



SUNFLEX TECH CO., Ltd.

承認書

APPROVAL SHEET

CUSTOMER 客 戶 名 稱	:	BIONIME CORPORATION 華廣生技股份有限公司
PRODUCT DESCRIPTION 產 品 種 類	:	FLEXIBLE PRINTED CIRCUIT 軟式印刷電路板
CUSTOMER PART NO/DWG. NO 客 戶 編 號 / 圖 號	:	HT500 V2.5
SUNFLEX PART NO 旭 軟 編 號	:	LW28M11235D
DATE 日 期	:	2024/12/23
APPROVAL SHEET NO 承 認 書 編 號	:	

No. 522, Nanshang Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

TEL : 886-3-222-0998 FAX : 886-3-222-0995



SUNFLEX TECH CO., Ltd.

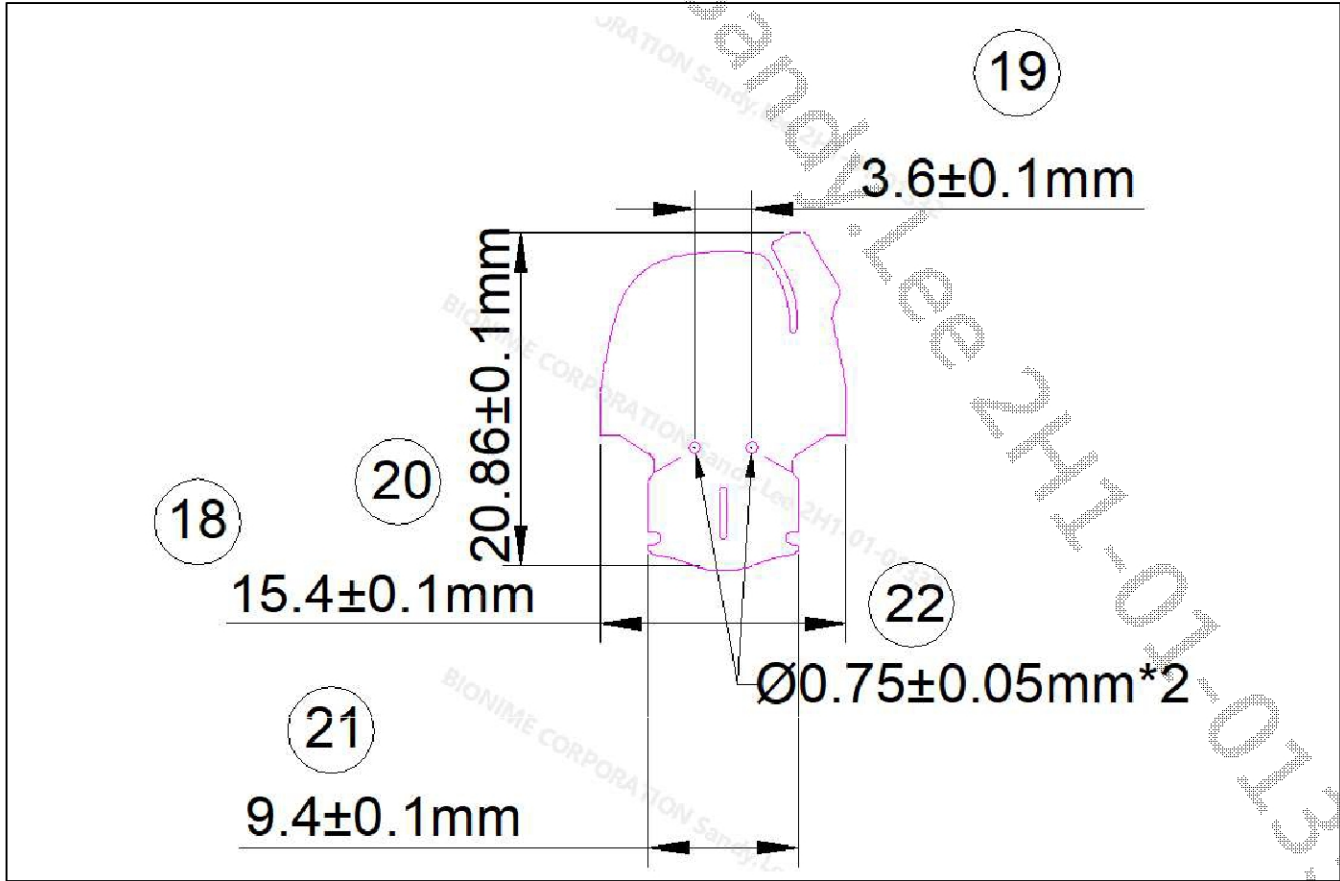
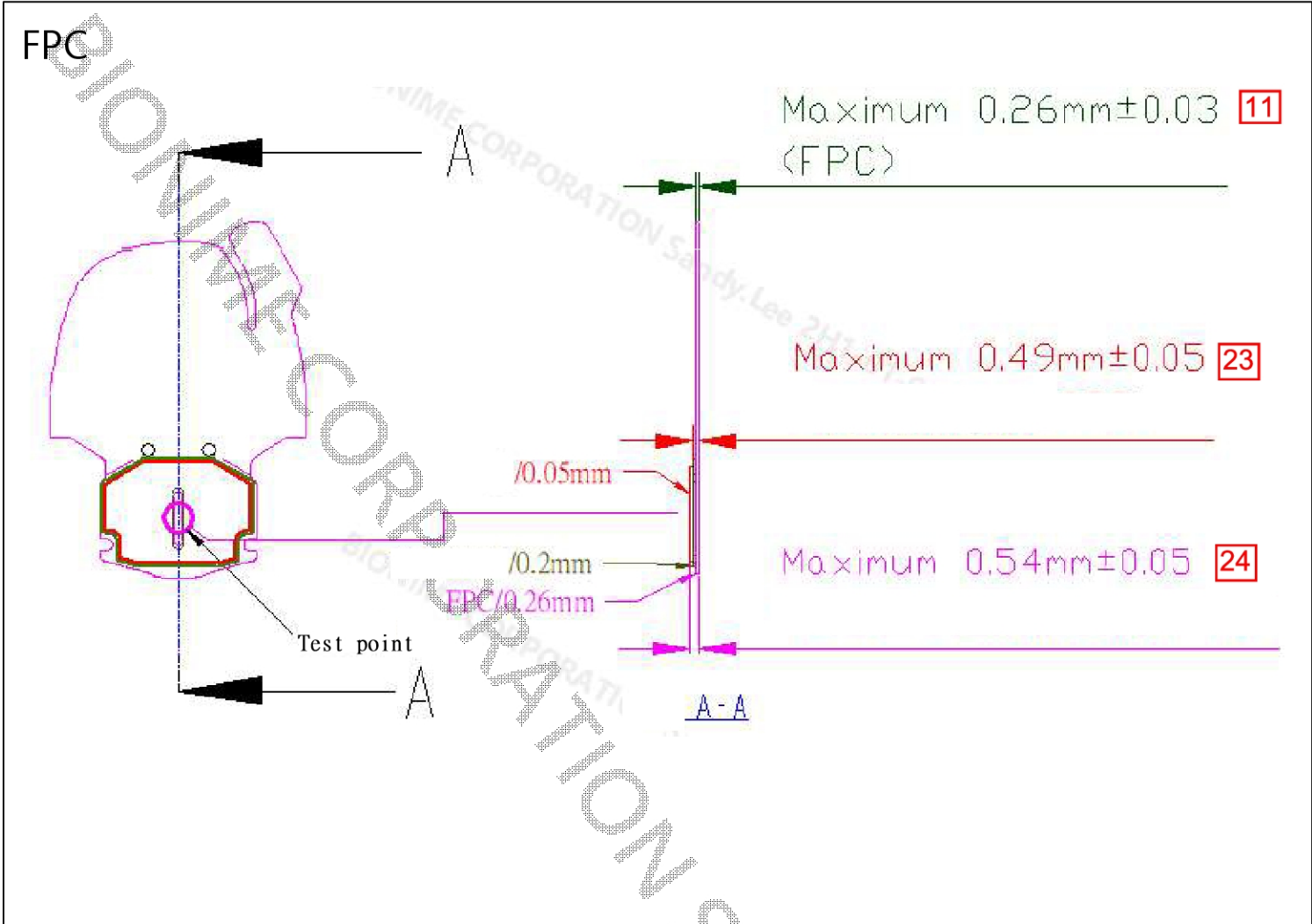
CUSTOMER	BIONIME CORPORATION	SUNFLEX P/N	LW28M11235D
CUSTOMER P/N	HT500 V2.5		
Product Structure	Flexible Printed Circuit : ☐ Single Side ☐ Double Side ☒ Multilayer Board		
	GP Matching Options : ☐ RoHS ☒ RoHS2.0+Halogen Free ☐ Other_____		
Main Material (FPC)	Copper Laminated 1+2	Mfger./Type	THINFLEX W-0505RD-CL
		Base Film	PI(Polyimide) Thk.1/2mil
		Adhesive	-
		Copper foil	ED Cu Thk. 1/2oz
	Coverlay 1	Mfger./Type	APLUS BHP025GM1 (Black)
		Cover Film	PI(Polyimide) Thk.1/2mil
		Adhesive	Epoxy resin Thk.1mil
	Coverlay 2	Mfger./Type	TAIFLEX FHT0525(Yellow)
		Cover Film	PI(Polyimide) Thk.1/2mil
		Adhesive	Epoxy resin Thk.1mil
	Adhesive	-	ADVANCE BA-25FP Thk.25μm
	Stiffener	PI	APLUS AHIQX235XSG1N Thk.2mil(Brown)
	Stainless Sheet	Steel Sheet	CHIA FAR SUS304 Thk.0.2mm
		Adhesive	TATSUTA CBF-800-D60 Thk.55~65μm
	Solder Mask	-	ONSTATIC R-500 FPMK (Black)
	Character Ink	-	AGFA FWh01(White)
	Surface Treatment	Ni Plating	Vale Nickel Plate Rounds(鎳塊)
		Au Plating	HONHAI Potassium Gold Cyanide(金鹽)
		Thickness	(化鎳)Ni : 80~200μ” ; (化金)Au : ≥2μ”

CUSTOMER	華廣生技股份有限公司	SUNFLEX P/N	LW28M11235D
CUSTOMER P/N	HT500 V2.5		
Appearance Inspection &Characteristic Test	Test Items	Test Result	Requirement & Reference
	UL Type	-	-
	Appearance Inspection	Pass	IPC6013/ IPC 6012/TPCA
	Open/Short 100% Test	Pass	Test voltage 100~250 V ; 10~50Ω ; IR 10~20MΩ
	Plating Adhesion	Pass	JIS C5016
	Solder Float	Pass	J-STD-003B 4.2.8.4.2
	Bending Resistance	Pass	IPC-TM-650

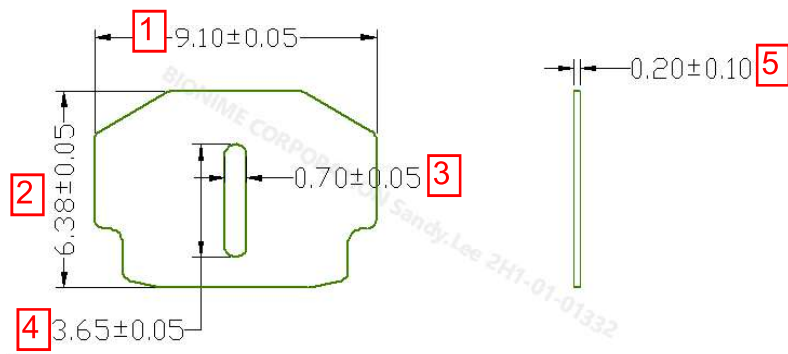
No. 522, Nanshang Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

桃園市龜山區南上路522號

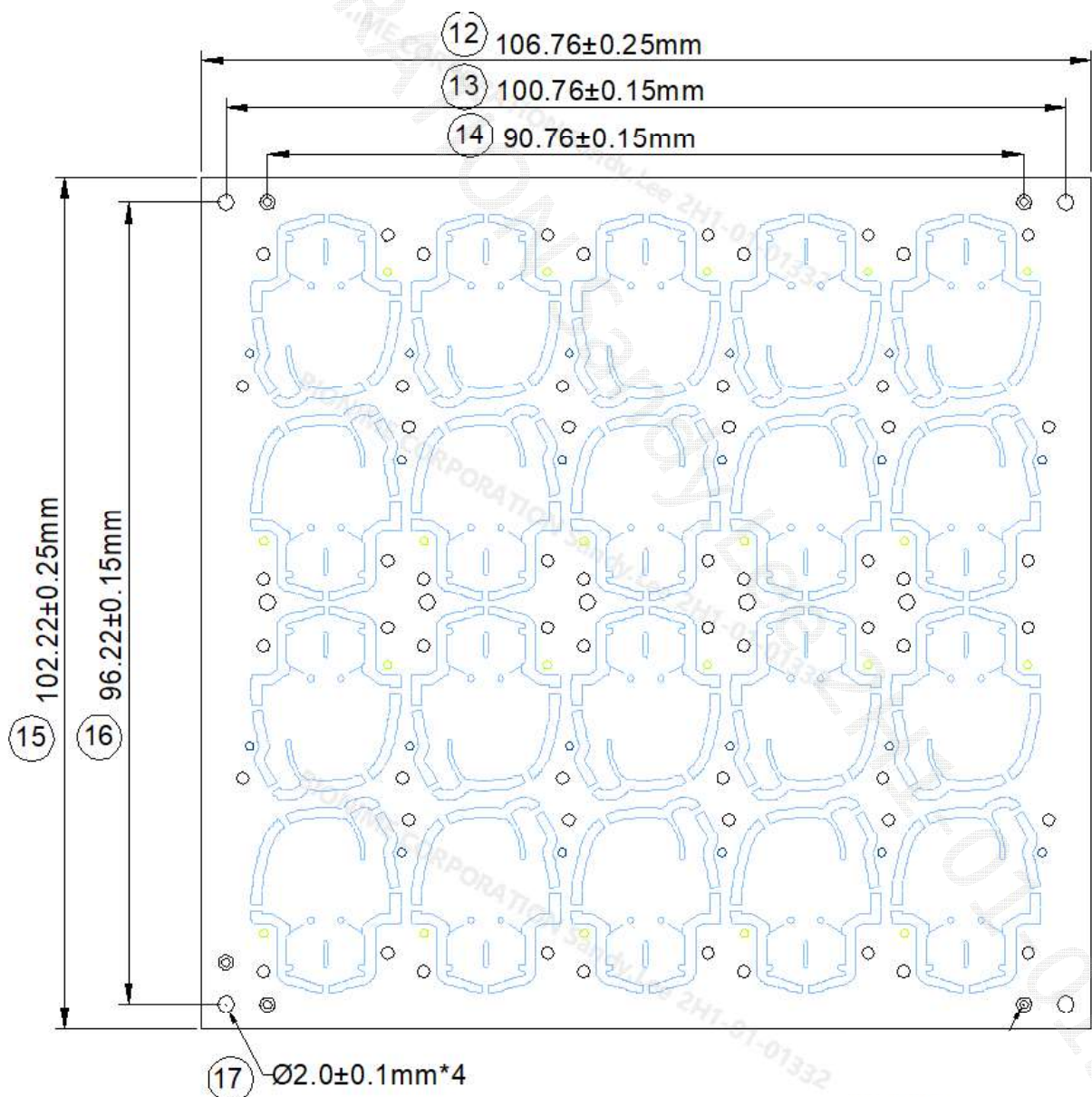
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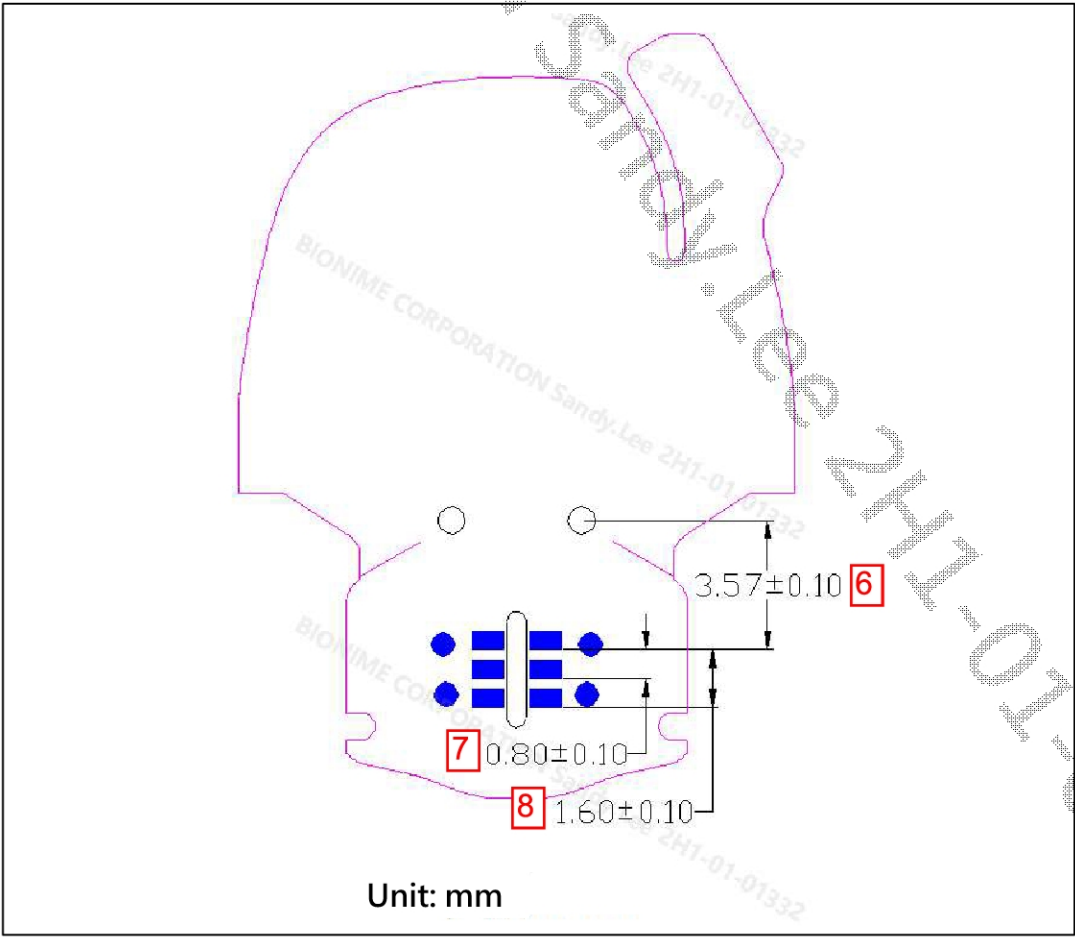


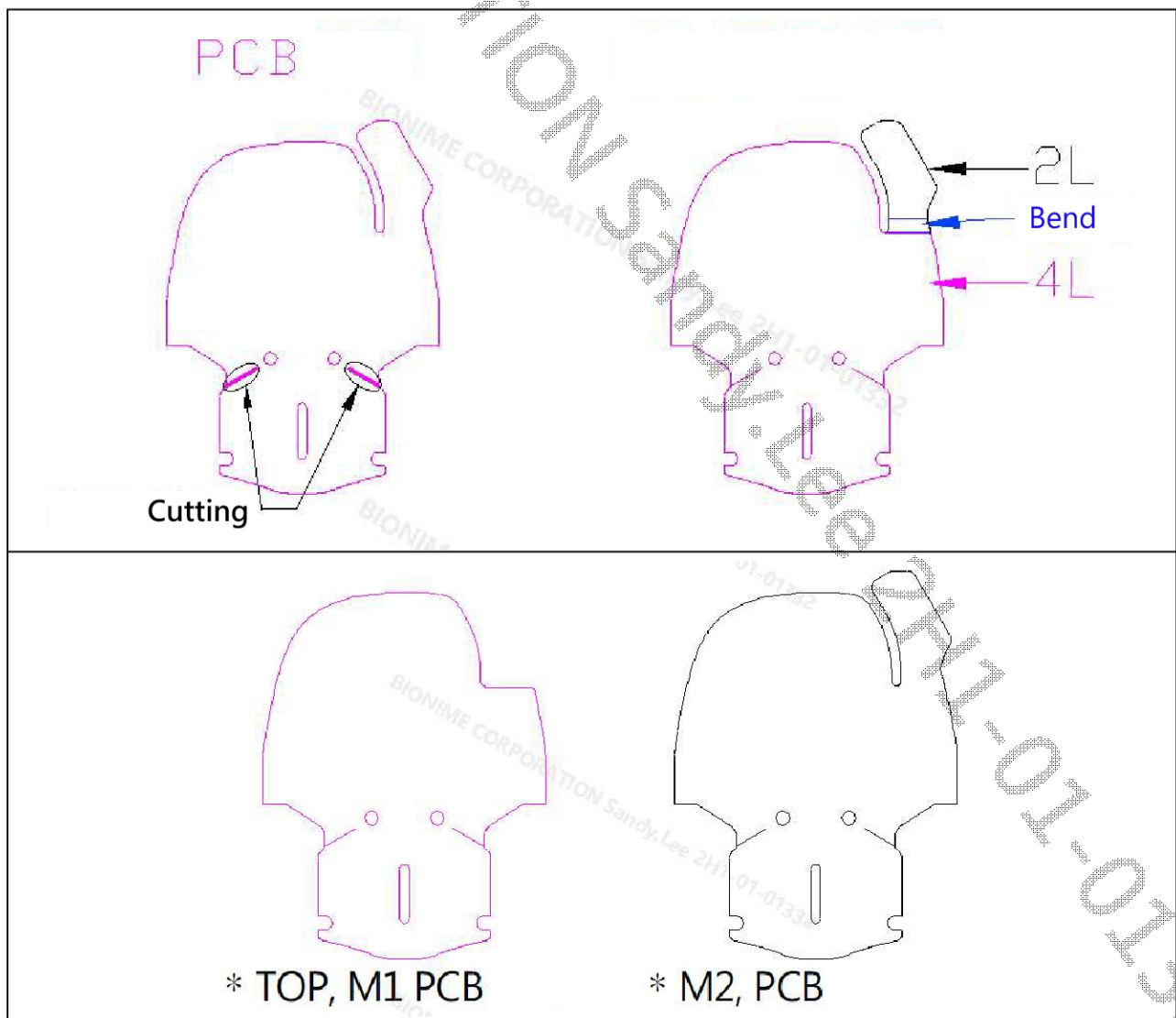
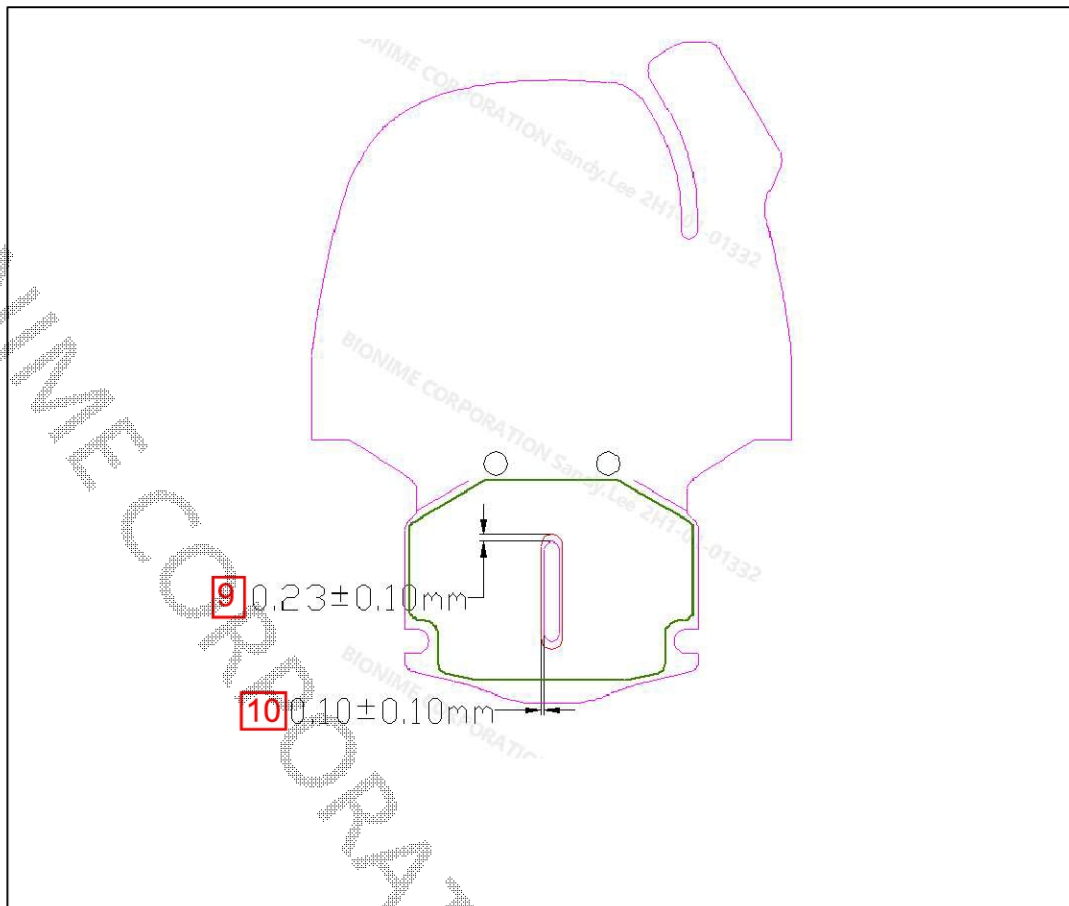
HT500 V2.5



unit: mm



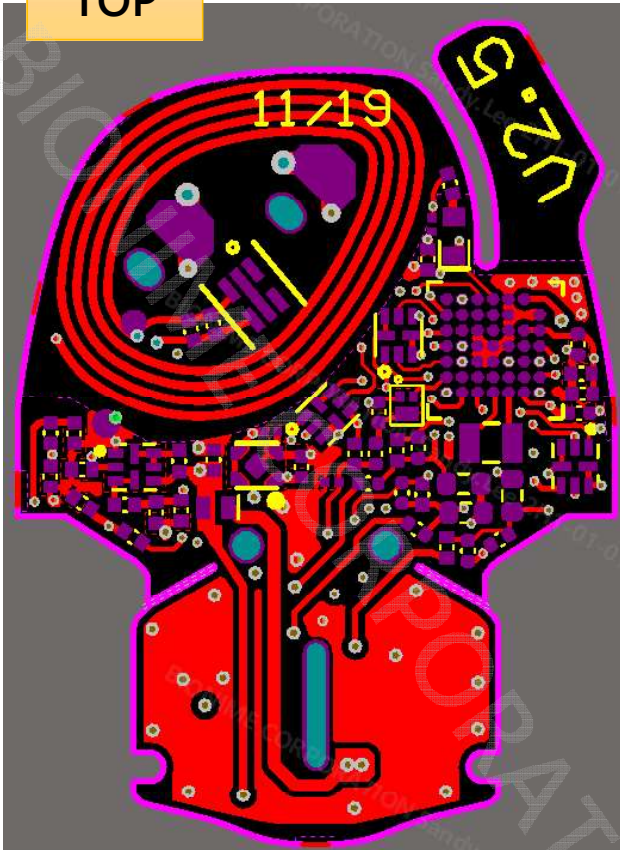




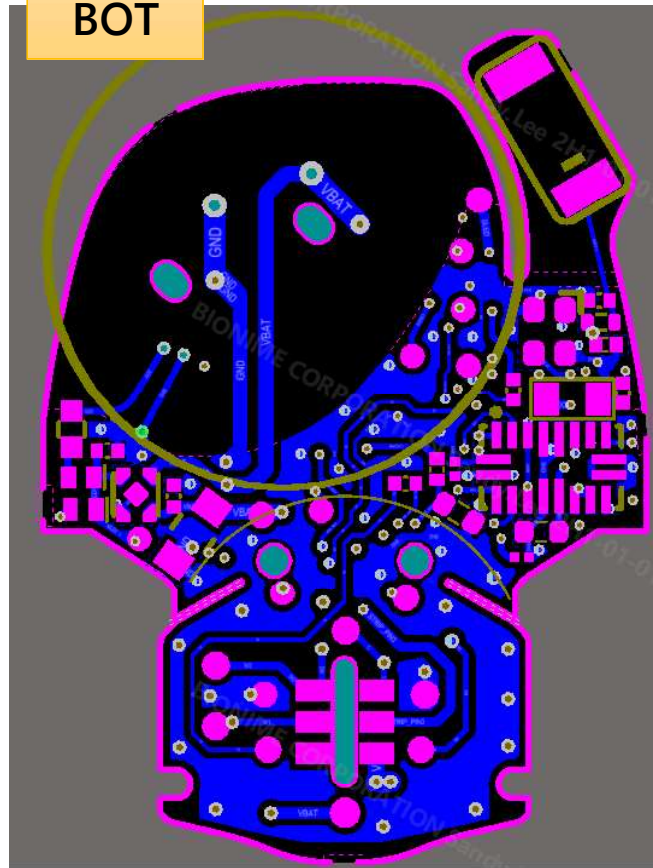
* TOP, M1 PCB

* M2, PCB

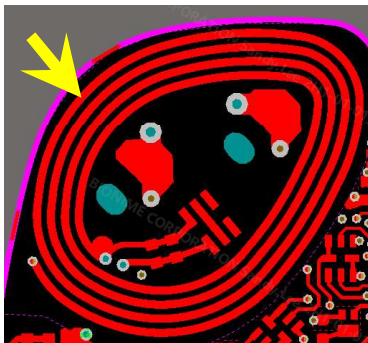
TOP



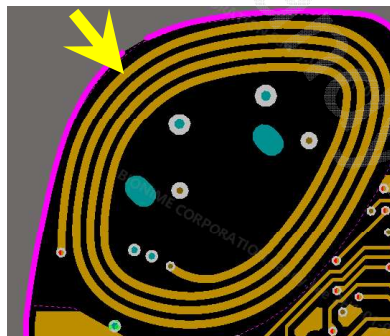
BOT



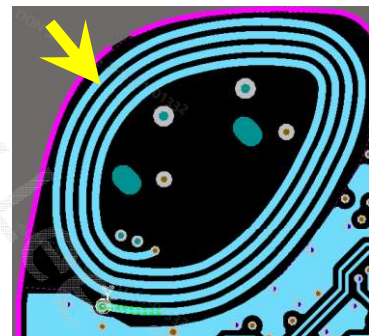
● nFC Antenna



TOP



M1



M2



CUSTOMER			華廣生技股份有限公司 BIONIME CORPORATION				
CUSTOMER P/N			HT500 V2.5				
SUNFLEX P/N			LW28M11235D				
DIMENSION (ATTACHMENT) mm							
Item	Spec.	Tolerance	Result	Difference	Status	Remarks	
1	9.100	± 0.05	9.085	-0.015	OK		
2	6.380	± 0.05	6.379	-0.001	OK		
3	0.700	± 0.05	0.751	0.051	NG	2024/12/18 Based on the appearance	
4	3.650	± 0.05	3.709	0.059	NG		
5	0.200	± 0.10	0.210	0.010	OK		
6	3.570	± 0.10	3.584	0.014	OK		
7	0.800	± 0.10	0.767	-0.033	OK		
8	1.600	± 0.10	1.576	-0.024	OK		
9	0.230	± 0.10	0.260	0.030	OK		
10	0.100	± 0.10	0.119	0.019	OK		
11	0.260	± 0.03	0.264	0.004	OK		
12	106.760	± 0.25	106.705	-0.055	OK		
13	100.760	± 0.15	100.804	0.044	OK		
14	90.760	± 0.15	90.734	-0.026	OK		
15	102.220	± 0.25	102.220	0.000	OK		
16	96.220	± 0.15	96.089	-0.131	OK		
17	2.000	± 0.10	1.976	-0.024	OK		
18	15.400	± 0.10	15.401	0.001	OK		
19	3.600	± 0.10	3.599	-0.001	OK		
20	21.160	± 0.10	21.153	-0.007	OK		

[illegible]

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桃園市龜山區南上路522號

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Wiring, Printed - Flexible Material Constructions - Component

COMPANY

SUNFLEX TECH CO LTD

522 Nan-Shang Rd

Kueisan Hsiang, 333 Taiwan

E203460

Type	Cond Width		Max		Report		Max		Assembly		Max		Meets		C
	Min	Cond	SS/	Area	date	Surface	Solder	Oper	Solder	Temp	Flame	UL796F			
	Min	Edge	Thk	DS/	Diam	After	Mount	Process	Process	Limits	Temp	Class			
	mm	mm	mic	DSO	mm	2022-01-01	Technology	°C	Cycles	°C	sec	°C	Class	DSR	I
Multilayer flexible materials interconnect constructions, Flammability Recognition only															
S-23	-	-	-	DS	-	No	-	-	-	280	10	-	V-0	-	-
S-5	-	-	-	DS	-	No	-	-	-	280	10	-	V-0	-	-
S-53 (ASP 1)	-	-	-	DS	-	Yes	Yes	260	3	280	10	-	V-0	-	-
S-61 (ASP 1)	-	-	-	DS	-	Yes	Yes	260	3	-	-	-	V-0	-	-
S-72 (ASP 1)	-	-	-	DS	-	Yes	Yes	260	3	-	-	-	V-0	-	-
Multilayer flexible materials interconnect constructions, Flex to Install Application															
S-51	0.04	0.05	12 Int:35	DS	50.8	No	-	-	-	280	10	105	V-0	-	-
S-52	0.04	0.05	12 Int:35	DS	50.8	No	-	-	-	280	10	105	V-0	-	-
Single layer flexible material construction printed-wiring boards for use in flexible applications															
S-1	0.25	0.25	17	DS	25.4	No	-	-	-	260	10	105	V-0	All	-
S-11	0.075	0.225	12	DS	25.4	No	-	-	-	280	10	105	V-0	-	-
Single layer flexible materials interconnect constructions, Flammability Recognition only															
S-1.a	-	-	-	DS	-	No	-	-	-	260	10	-	V-0	-	-

S-2	-	-	-	SS	-	No	-	-	-	280	15	-	V-0	-	-
S-22	-	-	-	DS	-	No	-	-	-	280	10	-	V-0	-	-
S-3	-	-	-	DS	-	No	-	-	-	280	10	-	VTM-0	-	-
S-31 (ASP 1)	-	-	-	DS	-	Yes	Yes	260	3	-	-	-	V-0	-	-
S-32 (ASP 1)	-	-	-	DS	-	Yes	Yes	260	3	-	-	-	V-0	-	-
S-71 (ASP 1)	-	-	-	DS	-	Yes	Yes	260	3	-	-	-	V-0	-	-
Single layer flexible materials interconnect constructions, Flex to Install Application															
S-12	0.14	0.42	12	DS	50.8	No	-	-	-	280	10	105	V-0	-	-
S-13	0.04	0.05	12	DS	50.8	No	-	-	-	280	10	105	V-0	-	-
S-14	0.15	0.45	12	DS	50.8	No	-	-	-	280	10	105	V-0	-	-
S-15	0.04	0.05	12	DS	50.8	No	-	-	-	280	10	105	V-0	-	-
S-16	0.06	0.2	12	SS	50.8	No	-	-	-	280	10	105	V-0	All	-
S-17	0.05	0.2	15	SS	50.8	No	-	-	-	280	10	105	V-0	-	-
S-21	0.14	0.42	9	DS	50.8	No	-	-	-	280	10	105	V-0	-	-
S-6	0.145	0.435	17.5	DS	50.8	No	-	-	-	260	10	105	V-0	All	-

(ASP 1) - Assembly solder process evaluated to IPC-TM-650, 2.6.27 Thermal Stress Assembly Simulation.

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Last Updated on 2024-01-25

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