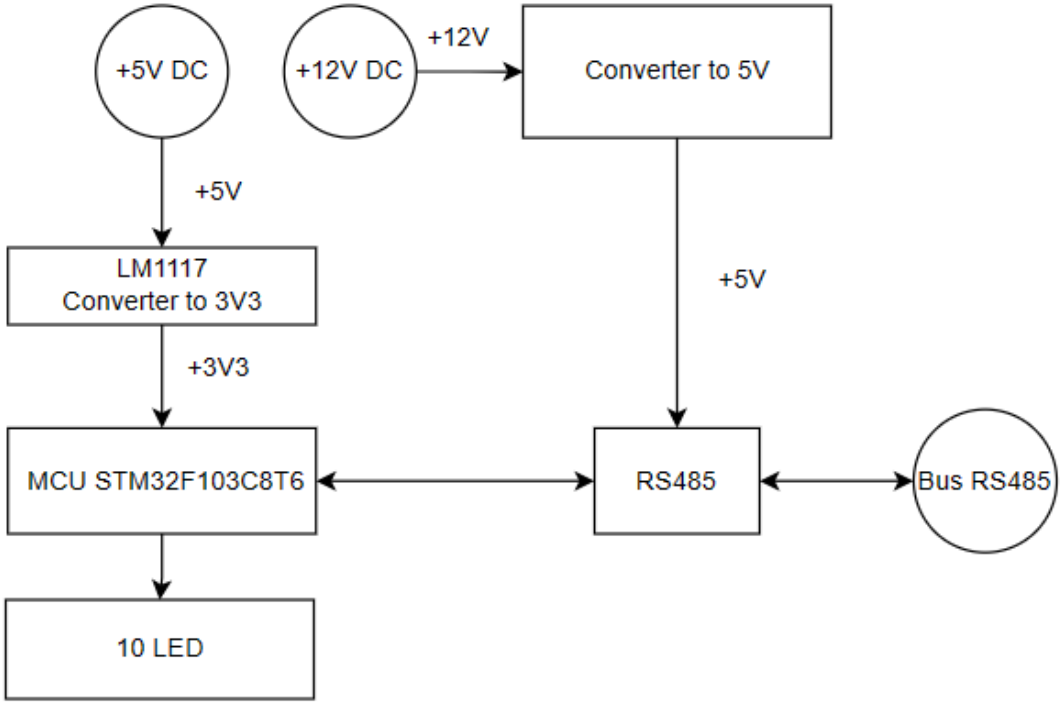
VTP-LED30KG



Title	VTP-LED30KG	
Size: A3	Number	Revision
Date: 9/19/2024		Sheet of
File: D:\D\..\LED_AGV_30KG.SchDoc		Drawn By: hungnt192



Khối LED hiển thị

Title		
Size: A	Number	Revision
Date: 9/19/2024		Sheet of
File: D:\D\..\LED_AGV_30KG SODOKHOI.SchDoc		Drawn By:

PCB NAME : VTP-LED30KG

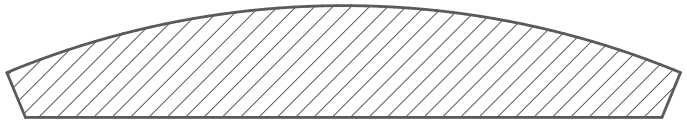
PCB SPECIFICATIONS :

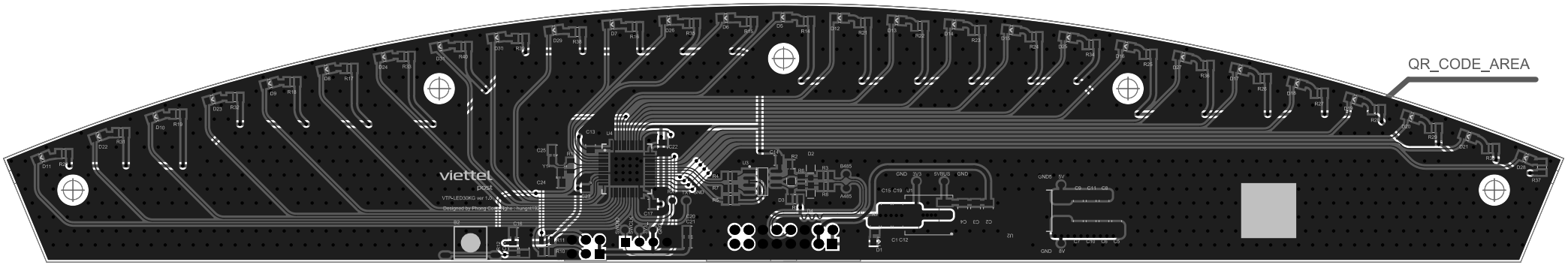
A. MATERIAL :	FR-4	☒ TG-170	☐ TG-150	☐ TG-140	
B. MATERIAL FAMILY :	N/A				
C. SOLDERMASK COLOR :	☐ MATTE GREEN		☐ RED	☒ MATTE BLACK	
D. SILKSCREEN COLOR :	☒ WHITE	☐ YELLOW	☐ BLACK	☐ Blue ink PANTONE 2955	
E. SURFACE FINISH :	☐ ENIG	☐ IMMERSION SILVER		☐ IMMERSION TIN	☒ FLUG
	☐ HASL	☐ HASL (PB-FREE)		☐ GOLDEN FINGER	
F. IMPEDANCE CONTROL :	☒ NO	☐ YES (SEE IMPEDANCE TABLE FOR DETAIL INFORMATION)			
G. THROUGH VIA :	PLUG THE VIAS WHICH ARE COVERED WITH SOLDERMASK TWO SIDE.				
H. STACK-UP :	2 LAYERS, 1.6mm THICKNESS, 1oz COPPER THICKNESS EACH LAYER				
I. QR CODE:	☐ NO	☒ YES (SEE QR CODE TABLE FOR DETAIL INFORMATION)			

QR CODE INFORMATION

RULE:	VTP_ (4 characters)	LED_ (3 characters)	001 (3 characters)	XXXX (4 characters)
Explain	Ký hiệu công ty	Ký hiệu mạch	Lô sản xuất	Số thứ tự trong lô
Example:	VTP_LED30KG_0010001			

Layer	Name	Material	Thickness	Constant	Board Layer Stack
	Top Overlay				
	Top Solder	Solder Resist	0.010mm	3.5	
1	Top Layer		0.036mm		
	Dielectric 1	FR-4	1.600mm	4.8	
2	Bottom Layer		0.036mm		
	Bottom Solder	Solder Resist	0.010mm	3.5	
	Bottom Overlay				





Comment	Description	Designator	Footprint	LibRef	Quantity
Testpoint	Testpoint	3V3, 3V3_, 5V, 5VBUS, 8V, A485, B485, GND, GND5, GND_, RX1, SWCLK, SWDIO, TX1	Testpoint_signal	T?	17
button SMD 6x6x5	SPST 50mA @ 12VDC Vertical Round Button SMD,6x6x5mm Tactile Switches RoHS	B2	button 250 smd	button 250_SMD	1
10uF	25V 10uF X5R ±10% 0805 Multilayer Ceramic Capacitors MLCC - SMD/SMT ROHS	C1, C2, C3, C5, C6, C7, C8, C9, C14	CAP_SMD_0805	Cap-NP-100	9
0.1uF	100nF ±10% 50V X7R 0805 Multilayer Ceramic Capacitors MLCC - SMD/SMT RoHS	C4, C10, C11, C12, C13, C15, C16, C17, C18, C19, C20, C21, C22, C23	CAP_SMD_0805	Cap-NP-100	14
20pF	50V 20pF NP0 ±5% 0805 Multilayer Ceramic Capacitors MLCC - SMD/SMT ROHS	C24, C25	CAP_SMD_0805	Cap-NP-100	2
LED RED SMD	20mA 230mcd Colorless transparence -20°C~+85°C Positive post 615nm~630nm Red 120° 55mW 2.3V 0805 Light Emitting Diodes (LED) ROHS	D1, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D23, D24, D25, D26, D27, D28, D29, D30, D31	LED_SMD0805	LED_RED_SMD_0805	28
SMF6.0CA	Bidirectional 6V 6.67V 10.3V 19.4mA SOD-123FL TVS RoHS	D2, D3, D4	SOD-123	TVS SMF05CA SOD123	3
header 16 8x2 2.54mm	16 2 0.100" (2.54mm) Header Through Hole, P=2.54mm IDC Connectors ROHS	J1	Header IDC 8x2 2.54mm through hold	header 8x2 JILN	1
CONN_2X3_2M54	CONN HEADER 6POS .100 STR 30AU	J2	HDR_2X3_2m54_7m62 x4m8x10m5	CONN 2X3 MALE 2.54MM	1
NAP_CODE	4 Header XHB 0.098"(2.50mm) Male Pin Through Hole Wire To Board / Wire To Wire Connector ROHS	J3	HDR 4PIN 2.5 XHB-4A	CON HDR 4 PIN 1X4 2.5MM XHB-4A	1
mainled	FR4; 1.6mm; 1OZ; color MATTEBLACK; 2 layer; Silkscreen White;	PCB1		CON Housings 4PIN 1x4 XHB—4Y	1
10k	125mW Thick Film Resistors 150V ±100ppm/°C ±1% 10kΩ 0805 Chip Resistor - Surface Mount ROHS	R1, R2, R9, R12	RES_SMD_0805	Res0.3	4
4.7R	125mW Thick Film Resistors 150V ±1% ±200ppm/°C 4.7Ω 0805 Chip Resistor - Surface Mount ROHS	R3, R4, R5, R7, R8	RES_SMD_0805	Res0.3	5
120R	125mW Thick Film Resistors 150V ±100ppm/°C ±1% 120Ω 0805 Chip Resistor - Surface Mount ROHS	R6	RES_SMD_0805	Res0.3	1
100k	125mW Thick Film Resistors 150V ±100ppm/°C ±1% 100kΩ 0805 Chip Resistor - Surface Mount ROHS	R10, R11	RES_SMD_0805	Res0.3	2
1M	1W 1mΩ ±50ppm/°C ±1% 0805 Current Sense Resistors/ Shunt Resistors ROHS	R13	RES_SMD_0805	Res0.3	1
470R	125mW Thick Film Resistors 150V ±100ppm/°C ±1% 470Ω 0805 Chip Resistor - Surface Mount ROHS	R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40	RES_SMD_0805	Res0.3	27
LM1117	Fixed 18V 3.3V 1.4V @ 1A SOT-223 Dropout Regulators(LDO) RoHS	U1	SOT223	LM1117	1
L7805CDT-TR	62dB@(120Hz) 1.5A Fixed 5V Positive electrode 35V DPAK Linear Voltage Regulators (LDO) ROHS	U2	DPAK_118_446_112X5 9_SMD	REG_35V_5V-1.5A-7.5W-DPAK_1	1
SIT3485EBDR	Transceiver RS485 1/1 200kbps SOIC-8_150mil RS-485/ RS-422 ICs RoHS	U3	SOIC8	RS485 SIT3485ESA	1
STM32F103C8T6	ARM® Cortex®-M3 STM32F1 Microcontroller IC 32-Bit 72MHz 64KB (64K x 8) FLASH 48-LQFP (7x7)	U4	LQFP-48_19.6_393_58X11_SMD	IC_STM32F103C8T6	1
8MHz	Crystal 3.2x2.5mm 4Pin	Y1	Crystal 3.2x2.5mm 4Pin	Crystal FL0800008Q	1