

Definition Package

Power board

Document summary:

This document contains the general PCB layers arrangement, the drill map and the components layout of this electronic board.

Diffusion : External

Date	Revision	Creator	Reviewer	Approver	Document status
	D				
	C				
	B				
	A				
07/06/2021	-	Benmouffok Amine	Alinei Jean	Villa Luiz	

Preliminary PREL, Good For Execution GFE, As Built ASB

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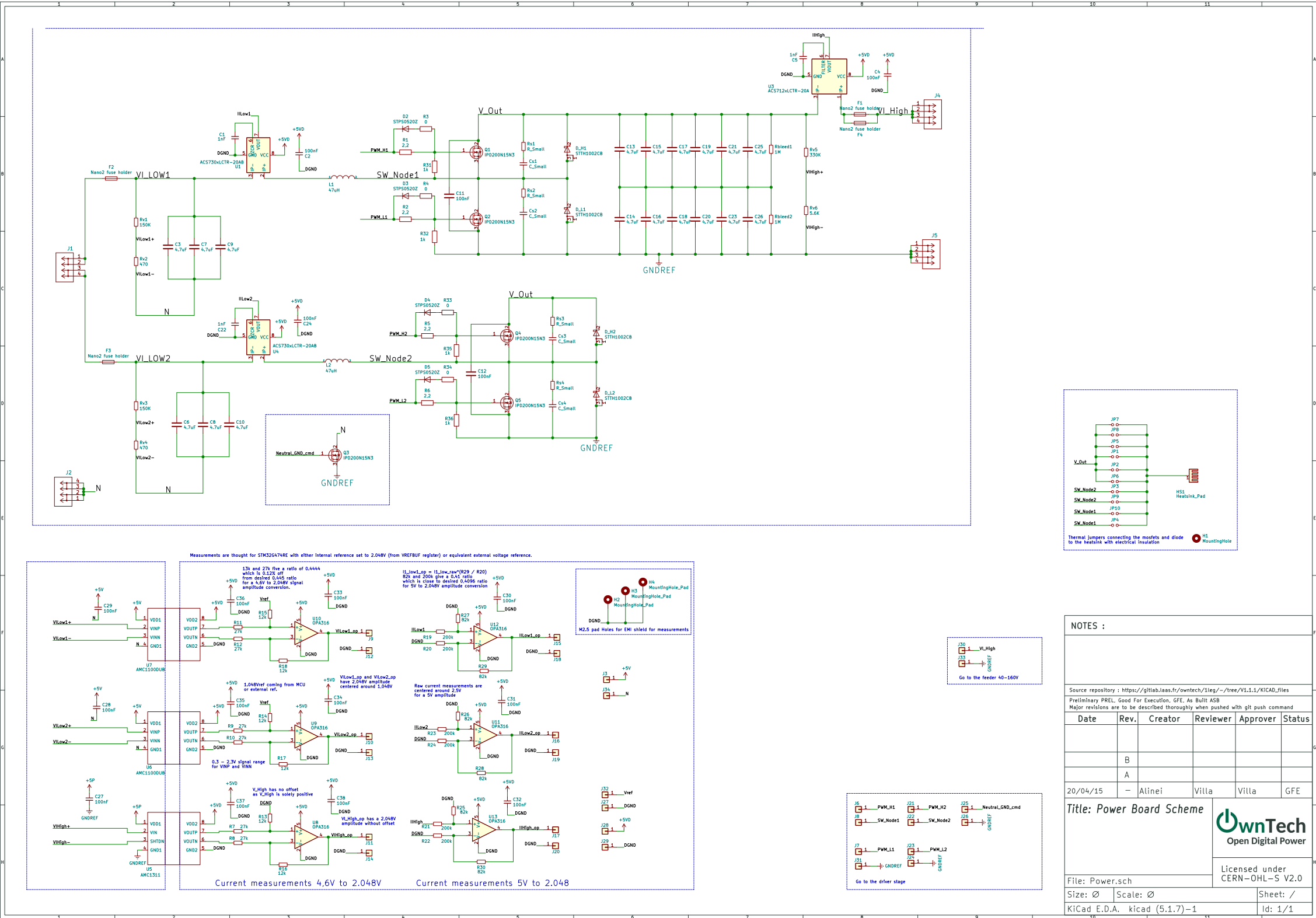
Bill of materials : 15



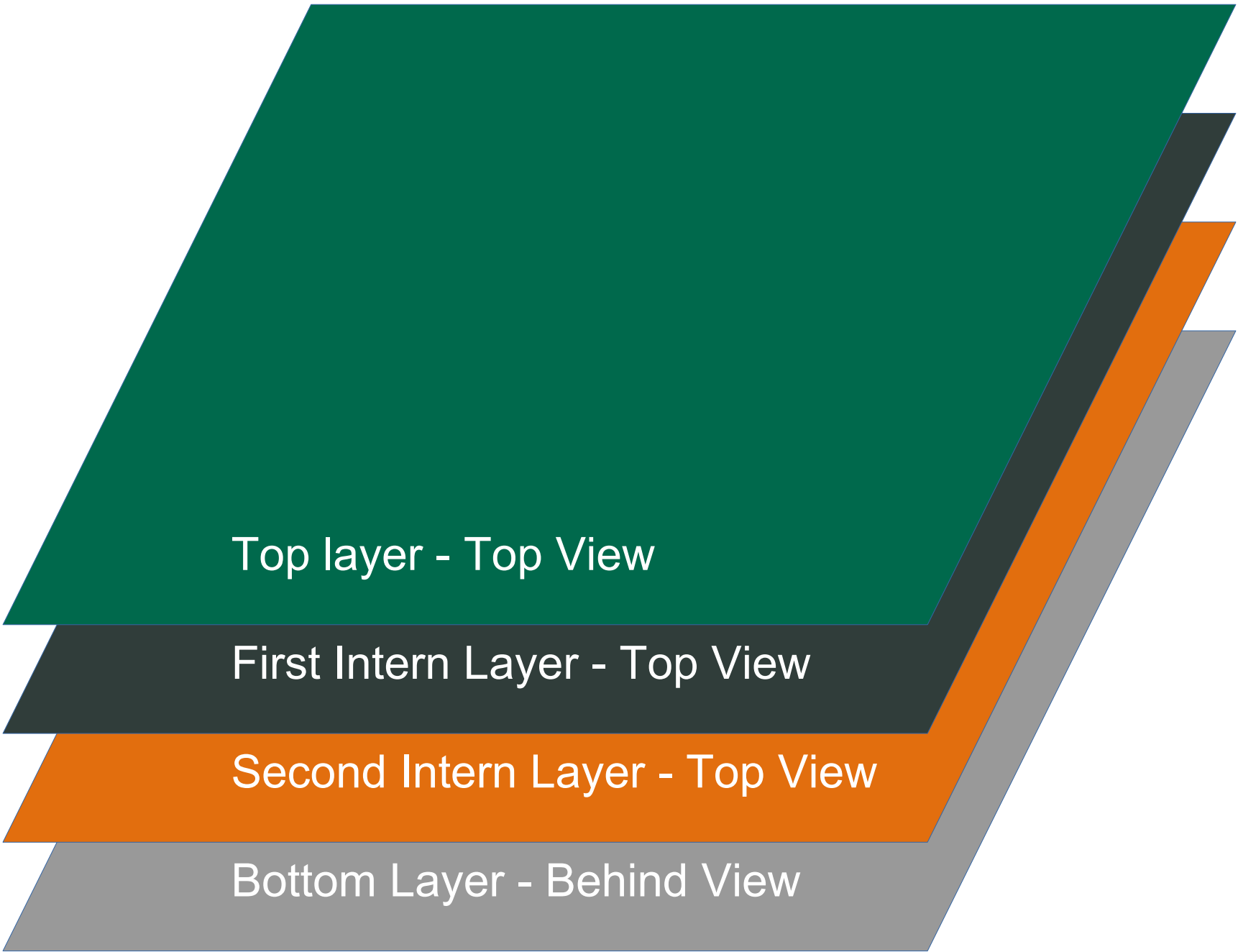
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Board Scheme :



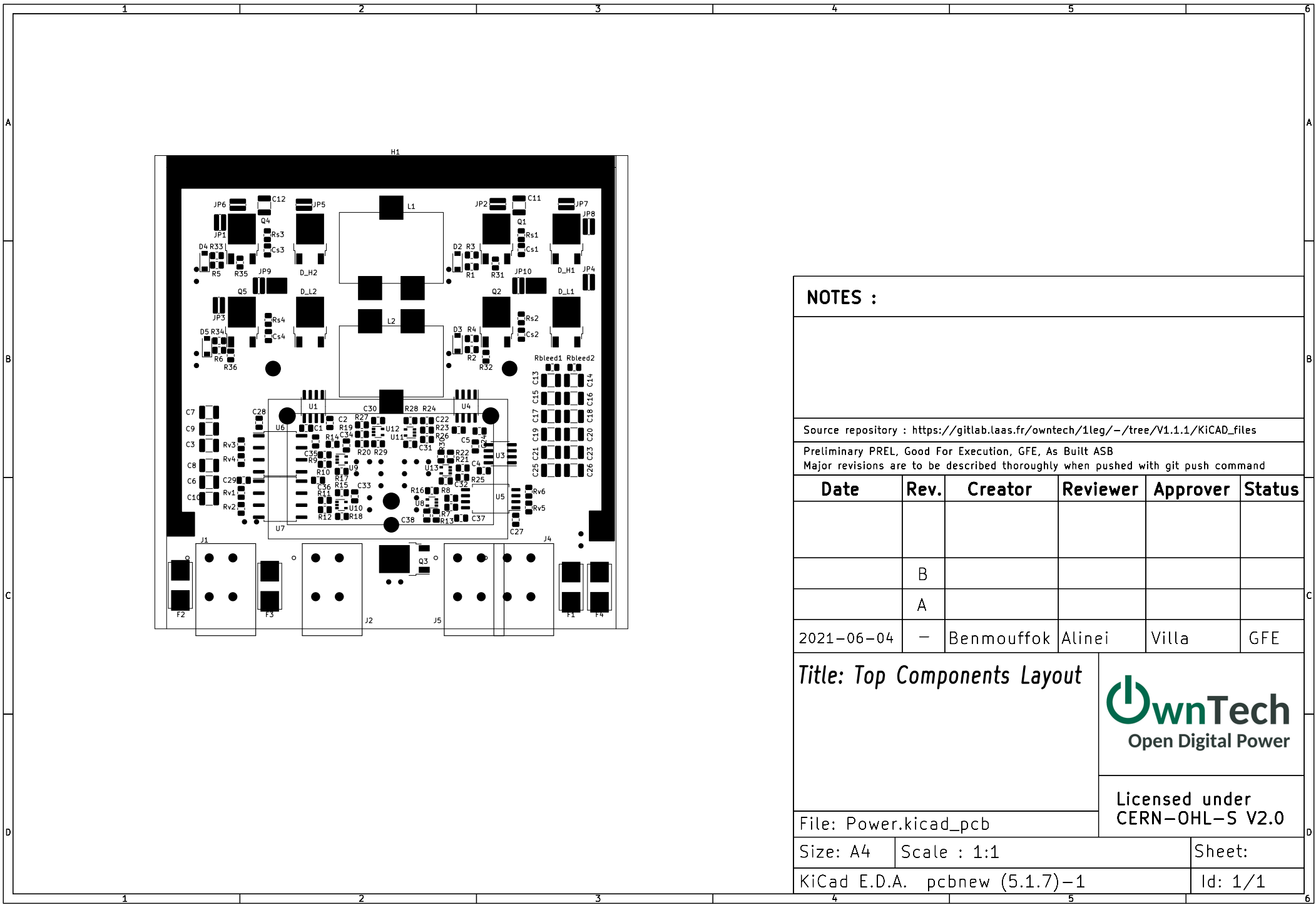
Layers Arrangement :



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Top Components Layout :




NOTES :

Source repository : https://gitlab.laas.fr/owntech/1leg/-/tree/V1.1.1/KiCAD_files

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Major revisions are to be described thoroughly when pushed with git push command

Date	Rev.	Creator	Reviewer	Approver	Status
	B				
	A				
2021-06-04	-	Benmouffok	Alinei	Villa	GFE

Title: Top Components Layout



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File: Power.kicad_pcb

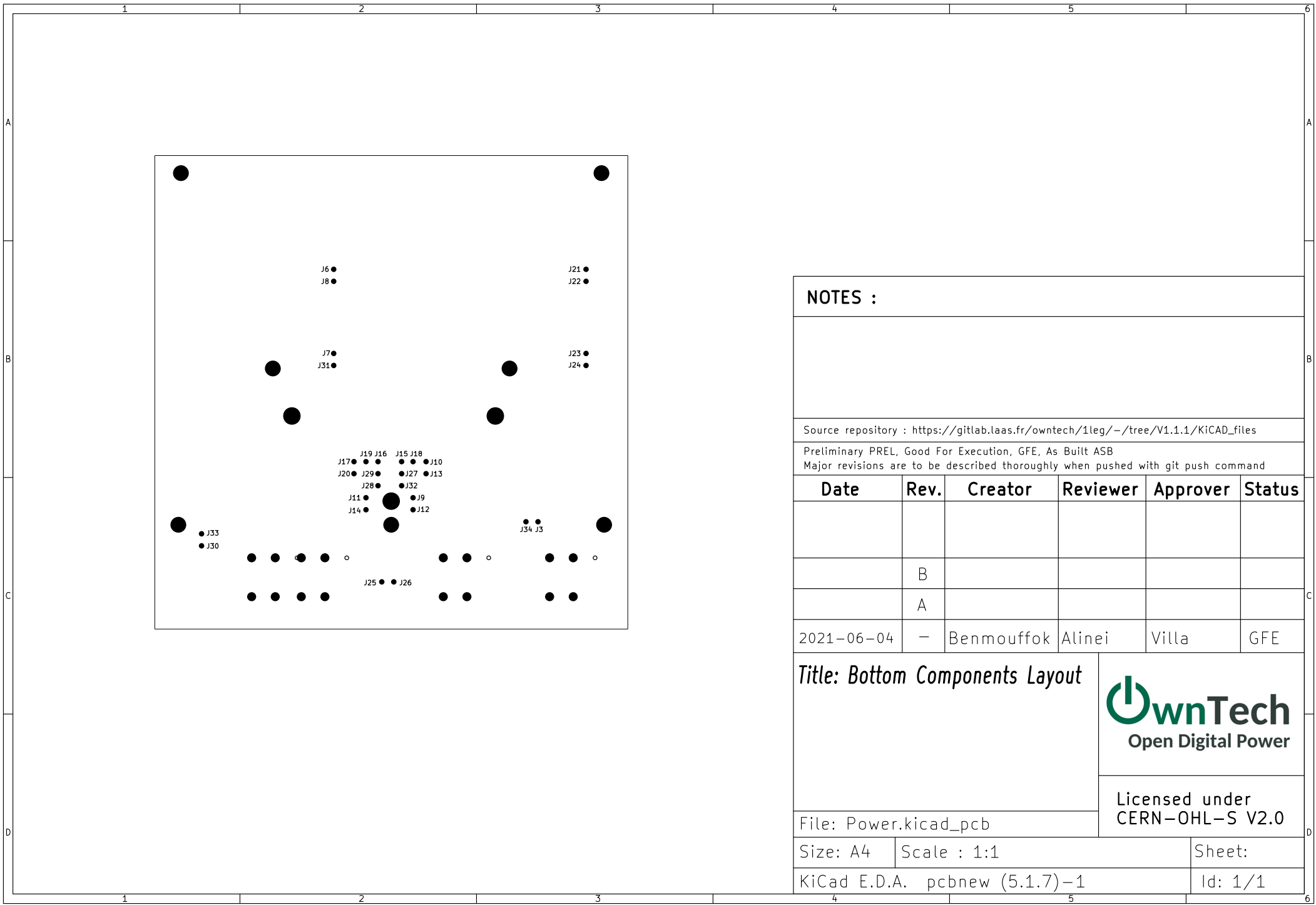
Size: A4 | Scale : 1:1 | Sheet:

KiCad E.D.A. pcbnew (5.1.7)-1 | Id: 1/1



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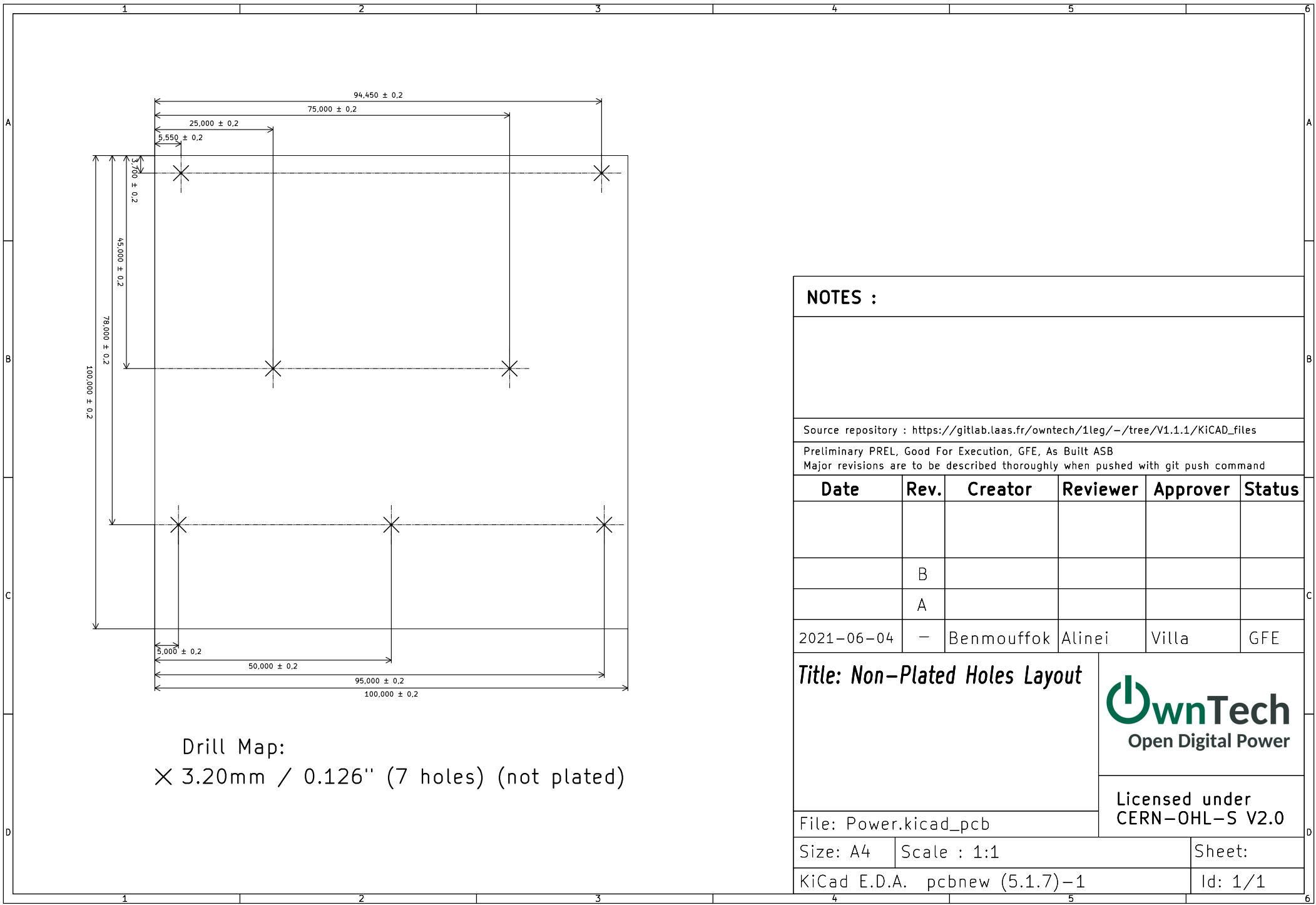
Bottom Components Layout :



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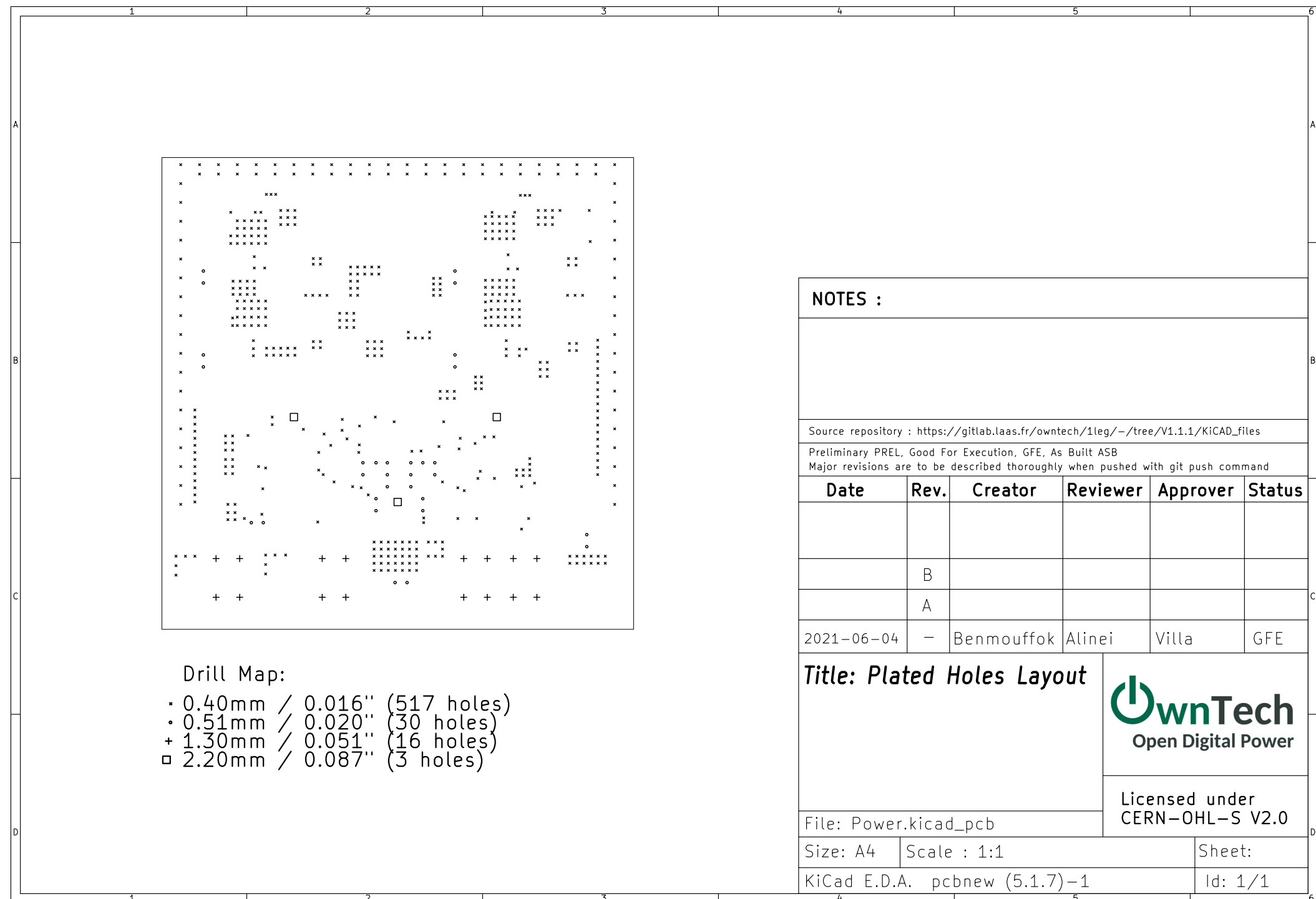
Power board

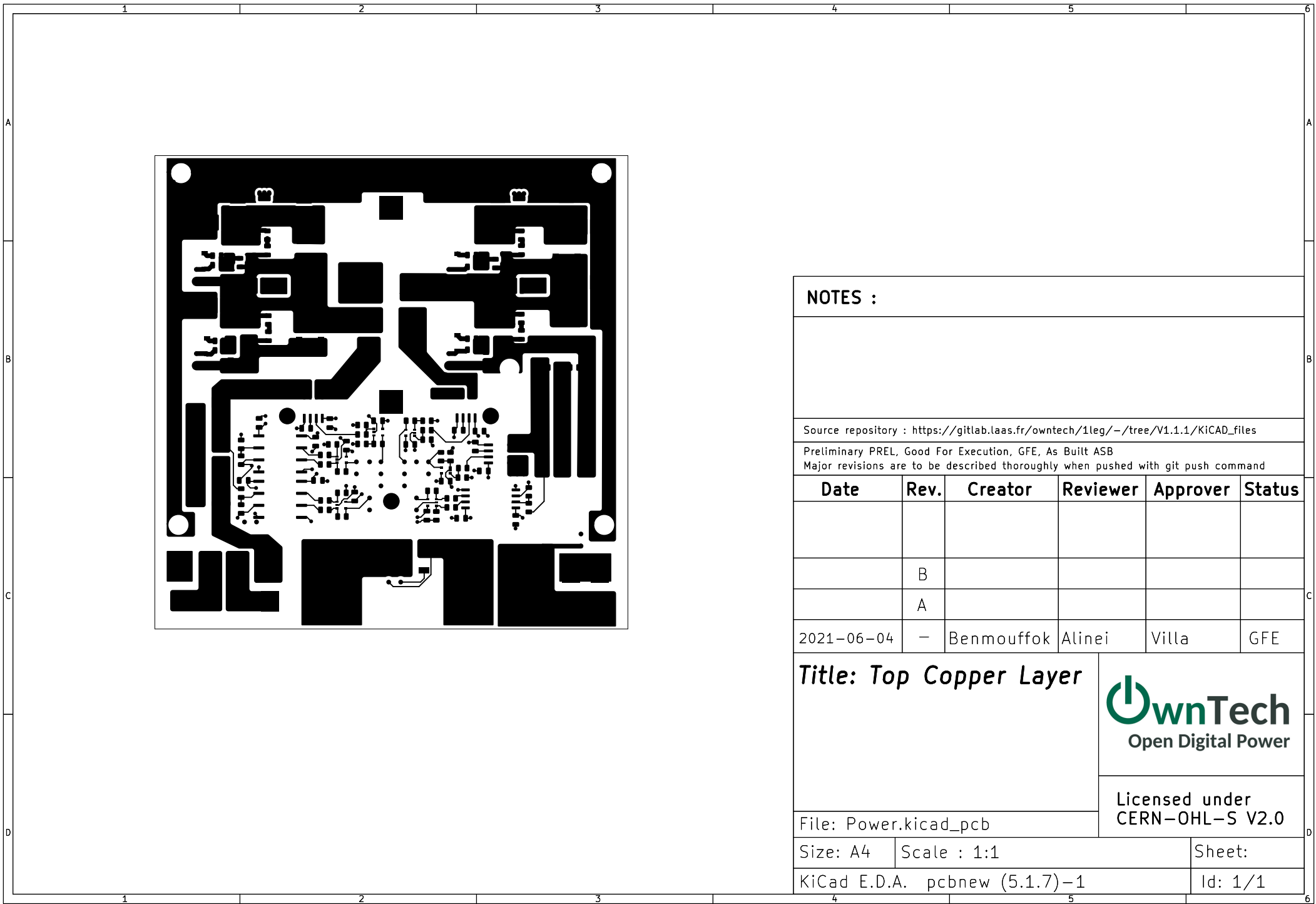
Non-Plated Holes Layout :



Power board

Plated Holes Layout :

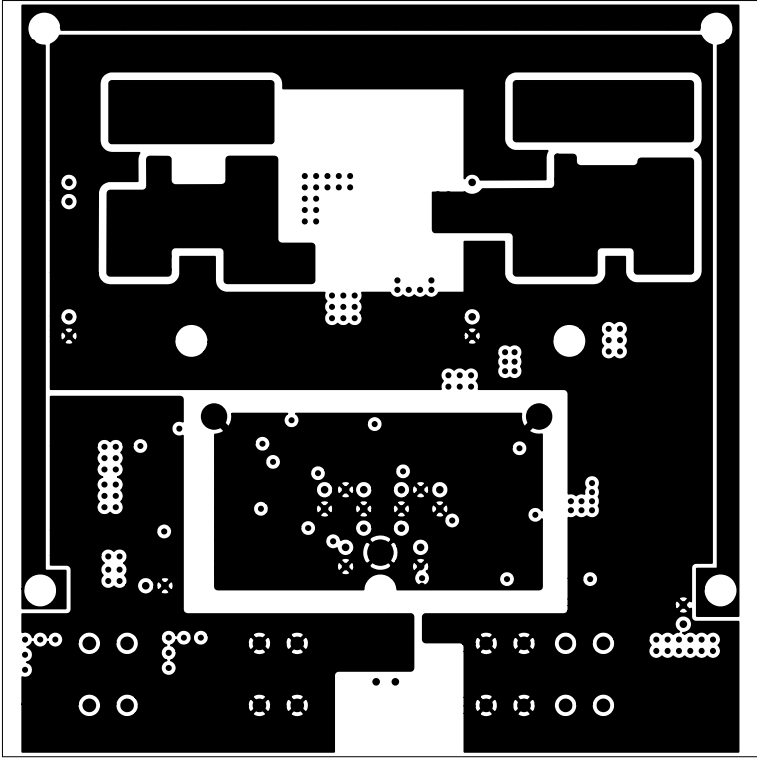




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First Intern Copper Layer :




NOTES :

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Date	Rev.	Creator	Reviewer	Approver	Status
	B				
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2021-06-04	-	Benmouffok	Alinei	Villa	GFE

Title: First Intern Copper Layer



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File: Power.kicad_pcb

Size: A4

Scale : 1:1

Sheet:

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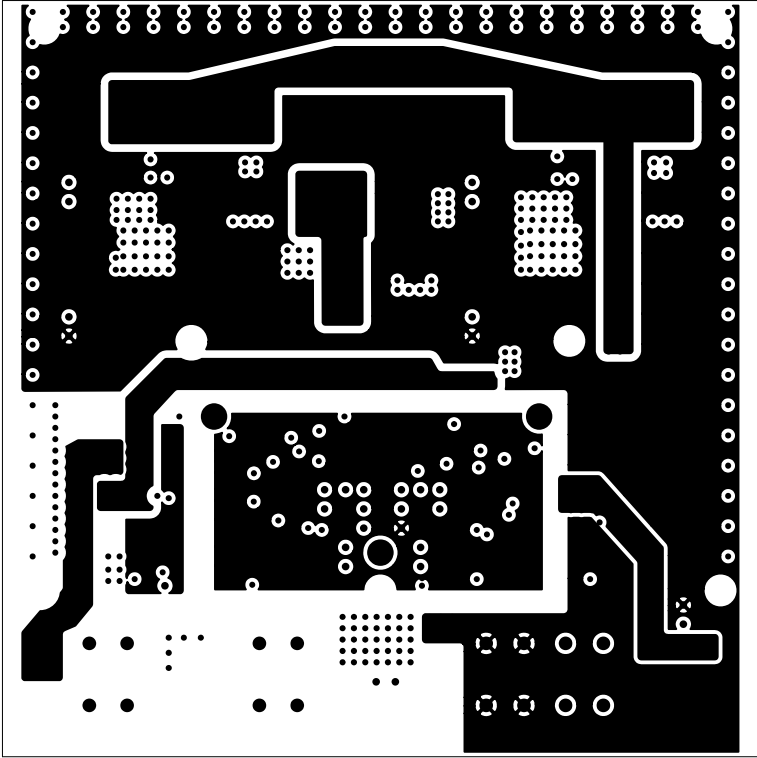
Id: 1/1



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Second Intern Copper Layer :




NOTES :

Source repository : https://gitlab.laas.fr/owntech/1leg/-/tree/V1.1.1/KiCAD_files

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Major revisions are to be described thoroughly when pushed with git push command

Date	Rev.	Creator	Reviewer	Approver	Status
	B				
	A				
2021-06-04	-	Benmouffok	Alinei	Villa	GFE

Title: *Second Intern Copper Layer*


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File: Power.kicad_pcb

Size: A4 | Scale : 1:1

KiCad E.D.A. pcbnew (5.1.7)-1

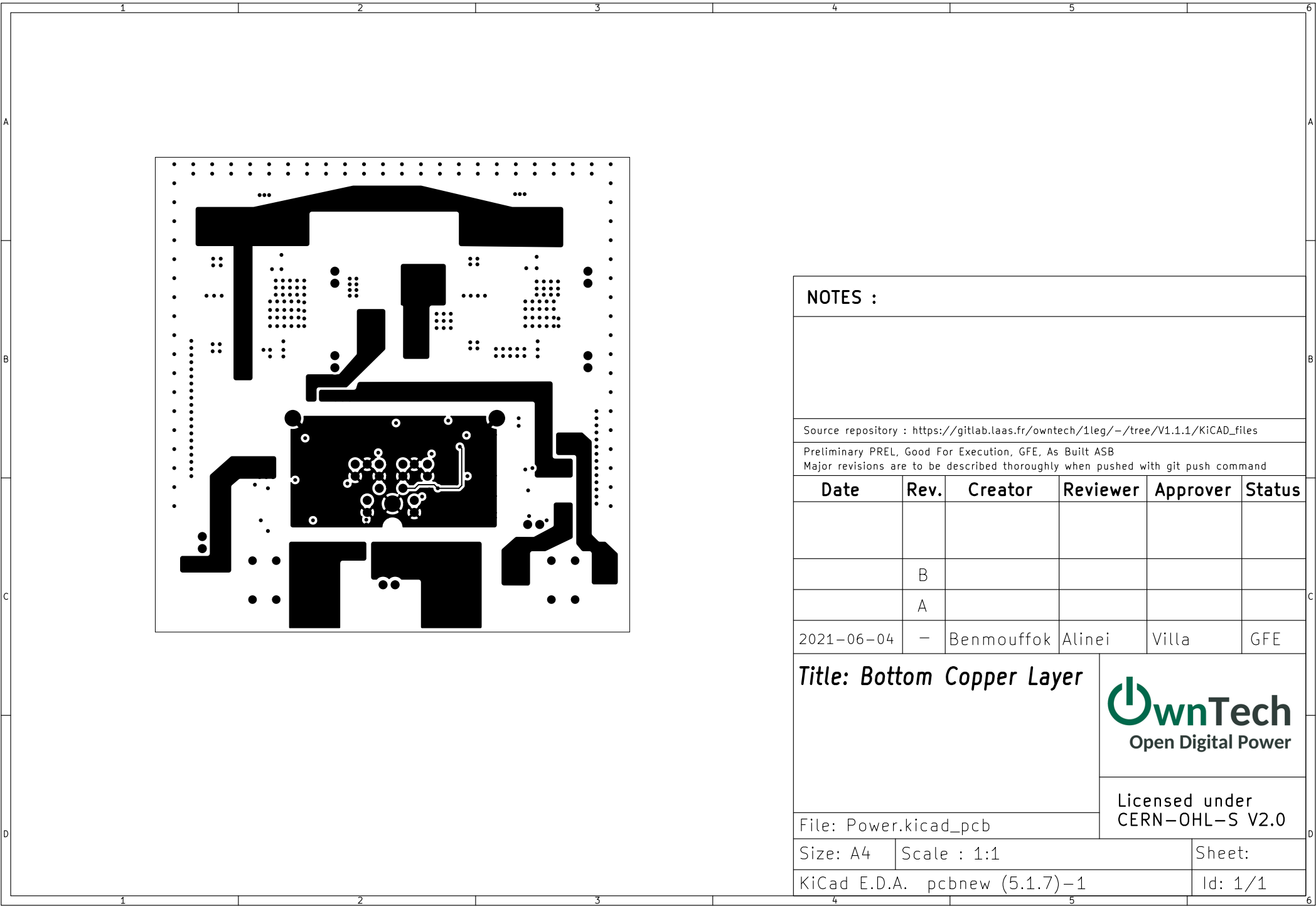
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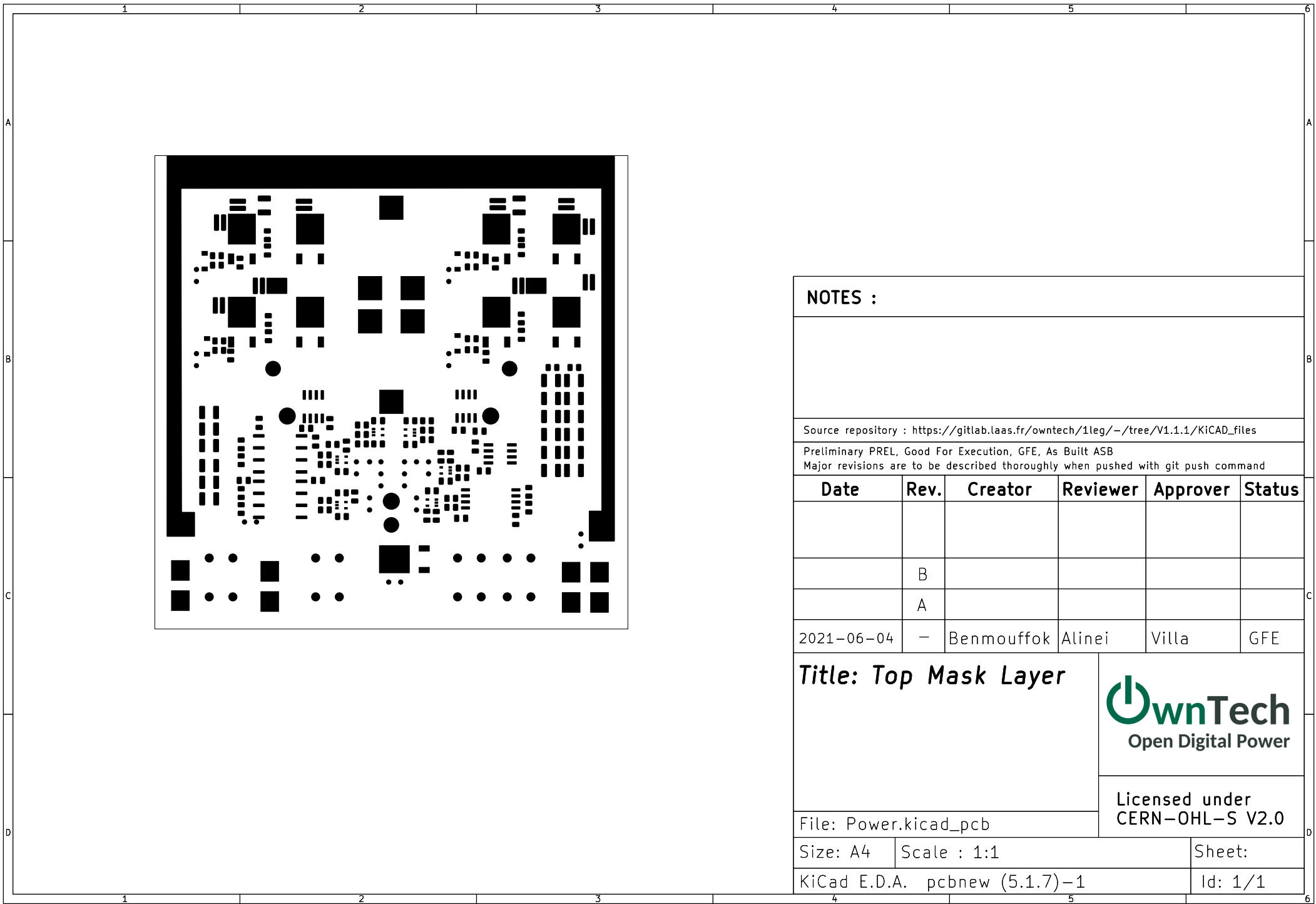
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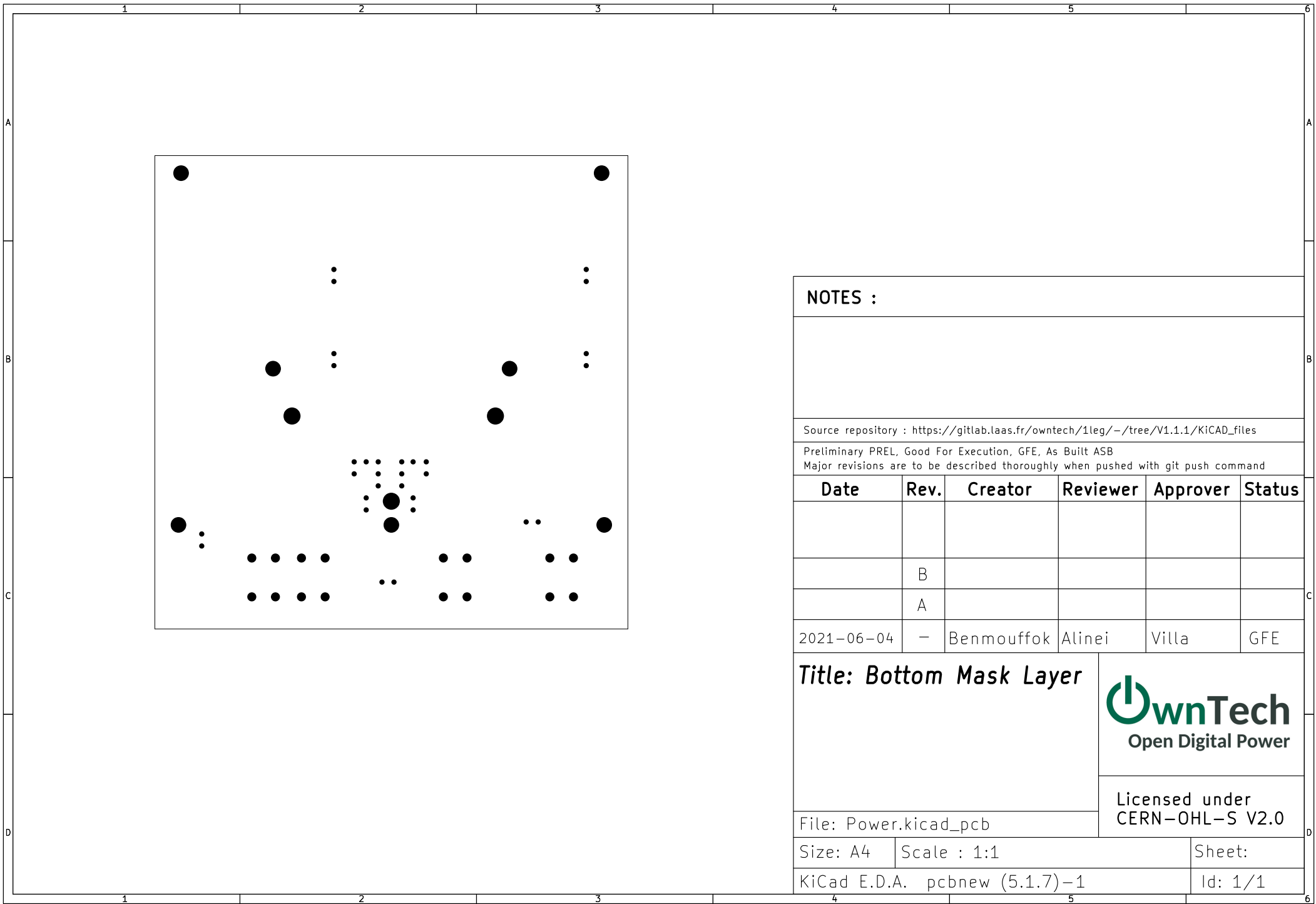



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Bottom Copper Layer :







NOTES :					
Source repository : https://gitlab.laas.fr/owntech/1leg/-/tree/V1.1.1/KiCAD_files					
Preliminary PREL, Good For Execution, GFE, As Built ASB Major revisions are to be described thoroughly when pushed with git push command					
Date	Rev.	Creator	Reviewer	Approver	Status
	B				
	A				
2021-06-04	—	Benmouffok	Alinei	Villa	GFE
Title: Bottom Mask Layer			<div> Open Digital Power</div> <div>Licensed under CERN-OHL-S V2.0</div>		
File: Power.kicad_pcb					
Size: A4	Scale : 1:1			Sheet:	
KiCad E.D.A. pcbnew (5.1.7)–1				Id: 1/1	



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Bill of materials :

Reference	Value	Footprint	Datasheet	Manf#(Manufacturer Reference)
Q1	IPD200N15N3	Package_TO_SOT_SMD:TO-252-2	https://www.infineon.com/dgdl/Infineon-IPD200N15N3%20G-DS-v02_07-EN.pdf?fileId=5546d4624fb7fef2014ff59238932dbf	IPD200N15N3GATMA1
Q2	IPD200N15N3	Package_TO_SOT_SMD:TO-252-2	https://www.infineon.com/dgdl/Infineon-IPD200N15N3%20G-DS-v02_07-EN.pdf?fileId=5546d4624fb7fef2014ff59238932dbf	IPD200N15N3GATMA1
R2	2,2	Resistor_SMD:R_0805_2012Metric	~	CR0805AF/-2R20EAS
R1	2,2	Resistor_SMD:R_0805_2012Metric	~	CR0805AF/-2R20EAS
R32	1k	Resistor_SMD:R_0805_2012Metric	~	RC0805FR-071KL
Rs1	R_Small	Resistor_SMD:R_0805_2012Metric	~	x
Rs2	R_Small	Resistor_SMD:R_0805_2012Metric	~	x
Cs2	C_Small	Capacitor_SMD:C_0805_2012Metric	~	x
Cs1	C_Small	Capacitor_SMD:C_0805_2012Metric	~	x
D_H1	STTH1002CB	Package_TO_SOT_SMD:TO-252-2	https://www.st.com/resource/en/datasheet/stth1002c.pdf	STTH1002CB
D_L1	STTH1002CB	Package_TO_SOT_SMD:TO-252-2	https://www.st.com/resource/en/datasheet/stth1002c.pdf	STTH1002CB
U3	ACS712xLCTR-20A	Package_SO:SOIC-8_3.9x4.9mm_P1.27mm	http://www.allegromicro.com/~media/Files/Datasheets/ACS712-Datasheet.ashx?la=en	ACS712ELCTR-20A-T
C2	100nF	Capacitor_SMD:C_0805_2012Metric	~	CC0805KRX7R9BB104
C5	1nF	Capacitor_SMD:C_0805_2012Metric	~	885382207004
D3	STPS0520Z	Diode_SMD:D_SOD-123	https://www.st.com/resource/en/datasheet/stps0520z.pdf	STPS0520Z
D2	STPS0520Z	Diode_SMD:D_SOD-123	https://www.st.com/resource/en/datasheet/stps0520z.pdf	STPS0520Z
C13	4.7uF	Capacitor_SMD:C_1210_3225Metric		12101C475K4Z2A
C11	100nF	Capacitor_SMD:C_1210_3225Metric	~	1210PC104KAT1A
L2	47uH	Footprints:WE-HCF-2013	https://www.we-online.com/catalog/datasheet/7443634700.pdf	7443634700
C24	100nF	Capacitor_SMD:C_0805_2012Metric	~	CC0805KRX7R9BB104
C22	1nF	Capacitor_SMD:C_0805_2012Metric	~	885382207004
L1	47uH	Footprints:WE-HCF-2013	https://www.we-online.com/catalog/datasheet/7443634700.pdf	7443634700
R4	0	Resistor_SMD:R_0805_2012Metric	~	RC0805FR-070RL
R3	0	Resistor_SMD:R_0805_2012Metric	~	RC0805FR-070RL
C1	1nF	Capacitor_SMD:C_0805_2012Metric	~	885382207004
U4	ACS730xLCTR-20AB	Package_SO:SOIC-8_3.9x4.9mm_P1.27mm	http://www.allegromicro.com/~media/Files/Datasheets/ACS730-Datasheet.ashx?la=en	ACS730KLCTR-20AB-T
Rv1	150K	Resistor_SMD:R_0805_2012Metric	~	PCF-W0805LF-03-1503-B-P-LT



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Reference	Value	Footprint	Datasheet	Manf#(Manufacturer Reference)
Rv3	150K	Resistor_SMD:R_0805_2012Metric	~	PCF-W0805LF-03-1503-B-P-LT
Rv4	470	Resistor_SMD:R_0805_2012Metric	~	TNPW0805470RDEEA
Rv2	470	Resistor_SMD:R_0805_2012Metric	~	TNPW0805470RDEEA
Rv6	5.6K	Resistor_SMD:R_0805_2012Metric		ERA-6AEB562V
Rv5	330K	Resistor_SMD:R_0805_2012Metric	~	RG2012P-334-B-T5
R33	0	Resistor_SMD:R_0805_2012Metric	~	RC0805FR-070RL
R35	1k	Resistor_SMD:R_0805_2012Metric	~	RC0805FR-071KL
C12	100nF	Capacitor_SMD:C_1210_3225Metric	~	1210PC104KAT1A
D4	STPS0520Z	Diode_SMD:D_SOD-123	https://www.st.com/resource/en/datasheet/stps0520z.pdf	STPS0520Z
D_L2	STTH1002CB	Package_TO_SOT_SMD:TO-252-2	https://www.st.com/resource/en/datasheet/stth1002c.pdf	STTH1002CB
D_H2	STTH1002CB	Package_TO_SOT_SMD:TO-252-2	https://www.st.com/resource/en/datasheet/stth1002c.pdf	STTH1002CB
Cs3	C_Small	Capacitor_SMD:C_0805_2012Metric	~	x
Cs4	C_Small	Capacitor_SMD:C_0805_2012Metric	~	x
Rs4	R_Small	Resistor_SMD:R_0805_2012Metric	~	x
Rs3	R_Small	Resistor_SMD:R_0805_2012Metric	~	x
R5	2,2	Resistor_SMD:R_0805_2012Metric	~	CR0805AF/-2R20EAS
Q5	IPD200N15N3	Package_TO_SOT_SMD:TO-252-2	https://www.infineon.com/dgdl/Infineon-IPD200N15N3%20G-DS-v02_07-EN.pdf?fileId=5546d4624fb7fef2014ff59238932dbf	IPD200N15N3GATMA1
Q4	IPD200N15N3	Package_TO_SOT_SMD:TO-252-2	https://www.infineon.com/dgdl/Infineon-IPD200N15N3%20G-DS-v02_07-EN.pdf?fileId=5546d4624fb7fef2014ff59238932dbf	IPD200N15N3GATMA1
J1	2604-1102	Footprints:WAGO-2604-1102	https://www.wago.com/fr/connexion-de-circuits-imprim%C3%A9s/borne-pour-circuits-imprim%C3%A9s/p/2604-1102	2604-1102
J4	2604-1102	Footprints:WAGO-2604-1102	https://www.wago.com/fr/connexion-de-circuits-imprim%C3%A9s/borne-pour-circuits-imprim%C3%A9s/p/2604-1102	2604-1102
Rbleed1	1M	Resistor_SMD:R_0805_2012Metric	~	CMP0805-FX-1004ELF
Rbleed2	1M	Resistor_SMD:R_0805_2012Metric	~	CMP0805-FX-1004ELF
R6	2,2	Resistor_SMD:R_0805_2012Metric	~	CR0805AF/-2R20EAS
R36	1k	Resistor_SMD:R_0805_2012Metric	~	RC0805FR-071KL
D5	STPS0520Z	Diode_SMD:D_SOD-123	https://www.st.com/resource/en/datasheet/stps0520z.pdf	STPS0520Z
R34	0	Resistor_SMD:R_0805_2012Metric	~	RC0805FR-070RL
C15	4.7uF	Capacitor_SMD:C_1210_3225Metric	~	12101C475K4Z2A
C17	4.7uF	Capacitor_SMD:C_1210_3225Metric	~	12101C475K4Z2A
C19	4.7uF	Capacitor_SMD:C_1210_3225Metric	~	12101C475K4Z2A



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Reference	Value	Footprint	Datasheet	Manf#(Manufacturer Reference)
C21	4.7uF	Capacitor_SMD:C_1210_3225Metric	~	12101C475K4Z2A
C25	4.7uF	Capacitor_SMD:C_1210_3225Metric	~	12101C475K4Z2A
C14	4.7uF	Capacitor_SMD:C_1210_3225Metric	~	12101C475K4Z2A
C16	4.7uF	Capacitor_SMD:C_1210_3225Metric	~	12101C475K4Z2A
C18	4.7uF	Capacitor_SMD:C_1210_3225Metric	~	12101C475K4Z2A
C20	4.7uF	Capacitor_SMD:C_1210_3225Metric	~	12101C475K4Z2A
C23	4.7uF	Capacitor_SMD:C_1210_3225Metric	~	12101C475K4Z2A
C26	4.7uF	Capacitor_SMD:C_1210_3225Metric	~	12101C475K4Z2A
C7	4.7uF	Capacitor_SMD:C_1210_3225Metric	~	12101C475K4Z2A
C9	4.7uF	Capacitor_SMD:C_1210_3225Metric	~	12101C475K4Z2A
C6	4.7uF	Capacitor_SMD:C_1210_3225Metric	~	12101C475K4Z2A
C8	4.7uF	Capacitor_SMD:C_1210_3225Metric	~	12101C475K4Z2A
C10	4.7uF	Capacitor_SMD:C_1210_3225Metric	~	12101C475K4Z2A
C3	4.7uF	Capacitor_SMD:C_1210_3225Metric	~	12101C475K4Z2A
U1	ACS730xLCTR-20AB	Package_SO:SOIC-8_3.9x4.9mm_P1.27mm	http://www.allegromicro.com/~media/Files/Datasheets/ACS730-Datasheet.ashx?la=en	ACS730KLCTR-20AB-T
R31	1k	Resistor_SMD:R_0805_2012Metric	~	RC0805FR-071KL
HS1	Heatsink_Pad	Footprints:custom_heatsink	~	x
JP1	THJP0612AST	Resistor_SMD:R_0612_1632Metric	https://www.vishay.com/docs/60157/thjp.pdf	THJP0612AST1
JP3	THJP0612AST	Resistor_SMD:R_0612_1632Metric	https://www.vishay.com/docs/60157/thjp.pdf	THJP0612AST1
JP4	THJP0612AST	Resistor_SMD:R_0612_1632Metric	https://www.vishay.com/docs/60157/thjp.pdf	THJP0612AST1
J6	Conn_01x01	Footprints:0906_millmax	https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J7	Conn_01x01	Footprints:0906_millmax	https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J8	Conn_01x01	Footprints:0906_millmax	https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J20	Conn_01x01	Footprints:0906_millmax	https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0



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Power board

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J21	Conn_01x01	Footprints:0906_millmax	https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J23	Conn_01x01	Footprints:0906_millmax	https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J22	Conn_01x01	Footprints:0906_millmax	https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J24	Conn_01x01	Footprints:0906_millmax	https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J25	Conn_01x01	Footprints:0906_millmax	https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J26	Conn_01x01	Footprints:0906_millmax	https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J9	Conn_01x01	Footprints:0906_millmax	https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J10	Conn_01x01	Footprints:0906_millmax	https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0



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Reference	Value	Footprint	Datasheet	Manf#(Manufacturer Reference)
J11	Conn_01x01	Footprints:0906_millmax	%2FPart+Number+Search https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J12	Conn_01x01	Footprints:0906_millmax	%2FPart+Number+Search https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J13	Conn_01x01	Footprints:0906_millmax	%2FPart+Number+Search https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J14	Conn_01x01	Footprints:0906_millmax	%2FPart+Number+Search https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J15	Conn_01x01	Footprints:0906_millmax	%2FPart+Number+Search https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J16	Conn_01x01	Footprints:0906_millmax	%2FPart+Number+Search https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J17	Conn_01x01	Footprints:0906_millmax	%2FPart+Number+Search https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J18	Conn_01x01	Footprints:0906_millmax	%2FPart+Number+Search https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J19	Conn_01x01	Footprints:0906_millmax	%2FPart+Number+Search https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0



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Reference	Value	Footprint	Datasheet	Manf#(Manufacturer Reference)
			0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	
J31	Conn_01x01	Footprints:0906_millmax	https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J29	Conn_01x01	Footprints:0906_millmax	https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J28	Conn_01x01	Footprints:0906_millmax	https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
JP5	THJP0612AST	Resistor_SMD:R_0612_1632Metric	https://www.vishay.com/docs/60157/thjp.pdf	THJP0612AST1
JP2	THJP0612AST	Resistor_SMD:R_0612_1632Metric	https://www.vishay.com/docs/60157/thjp.pdf	THJP0612AST1
JP6	THJP0612AST	Resistor_SMD:R_0612_1632Metric	https://www.vishay.com/docs/60157/thjp.pdf	THJP0612AST1
U6	AMC1100DUB	Footprints:SOP-8_6.62x9.15mm_P2.54mm	https://www.ti.com/lit/ds/symlink/amc1100.pdf?ts=1622519237932&ref_url=https%253A%252F%252Fwww.google.com%252F	AMC1100DUB
U7	AMC1100DUB	Footprints:SOP-8_6.62x9.15mm_P2.54mm	https://www.ti.com/lit/ds/symlink/amc1100.pdf?ts=1622519237932&ref_url=https%253A%252F%252Fwww.google.com%252F	AMC1100DUB
R11	27k	Resistor_SMD:R_0805_2012Metric	~	RC0805FR-0727KL
R12	27k	Resistor_SMD:R_0805_2012Metric	~	RC0805FR-0727KL
U10	OPA316	Package_TO_SOT_SMD:SOT-353_SC-70-5	https://www.ti.com/lit/ds/symlink/opa316.pdf?ts=1622530692356&ref_url=https%253A%252F%252Fwww.ti.com%252Fproduct%252FOPA316	OPA316IDCKT
R15	12k	Resistor_SMD:R_0805_2012Metric	~	RC0805FR-0712KL
R18	12k	Resistor_SMD:R_0805_2012Metric	~	RC0805FR-0712KL



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Reference	Value	Footprint	Datasheet	Manf#(Manufacturer Reference)
R7	27k	Resistor_SMD:R_0805_2012Metric	~	RC0805FR-0727KL
R8	27k	Resistor_SMD:R_0805_2012Metric	~	RC0805FR-0727KL
U8	OPA316	Package_TO_SOT_SMD:SOT-353_SC-70-5	https://www.ti.com/lit/ds/symlink/opa316.pdf?ts=1622530692356&ref_url=https%253A%252F%252Fwww.ti.com%252Fproduct%252FOPA316	OPA316IDCKT
R13	12k	Resistor_SMD:R_0805_2012Metric	~	RC0805FR-0712KL
R16	12k	Resistor_SMD:R_0805_2012Metric	~	RC0805FR-0712KL
C35	100nF	Capacitor_SMD:C_0805_2012Metric	~	CC0805KRX7R9BB104
R9	27k	Resistor_SMD:R_0805_2012Metric	~	RC0805FR-0727KL
R10	27k	Resistor_SMD:R_0805_2012Metric	~	RC0805FR-0727KL
U9	OPA316	Package_TO_SOT_SMD:SOT-353_SC-70-5	https://www.ti.com/lit/ds/symlink/opa316.pdf?ts=1622530692356&ref_url=https%253A%252F%252Fwww.ti.com%252Fproduct%252FOPA316	OPA316IDCKT
R14	12k	Resistor_SMD:R_0805_2012Metric	~	RC0805FR-0712KL
R17	12k	Resistor_SMD:R_0805_2012Metric	~	RC0805FR-0712KL
C29	100nF	Capacitor_SMD:C_0805_2012Metric	~	CC0805KRX7R9BB104
C27	100nF	Capacitor_SMD:C_0805_2012Metric	~	CC0805KRX7R9BB104
C36	100nF	Capacitor_SMD:C_0805_2012Metric	~	CC0805KRX7R9BB104
C37	100nF	Capacitor_SMD:C_0805_2012Metric	~	CC0805KRX7R9BB104
J32	Conn_01x01	Footprints:0906_millmax	https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
U11	OPA316	Package_TO_SOT_SMD:SOT-353_SC-70-5	https://www.ti.com/lit/ds/symlink/opa316.pdf?ts=1622530692356&ref_url=https%253A%252F%252Fwww.ti.com%252Fproduct%252FOPA316	OPA316IDCKT
U13	OPA316	Package_TO_SOT_SMD:SOT-353_SC-70-5	https://www.ti.com/lit/ds/symlink/opa316.pdf?ts=1622530692356&ref_url=https%253A%252F%252Fwww.ti.com%252Fproduct%252FOPA316	OPA316IDCKT
R24	200k	Resistor_SMD:R_0805_2012Metric	~	ERJ6RED2003V
R20	200k	Resistor_SMD:R_0805_2012Metric	~	ERJ6RED2003V
R22	200k	Resistor_SMD:R_0805_2012Metric	~	ERJ6RED2003V



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Reference	Value	Footprint	Datasheet	Manf#(Manufacturer Reference)
R28	82k	Resistor_SMD:R_0805_2012Metric	~	CR0805-FX-8202ELF
R29	82k	Resistor_SMD:R_0805_2012Metric	~	CR0805-FX-8202ELF
R30	82k	Resistor_SMD:R_0805_2012Metric	~	CR0805-FX-8202ELF
U12	OPA316	Package_TO_SOT_SMD:SOT-353_SC-70-5	https://www.ti.com/lit/ds/symlink/opa316.pdf?ts=1622530692356&ref_url=https%253A%252F%252Fwww.ti.com%252Fproduct%252FOPA316	OPA316IDCKT
R19	200k	Resistor_SMD:R_0805_2012Metric	~	ERJ6RED2003V
R27	82k	Resistor_SMD:R_0805_2012Metric	~	CR0805-FX-8202ELF
R26	82k	Resistor_SMD:R_0805_2012Metric	~	CR0805-FX-8202ELF
R25	82k	Resistor_SMD:R_0805_2012Metric	~	CR0805-FX-8202ELF
R23	200k	Resistor_SMD:R_0805_2012Metric	~	ERJ6RED2003V
R21	200k	Resistor_SMD:R_0805_2012Metric	~	ERJ6RED2003V
F1	Nano2 fuse holder	Footprints:Fuse_holder_omni_blok	https://www.littelfuse.com/~media/electronics/datasheets/fuses/littelfuse_fuse_154_154t_154l_154tl_datash eet.pdf.pdf	0154008.DRL
F2	Nano2 fuse holder	Footprints:Fuse_holder_omni_blok	https://www.littelfuse.com/~media/electronics/datasheets/fuses/littelfuse_fuse_154_154t_154l_154tl_datash eet.pdf.pdf	0154008.DRL
F3	Nano2 fuse holder	Footprints:Fuse_holder_omni_blok	https://www.littelfuse.com/~media/electronics/datasheets/fuses/littelfuse_fuse_154_154t_154l_154tl_datash eet.pdf.pdf	0154008.DRL
Q3	IPD200N15N3	Package_TO_SOT_SMD:TO-252-2	https://www.infineon.com/dgdl/Infineon-IPD200N15N3%20G-DS-v02_07-EN.pdf?fileId=5546d4624fb7fef2014ff59238932dbf	IPD200N15N3GATMA1
U5	AMC1311	Footprints:SOIC-8_7.5x5.85mm_P1.27mm	ti.com/lit/ds/symlink/amc1311.pdf?ts=1622554434410&ref_url=https%253A%252F%252Fwww.ti.com%252Fproduct%252FAMC1311%253Futm_source%253Dgoogle%2526utm_medium%253Dcpc%2526utm_campaign%253Dasc-dc-null-prod%2526utm_content%253Dpro	AMC1311DWVR
C28	100nF	Capacitor_SMD:C_0805_2012Metric	~	CC0805KRX7R9BB104
C4	100nF	Capacitor_SMD:C_0805_2012Metric	~	CC0805KRX7R9BB104
J5	2604-1102	Footprints:WAGO-2604-1102	https://www.wago.com/fr/connexion-de-circuits-imprim%C3%A9s/borne-pour-	2604-1102



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Reference	Value	Footprint	Datasheet	Manf#(Manufacturer Reference)
J2	2604-1102	Footprints:WAGO-2604-1102	circuits-imprim%C3%A9s/p/2604-1102 https://www.wago.com/fr/connexion-de-circuits-imprim%C3%A9s/borne-pour-circuits-imprim%C3%A9s/p/2604-1102	2604-1102
J27	Conn_01x01	Footprints:0906_millmax	https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J30	Conn_01x01	Footprints:0906_millmax	https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J33	Conn_01x01	Footprints:0906_millmax	https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J34	Conn_01x01	Footprints:0906_millmax	https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
J3	Conn_01x01	Footprints:0906_millmax	https://www.mill-max.com/products/pin/0906/0906-0-15-20-76-14-11-0?s_term=0906-0-15-20-76-14-11-0&s_type=Quick%2FProduct%2FPart+Number+Search	0906-0-15-20-76-14-11-0
C30	100nF	Capacitor_SMD:C_0805_2012Metric	~	CC0805KRX7R9BB104
C31	100nF	Capacitor_SMD:C_0805_2012Metric	~	CC0805KRX7R9BB104
C32	100nF	Capacitor_SMD:C_0805_2012Metric	~	CC0805KRX7R9BB104
H1	MountingHole	Footprints:mounting_holes	~	x
F4	Nano2 fuse holder	Footprints:Fuse_holder_omni_blok	https://www.littelfuse.com/~media/electronics/datasheets/fuses/littelfuse_fuse_154_154t_154l_154tl_datash eet.pdf.pdf	0154008.DRL
C33	100nF	Capacitor_SMD:C_0805_2012Metric	~	CC0805KRX7R9BB104
C34	100nF	Capacitor_SMD:C_0805_2012Metric	~	CC0805KRX7R9BB104
C38	100nF	Capacitor_SMD:C_0805_2012Metric	~	CC0805KRX7R9BB104
JP8	THJP0612AST	Resistor_SMD:R_0612_1632Metric	https://www.vishay.com/docs/60157/thjp.pdf	THJP0612AST1



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Reference	Value	Footprint	Datasheet	Manf#(Manufacturer Reference)
JP7	THJP0612AST	Resistor_SMD:R_0612_1632Metric	https://www.vishay.com/docs/60157/thjp.pdf	THJP0612AST1
JP10	THJP0612AST	Resistor_SMD:R_0612_1632Metric	https://www.vishay.com/docs/60157/thjp.pdf	THJP0612AST1
JP9	THJP0612AST	Resistor_SMD:R_0612_1632Metric	https://www.vishay.com/docs/60157/thjp.pdf	THJP0612AST1
H2	MountingHole_Pad	MountingHole:MountingHole_2.2mm_M2_ISO7380_Pad	~	x
H3	MountingHole_Pad	MountingHole:MountingHole_2.2mm_M2_ISO7380_Pad	~	x
H4	MountingHole_Pad	MountingHole:MountingHole_2.2mm_M2_ISO7380_Pad	~	X

