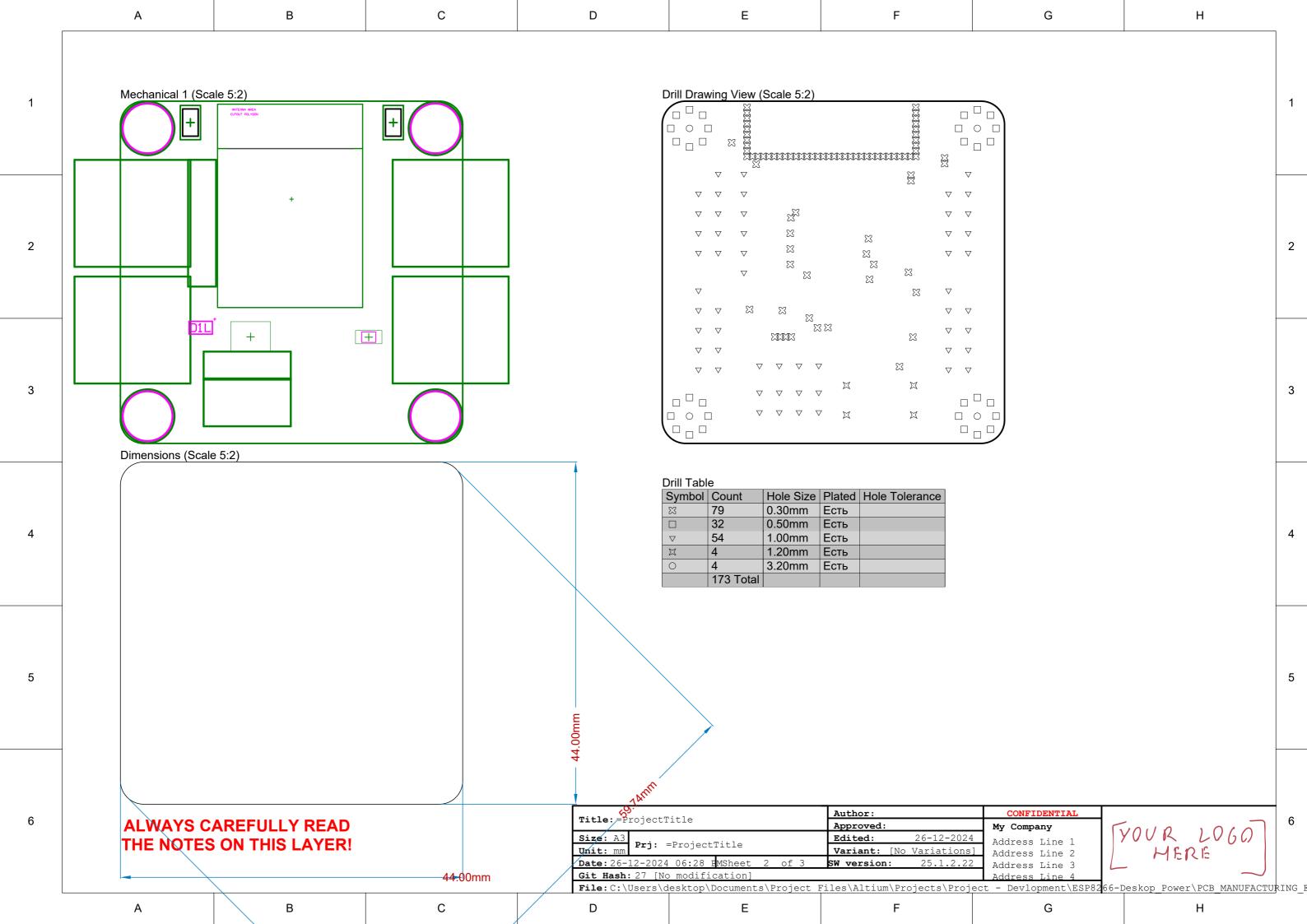
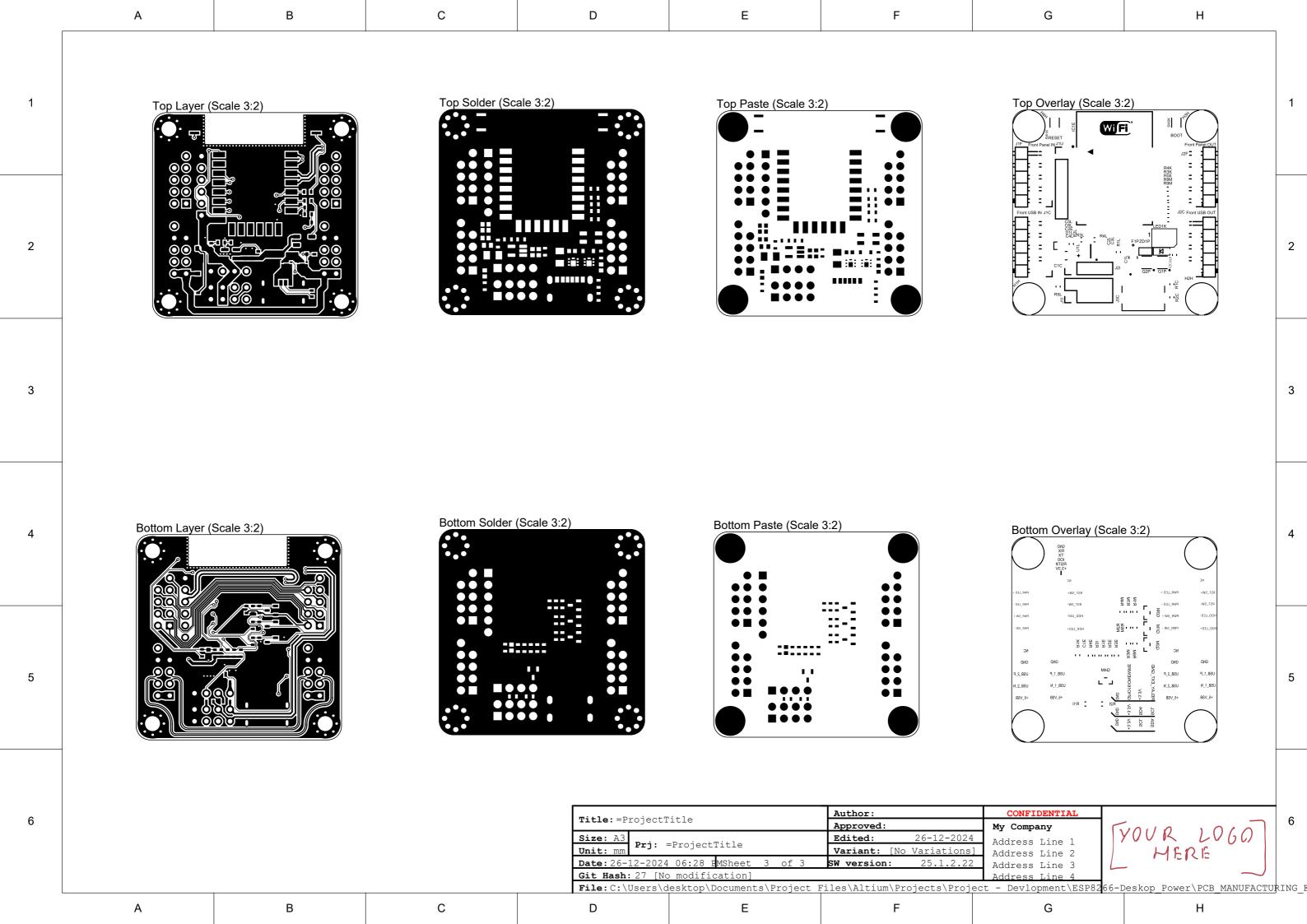
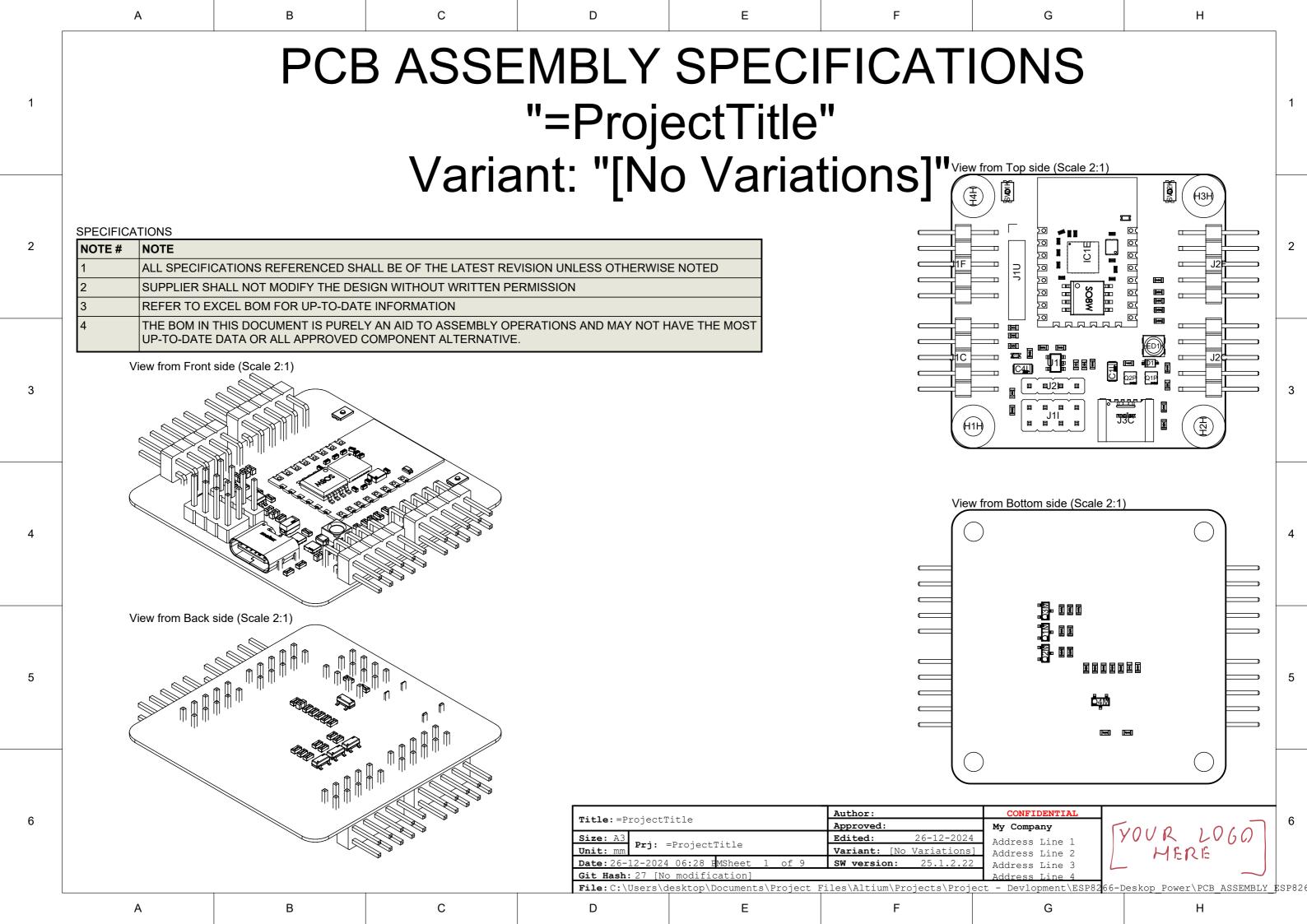
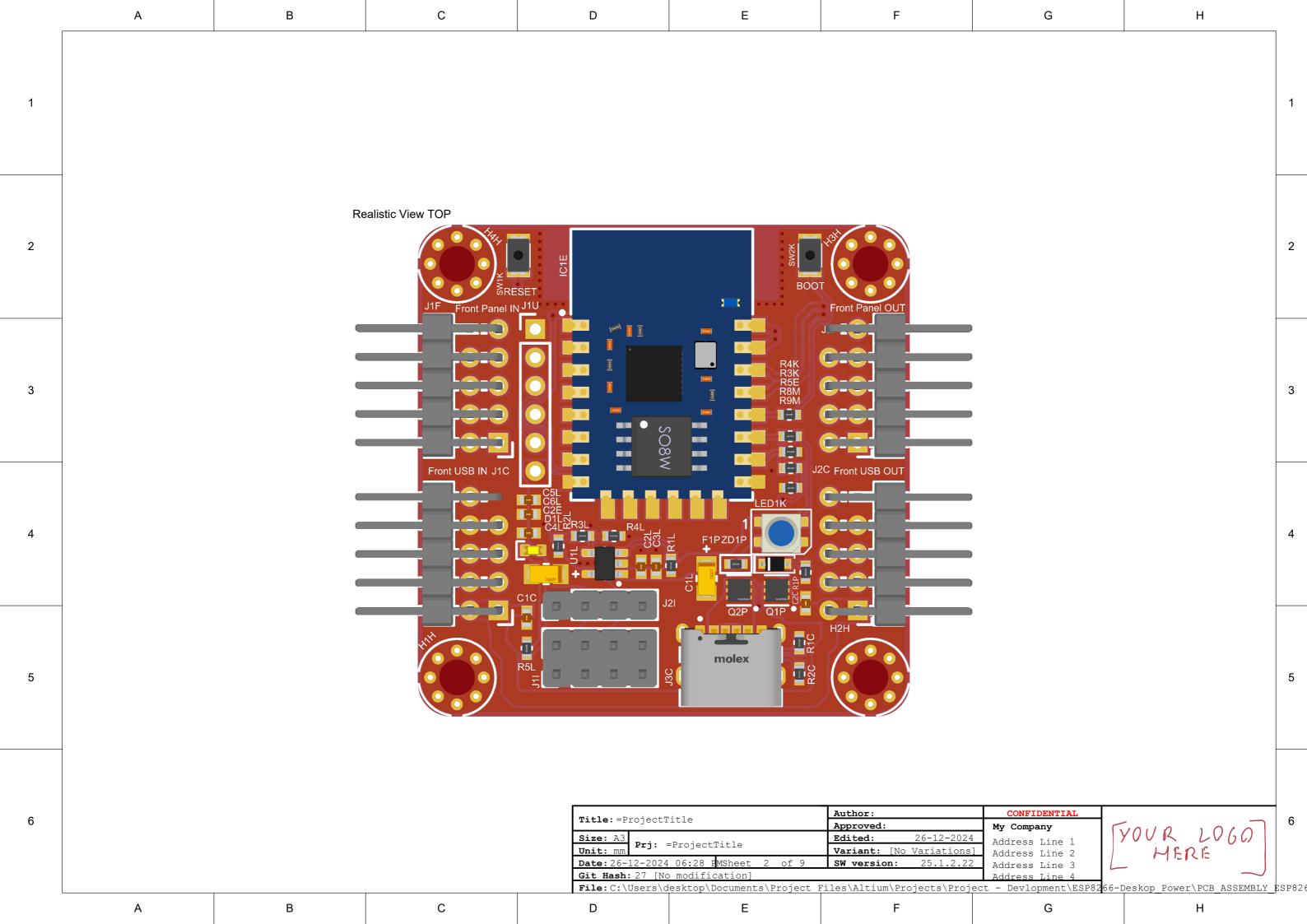


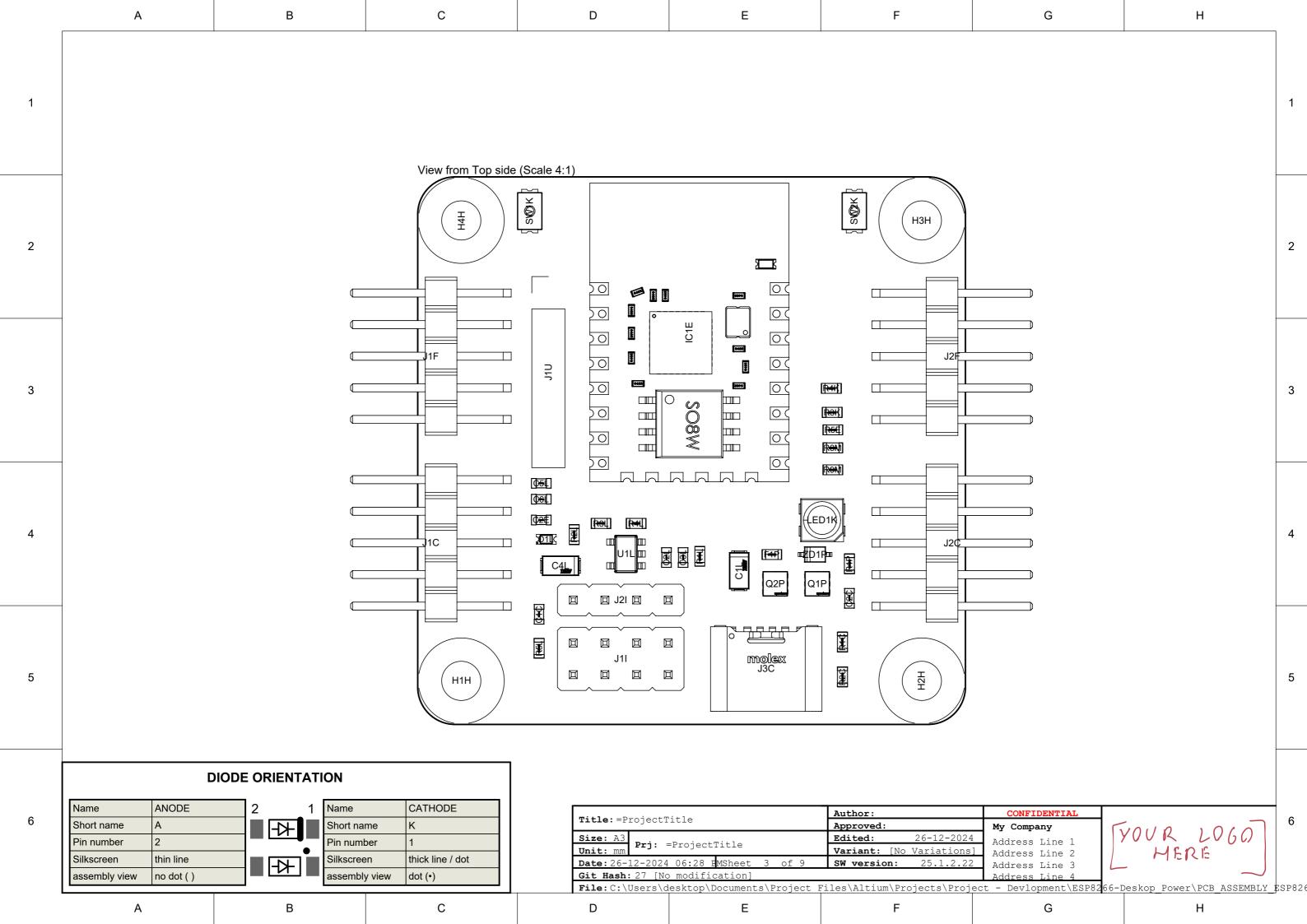
PCB MANUFACTURING SPECIFICATIONS "=ProjectTitle" **SPECIFICATIONS SPECIFICATIONS** NOTE# NOTE LENGHT 44.00mm **WIDTH** ALL SPECIFICATIONS REFERENCED ARE OF THE REVISION SPECIFIED IN THE TITLE BLOCK 44.00mm **LAYERS** SUPPLIER SHALL NOT MODIFY THE DESIGN OR APPROVED STACK-UP WITHOUT WRITTEN PERMISSION **MATERIAL** FR-4 ALL MATERIALS SHALL BE RoHS COMPLIANT AND FINAL PRODUCT SHALL BE ACCEPTABLE TO USE IN RoHS ASSEMBLY. RoHS LOGO SHALL BE MARKED IN SILKSCREEN INK BY THE SUPPLIER WHERE INDICATED BY **MATERIAL MIN TG** 130-140 THE TEXT "PLACE MARKINGS HERE" TRACK WIDTH/CLEARANCE 10 mils / 10 mils COPPER FOIL: REFER TO LAYER STACK LEGEND FOR Cu THICKNESS DETAILS. ALL Cu THICKNESSES ARE **THICKNESS** 0.6mm FINISHED AND INCLUDE BASE FOIL PLUS Cu PLATING ON PLATED LAYERS **COPPER THICKNESS** 35um (1oz) ELECTRICAL TEST: ALL PRINTED CIRCUITS SHALL BE 100% ELECTRICALLY TESTED FOR OPENS/SHORTS USING PROVIDED NETLIST. REJECTED PRINTED BOARDS MUST BE CLEARLY MARKED WITH NON-YES, TOP AND BOTTOM SOLDERMASK CONDUCTIVE. PERMANENT INK. **GREEN SOLDERMASK COLOR** MARKINGS: VENDOR MARKING AND DATE/LOT CODES SHALL BE LOCATED ON THE BOARD IN THE SILKSCREEN YES. TOP AND BOTTOM RESERVED AREA AS SPECIFIED IN THE GERBER LAYER "PCBM NOTES" BY THE TEXT "PLACE MARKINGS WHITE SILKSCREEN COLOR MARKINGS: THE SIDE ONTO WHICH PLACE THE MARKINGS IS AT THE SUPPLIER DISCRESSION UNLESS SURFACE FINISH **HASL LEAD FREE** OTHERWISE NOTED ONTO THE LAYER "PCBM NOTES" NO **GOLD FINGERS** SUPPLIER SHALL CHECK PCBM NOTES LAYER BEFORE ASKING FOR CLARIFICATIONS **CHAMFERING** YES MANUFACTURE TENTED/PLUGGED VIAS AS SPECIFIED IN THE GERBER FILES YES IMPEDANCE CONTROL HALF-CUT/CASTELLATED HOLES NO **BURIED/BLIND VIAS** NO NO VIAS FILLED WITH RESIN Layer Stack Legend Material Layer Thickness Dielectric Material Type Gerber NO **CARBON MASK** Top Overlay GTO COUNTERSINKS/COUNTERBORES NO Surface Material Top Solder Solder Mask GTS NO **Z-AXIS MILLING** Copper Top Layer Signal GTL PEELABLE SOLDERMASK NO Core 0.50mm FR-4 Dielectric **GBL** 0.04mm Signal Solder Mask GBS Surface Material Bottom Solder 0.02mm Solder Resist GBO **Bottom Overlay** Legend Total thickness: 0.60mm NON-COPPER LAYER THICKNESS FOR REFERENCE ONLY LAYERS OF TYPE "INTERNAL PLANE" ARE NEGATIVE Author: Title: =ProjectTitle Approved: My Company Address Line 1 Prj: =ProjectTitle Variant: Address Line 2 SW version: Address Line 3 6-Deskop Power\PCB MANUFACTURING I С G В

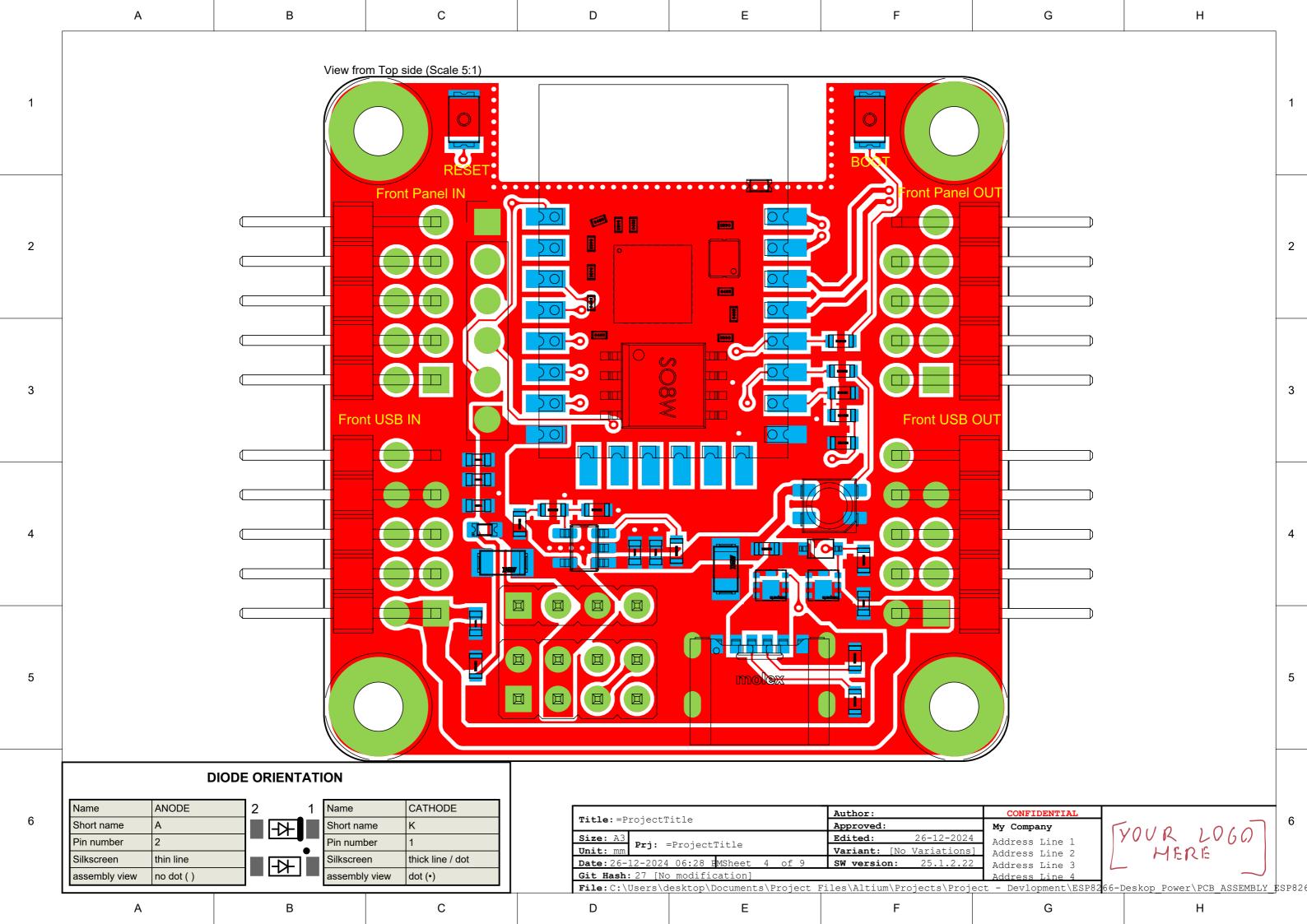


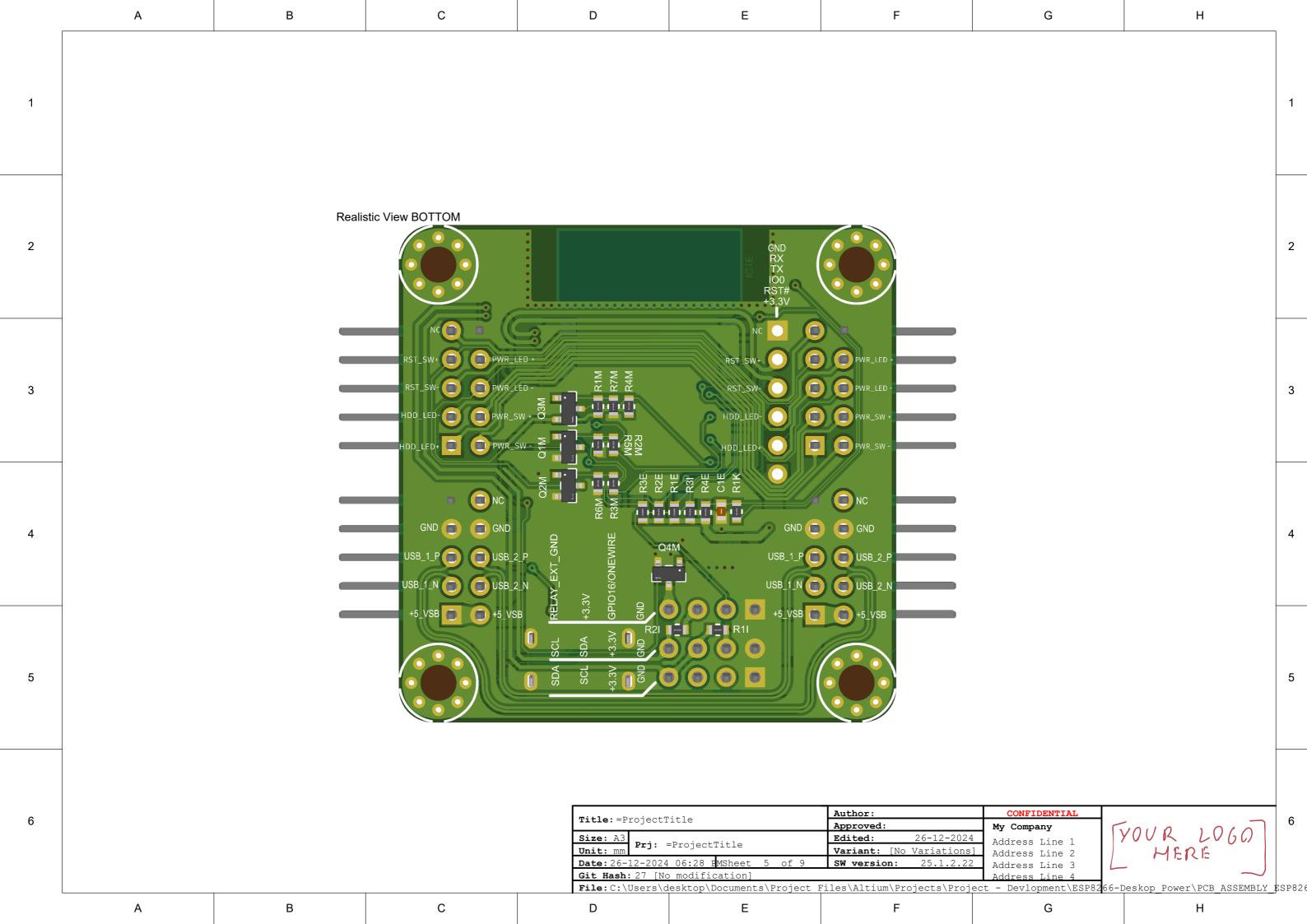


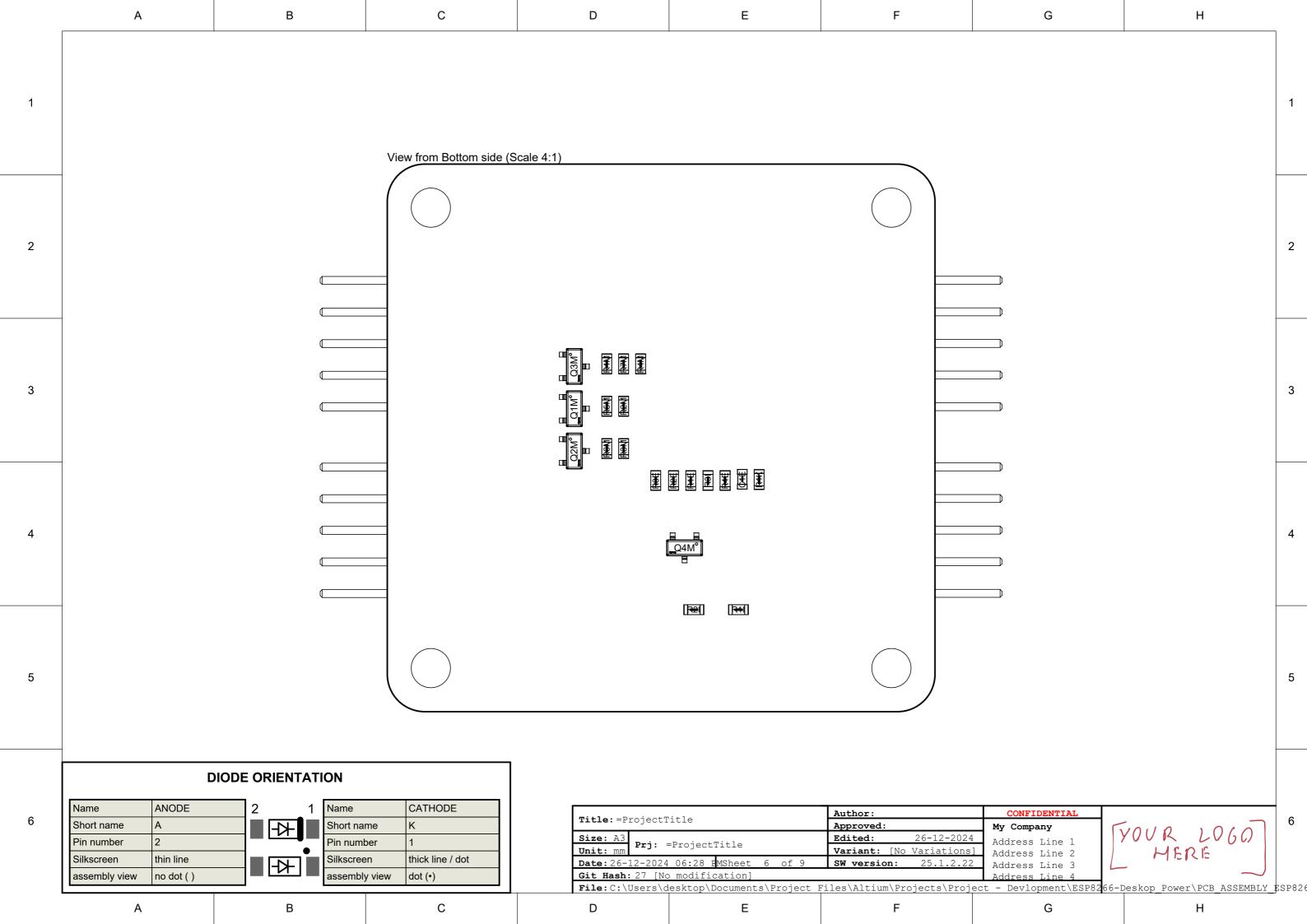


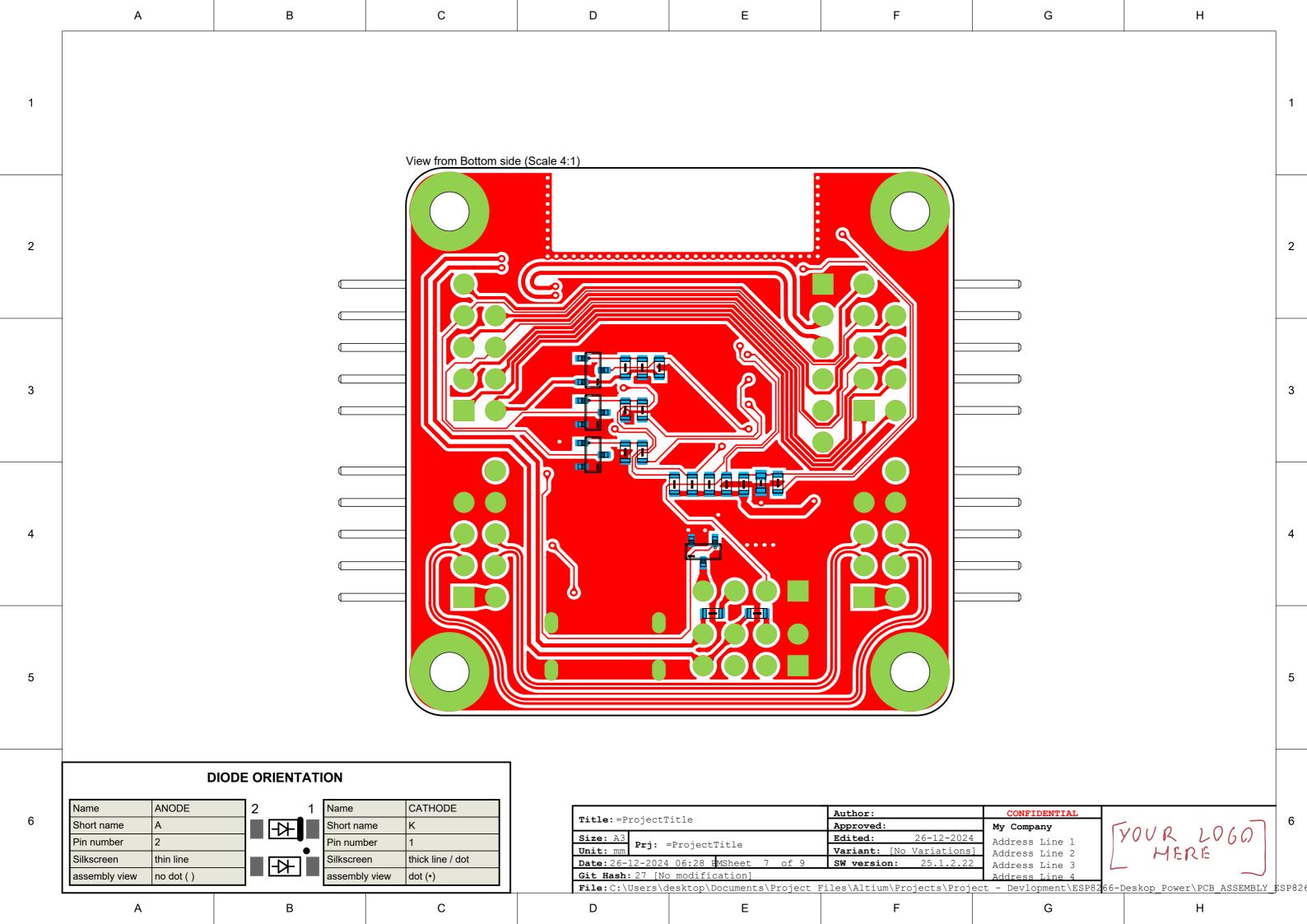


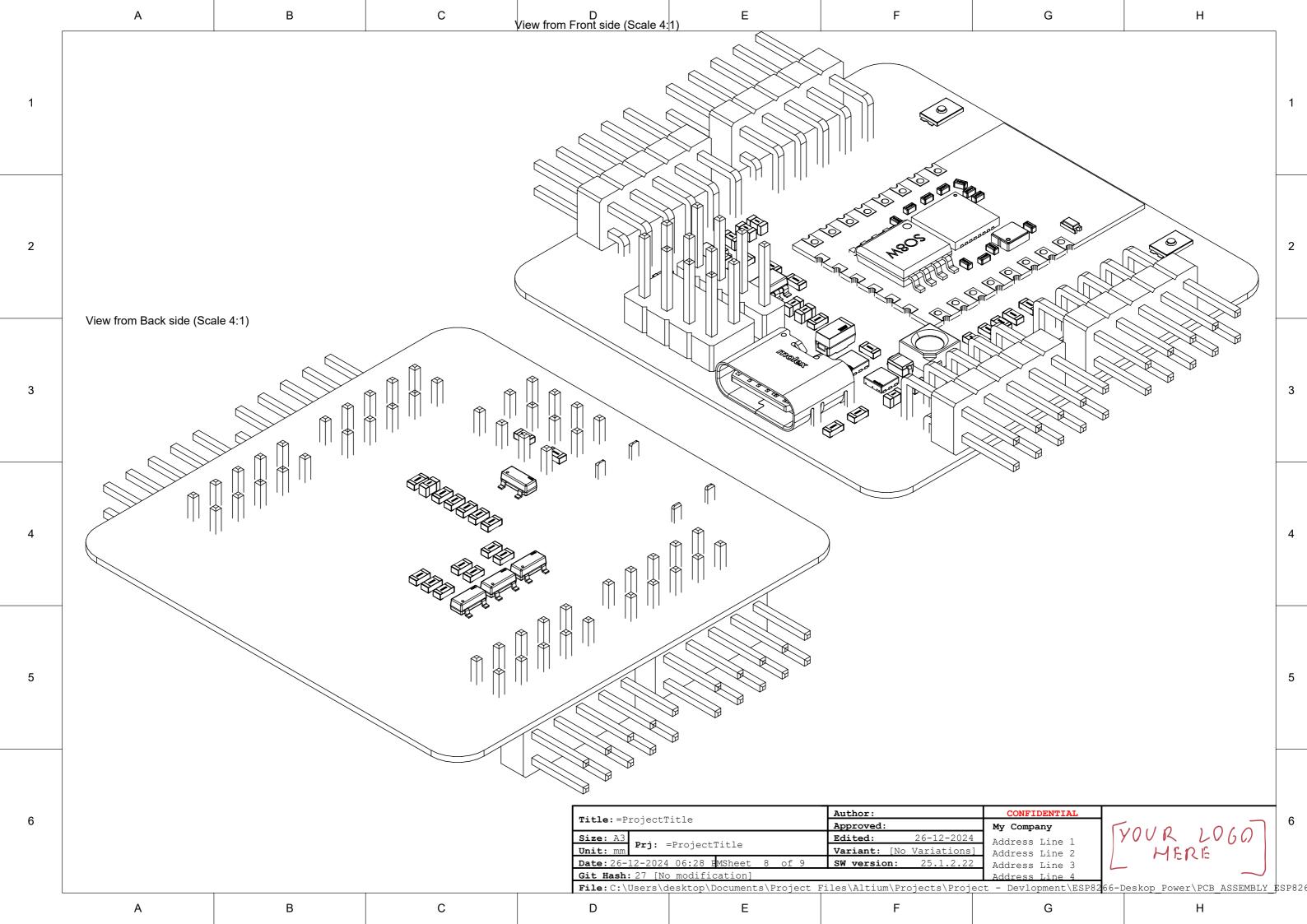












Description Multilayer Ceramic Capacitor, 2.2 uF, 10 V, ± 10%, X7R, 0603 [1608 Metric] Cap Cer 0.1UF 6.3V X7R 0603 Surface Mount Tantalum Capacitor, 47 uF, 10 V, ± 20%, -55 °C, 125 °C, 1206	Designator	Quantity			
Description Multilayer Ceramic Capacitor, 2.2 uF, 10 V, ± 10%, X7R, 0603 [1608 Metric] Cap Cer 0.1UF 6.3V X7R 0603	-	Quantity			
Multilayer Ceramic Capacitor, 2.2 uF, 10 V, ± 10%, X7R, 0603 [1608 Metric] Cap Cer 0.1UF 6.3V X7R 0603	-	Quantity	Manufacturer Part	Part Number	Layer
	C1C	1	Number 1		•
	C1E, C2E	2	KGM15AR70J104KM		
[3216-12 Metric]	C1L	1			
Multilayer Ceramic Capacitor, 4.7 uF, 10 V, ± 10%, X5R, 0603 [1608 Metric]	C2C	1	CL10A475KP8NNNC GRM188R61A226ME1		
Multilayer Ceramic Capacitor, 22 uF, 10 V, ± 20%, X5R, 0603 [1608 Metric]	C2L	1	5D		
Multilayer Ceramic Capacitor, 0.1 uF, 10 V, ± 10%, X7R, 0603 [1608 Metric]	C3L	1	7		
ruF Solid MnO2 Tantalum Electrolytic Capacitor; 6.3 V dc +/-20%; T491 Series		1			
		2	OD OD		
		1			
	H1H, H2H, H3H, H4H	4			
ESP8200 ESP-12-F	J1C, J2C	2			
	J1F, J2F	2			
	J1U	1			
nector LISB Type C Female 6Positions 0.5mm Right Angle SMT Embossed T/R	J2l	1			
- Tape and Reel	J3C	1			
4 PIN SMART LED WS2812 BODY 3.5MM X 3.5MM	LED1K	1			
ingle N-Channel 60 V 3.5 Ohm 1 nC SIPMOS® Small Signal Mosfet - SOT-23	Q1M, Q2M, Q3M, Q4M	4	BSS138N		
MD Chip Resistor, 5.1 kOhm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film,	<u> </u>	2			
SMD Chip Resistor, 10 kOhm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film,	R1E, R1L, R2E, R3E, R4E, R4M, R5E, R5M, R6M,	11	RC0603FR-0710KL		
MD Chip Resistor, 2.2 kOhm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film,		2	RC0603FR-072K2I		
SMD Chip Resistor, 1 kOhm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film,	· · · · · · · · · · · · · · · · · · ·	2			
MD Chip Resistor, 100 Ohm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film,	R1M, R2M, R3K, R3M, R8M	5	AC0603FR-07100RL		
MD Chip Resistor, 100 kOhm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film,	R1P	1	AC0603ER07100KI		
PPM	R2L	1	MCR03EZPFX1691		
General Purpose	R3I	1	AC0603FR-074K7L		
Thick Film 0603 33K Ohm 1% 0.1W(1/10W) ±100ppm/C Pad SMD Automotive	R3L	1	ERJ-3EKF3302V		
SMD Chip Resistor, 20 kOhm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film,	R4L	1	CR0603-FX-2002ELF		
General Purpose Thick Film 0603 2.49K Ohm 1% 1/10W ±100ppm/°C Molded SMD SMD Paper		1			
T/R		2	FVP-Δ\M/FD4Λ	FVP-ΔWFD4Λ	
LDO U-Reg Adj 0, 3A SOT23-5	U1L	1	LVI-AVLU4A	LVI -AVVLUHA	
MM3Z12VST1G Zener Diode, 12V 2% 200 mW SMT 2-Pin SOD-323 ON	ZD1P				
IN I	IF Solid MnO2 Tantalum Electrolytic Capacitor; 6.3 V dc +/-20%; T491 Series Multilayer Ceramic Capacitor, 22 uF, 6.3 V, ± 20%, X5R, 0603 [1608 Metric] LED 0603 YELLOW SMD Fuse PPTC SMD 0603 ESP8266 ESP-12-F Bector USB Type C Female 6Positions 0.5mm Right Angle SMT Embossed T/R - Tape and Reel 4 PIN SMART LED WS2812 BODY 3.5MM X 3.5MM Igle N-Channel 60 V 3.5 Ohm 1 nC SIPMOS® Small Signal Mosfet - SOT-23 PMPB14XPZ MD Chip Resistor, 5.1 kOhm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film, General Purpose MD Chip Resistor, 10 kOhm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film, General Purpose MD Chip Resistor, 1 kOhm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film, General Purpose MD Chip Resistor, 1 kOhm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film, General Purpose MD Chip Resistor, 1 kOhm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film, General Purpose MD Chip Resistor, 100 Ohm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film, General Purpose MD Chip Resistor, 100 Rohm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film, General Purpose MD Chip Resistor, 100 Rohm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film, General Purpose Thick Film Chip Resistor 0603 Case 1.69K Ohms 1% Tolerance 100 PPM MD Chip Resistor, 4.7 kOhm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film, General Purpose Thick Film 0603 33K Ohm 1% 0.1W(1/10W) ±100ppm/°C Pad SMD Automotive T/R MD Chip Resistor, 20 kOhm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film, General Purpose Thick Film 0603 2.49K Ohm 1% 0.1W(1/10W) ±100ppm/°C Molded SMD SMD Paper	Multilayer Ceramic Capacitor, 0.1 uF, 10 V, ± 10%, X7R, 0603 [1608 Metric] C3L	Multilayer Ceramic Capacitor, 0.1 uF, 10 V, ± 10%, X7R, 0603 [1608 Metric] C3L 1	Solid MnO2 Tantalum Electrolytic Capacitor, 0.1 uF, 10 V, ± 20%, X5R, 0603 [1608 Metric] C3L	Multilayer Ceramic Capacitor, 12 (2017) (10 17) (2017), ASP. (2016) (1000 Neutric) Cal. Common Capacitor, 12 (2017) (10 17) (10

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