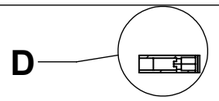
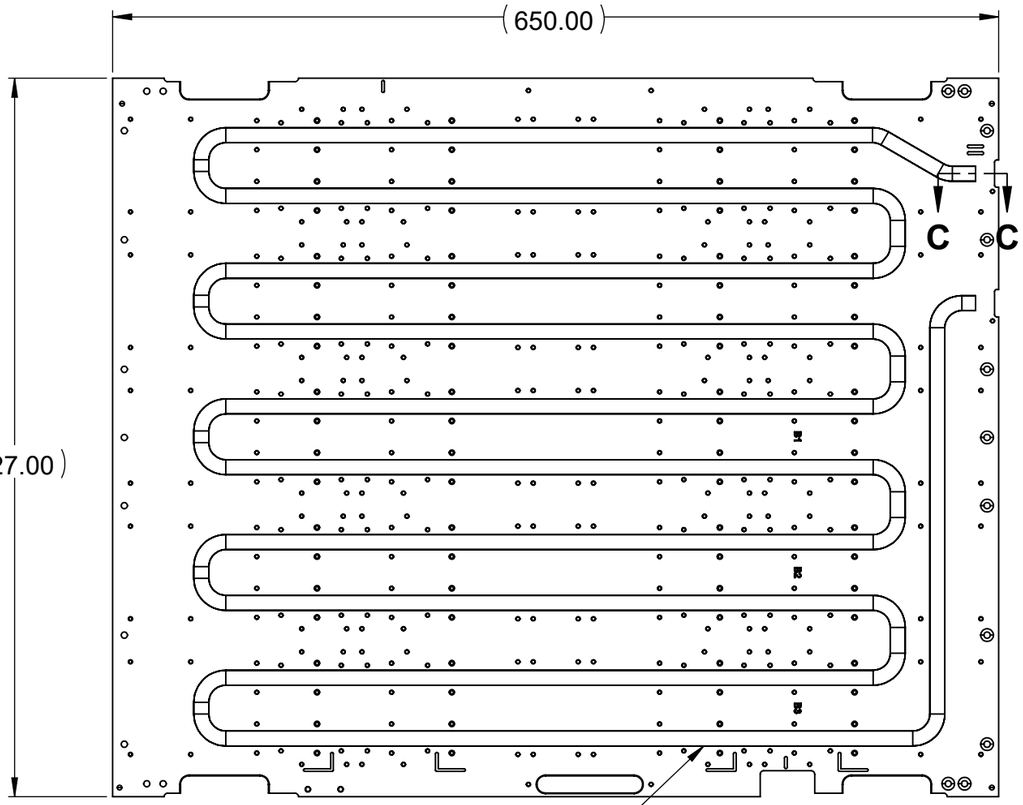
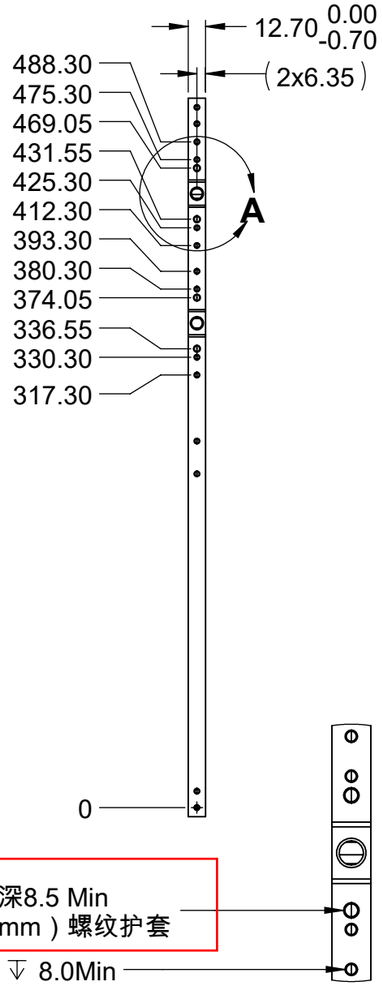
REVISION HISTORY							
REV	ECN	ZONE	REASON FOR CHANGE	REVISED BY	REVISION DATE	APPROVED BY	DATE APPROVED
06	EC-SZ202610022		设计变更，增加4个M3螺纹孔		2026/11/4		2026/11/4
07			去除接头		2026/11/12		2026/11/12



剖面 C-C



摩擦焊路径，焊接后实物
上查看不到

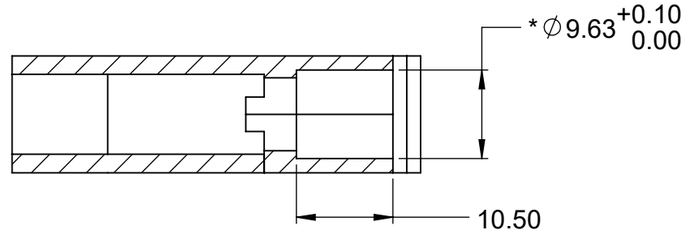


4xM4x0.7 护套牙 ,牙深8.5 Min
适配M4×0.7,长度 1.5D（6mm）螺纹护套

8x*M4x0.7-6H ↧ 8.0Min

局部视图 A
比例 1 : 2

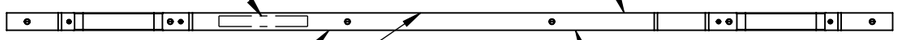
注意事项：
1、所有物料均需符合欧盟最新的RoHS要求；
2、未注公差均参照如下要求：
+/-0.12 适用于所有的孔和半径尺寸
+/-0.12 适用于所有的孔中心线之间的距离尺寸
+/-0.25 适用于所有的孔中心线到边线的尺寸
+/-0.50 适用于所有的边线到边线的尺寸
+/- 2° 适用于所有角度的公差
+/-0.60 适用于所有的凹槽，孔的深度尺寸
+/-0.25 如果没有特别指定，适用于所有的沉头倒角标注。
3、管子和基板通过摩擦焊方式焊接；
4、如未特别说明，去除所有毛刺和锋锐的边角；
5、所有牙孔用挤牙加工；
6、如未特别说明，产品表面粗糙度不能超过Ra1.6um;
7、未注尺寸参照3D档；
8、表面处理：铜洗抗氧化；
9、要求依照 684772（684678）检验记录表全检牙孔与重点尺寸；
10、遵循QI-PRDE-87 Copy Exact流程，在未经批准的前提下，不能更换摩擦焊刀具，更改转速，进给量等会影响到焊接的参数；
11、需保证焊接后流道截面积尺寸&面积在要求范围内；
*12、IQC根据684772检验表单抽检1pcs；



局部视图 D
比例 1.5 : 1
图示标注均为后工序焊接接头配合尺寸

在此面该区域敲钢印，五位数；
从00001开始，要求不重复；
如图视角字是正的

▱	0.6
▱	0.025/25X25

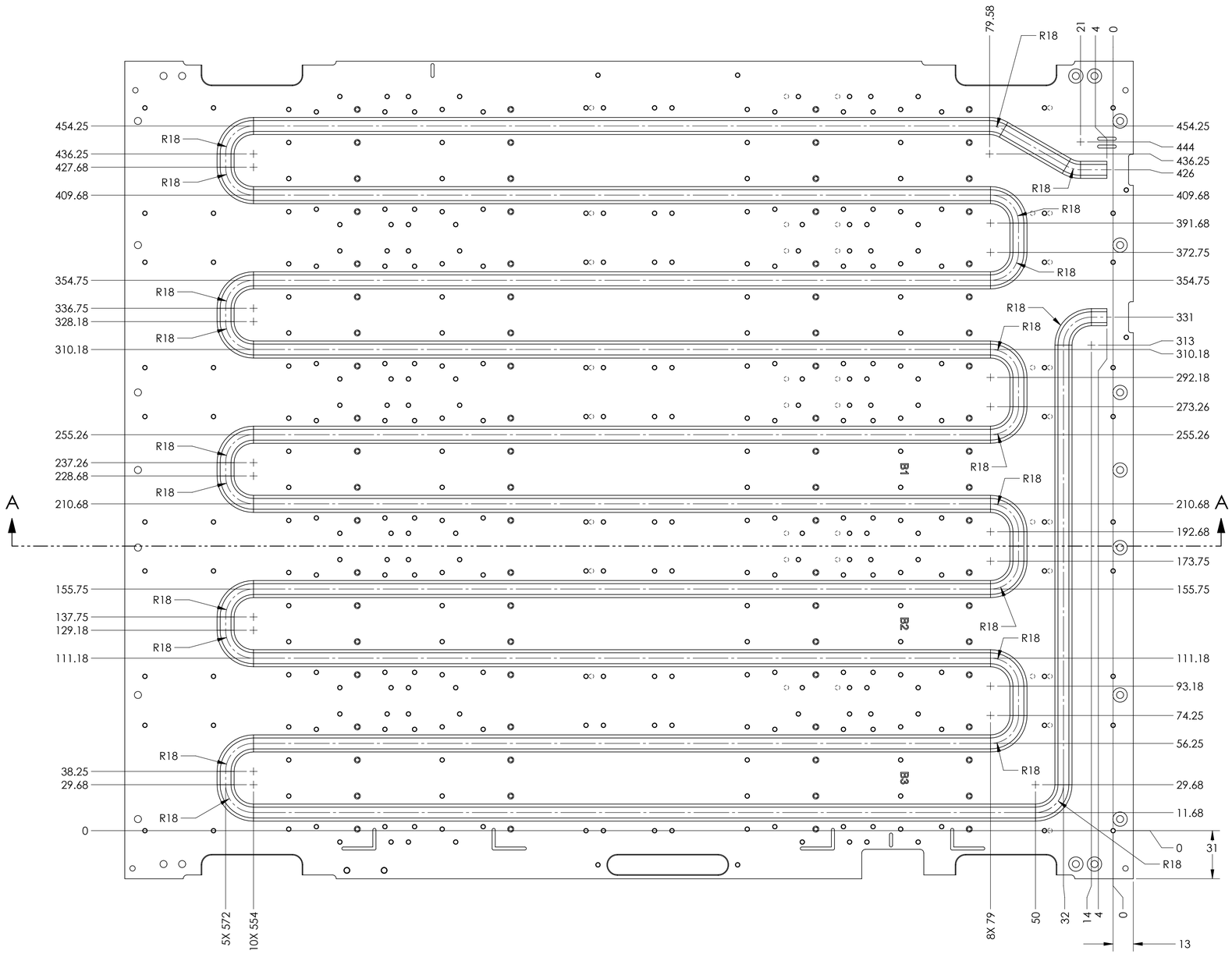


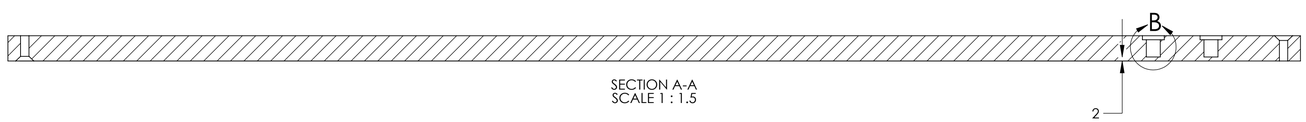
这两个面表面粗糙度
允许超过Ra1.6um

▱	0.6
▱	0.025/25X25

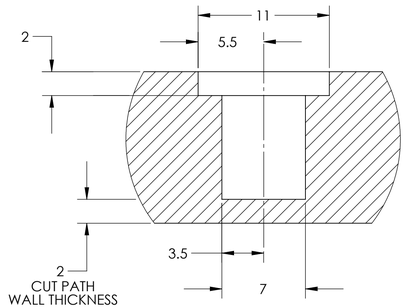
RoHS COMPLIANT

THIRD ANGLE PROJECTION INTERPRET PER ASME Y14.5-2018	DRAWING IS CONTROLLED BY CAD FILE NOTED BELOW. UNDIMENSIONED FEATURES ARE PER CAD FILE				
见注释2	DRAWN BY	DATE 2026/11/12	DESCRIPTION: PLATE,COPPER C11000,FSW LCP 684678,650X527X12.7,MM(GP)		
	APPROVED BY	DATE 2026/11/12			
		DATE 2026/11/12	MATERIAL C11000	FINISH 铜洗抗氧化	
	APPROVED BY	DATE	CAD FILE NAME 684772		
	SHEET SIZE A3 / SHEET 1 of 6 / SCALE 1:10		PDM Number	PART NUMBER 684772	REV 07





SECTION A-A
SCALE 1 : 1.5



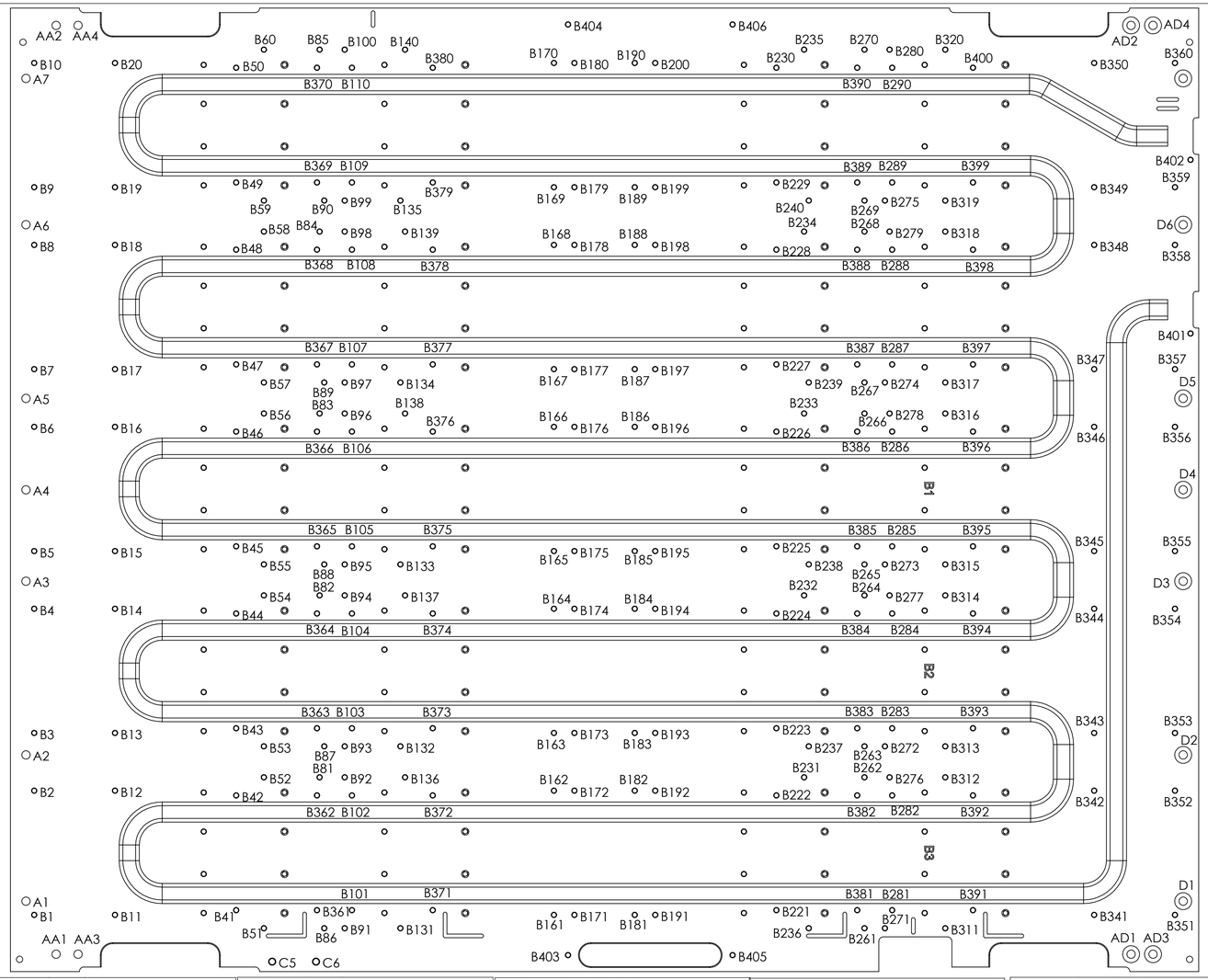
DETAIL B
SCALE 4 : 1
UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS SHOWN IN
DETAIL B +/-0.25

除非特别标注，局部视图B的所有尺寸
公差为±0.25mm

		DESCRIPTION	
		PLATE,COPPER C11000,FSW LCP 684678,650X527X12.7,MM(GP)	
DO NOT SCALE	SHEET 2 OF 6	DRAWING NUMBER 684772	REV 07

10X 6.35
15
0
30.7
105
112.7
235
385
507.3
515
589.3
620
4X M3X0.5 - 6H ↧ 8 MIN.
CHAMFER DEBURR
BY CNC OPERATION
6X M4X0.7 - 6H ↧ 8 MIN.
CHAMFER DEBURR
BY CNC OPERATION
最小深度为8mm
通过CNC制程倒角去毛刺
599.3
587.3
522.7
500.7
4X R6.3
123.3
101.3
36.7
24.7
0
2X 10
4X 493.5
2X 480.7
R0.5
AROUND SLOT
BOTH SIDES
凹槽两侧均要倒圆角
4X R2.5 0 -2.50
436
416
341
4X R1.5
321
513.6
501.6
268.8
244.8
B1
B2
B3
3X R2.5 0 -2.50
0
12
2X 15.7
22
4X 28.5
(31)
(13)
12
6.7
6X 6.35
319.5
254.5
R6.3 SLOT
162
122
R2.5
8X 6.35
2X ∅7.94↧16
⌴ ∅9.68 ↧10.5
∅9.58
450.3
355.3
6X M4X0.7 - 6H ↧ 8 MIN.
CHAMFER DEBURR
BY CNC OPERATION

	DESCRIPTION	
	PLATE,COPPER C11000,FSW LCP 684678,650X527X12.7,MM(GP)	
DO NOT SCALE / SHEET 3 OF 6	DRAWING NUMBER 684772	REV 07



Hole Table			
TAG	X LOC	Y LOC	SIZE
B264	-169.8	174.8	
B265	-169.8	191.7	
B266	-169.8	274.3	
B267	-169.8	291.2	
B268	-169.8	373.8	
B269	-169.8	390.7	
B270	-169.8	473.3	
B271	-158.7	-7.3	
B272	-158.7	92.2	
B273	-158.7	191.7	
B274	-158.7	291.2	
B275	-158.7	390.7	
B276	-156.1	75.2	
B277	-156.1	174.7	
B278	-156.1	274.2	
B279	-156.1	373.7	
B280	-156.1	473.2	
B281	-154.7	2.6	
B282	-154.7	65.4	
B283	-154.7	102.1	
B284	-154.7	164.9	
B285	-154.7	201.6	
B286	-154.7	264.4	
B287	-154.7	301.1	
B288	-154.7	363.9	
B289	-154.7	400.6	
B290	-154.7	463.4	
B311	-125.6	-7.3	
B312	-125.6	75.2	
B313	-125.6	92.2	
B314	-125.6	174.7	
B315	-125.6	191.7	
B316	-125.6	274.2	
B317	-125.6	291.2	
B318	-125.6	373.7	
B319	-125.6	390.7	
B320	-125.6	473.2	
B341	-44.2	0	
B342	-44.2	67.9	
B343	-44.2	99.5	
B344	-44.2	167.4	
B345	-44.2	199	
B346	-44.2	266.9	
B347	-44.2	298.5	
B348	-44.2	366.4	
B349	-44.2	398	
B350	-44.2	465.9	
B351	0	0	
B352	0	67.9	
B353	0	99.5	
B354	0	167.4	
B355	0	199	
B356	0	266.9	
B357	0	298.5	
B358	0	366.4	
B359	0	398	
B360	0	465.9	
B361	-469.3	2.6	
B362	-469.3	65.4	
B363	-469.3	102.1	
B364	-469.3	164.9	
B365	-469.3	201.6	
B366	-469.3	264.4	
B367	-469.3	301.1	
B368	-469.3	363.9	
B369	-469.3	400.6	
B370	-469.3	463.4	
B371	-406	2.6	
B372	-406	65.4	
B373	-406	102.1	
B374	-406	164.9	
B375	-406	201.6	
B376	-406	264.4	
B377	-406	301.1	
B378	-406	363.9	
B379	-406	400.6	
B380	-406	463.4	
B381	-173.8	2.6	
B382	-173.8	65.4	
B383	-173.8	102.1	
B384	-173.8	164.9	
B385	-173.8	201.6	
B386	-173.8	264.4	
B387	-173.8	301.1	
B388	-173.8	363.9	
B389	-173.8	400.6	
B390	-173.8	463.4	
B391	-110.5	2.6	
B392	-110.5	65.4	
B393	-110.5	102.1	
B394	-110.5	164.9	
B395	-110.5	201.6	
B396	-110.5	264.4	
B397	-110.5	301.1	
B398	-110.5	363.9	
B399	-110.5	400.6	
B400	-110.5	463.4	
B401	8.5	318	
B402	8.5	413	
B403	-332	-22	
B404	-332	487	

M3X0.5 - 6H THRU ALL CHAMFER DEBURR BOTH SIDES BY CNC OPERATION

M3X0.5-6H贯穿
通过CNC制程在两侧倒角去毛刺

Hole Table			
TAG	X LOC	Y LOC	SIZE
B405	-242	-22	M3X0.5 - 6H THRU ALL CHAMFER DEBURR BOTH SIDES BY CNC OPERATION
B406	-242	487	
C5	-493.8	-25.6	M4X0.7 - 6H THRU ALL DEBURR BY CNC BOTH SIDES
C6	-469.8	-25.6	
D1	4.5	7.5	∅ 4.6±0.10 THRU ALL ⌵ ∅ 9.3 +0.10 -0.20 X 90° NEAR SIDE
D2	4.5	87.5	
D3	4.5	182.5	
D4	4.5	232.5	
D5	4.5	282.5	
D6	4.5	377.5	
AA1	-612	-21.5	∅ 4.6±0.10 THRU ALL ⌵ ∅ 9.3 +0.10 -0.20 X 90° FAR SIDE
AA2	-612	486.5	
AA3	-600	-21.5	
AA4	-600	486.5	
AD1	-24	-21.5	∅ 4.6±0.10 THRU ALL ⌵ ∅ 9.3 +0.10 -0.20 X 90° NEAR SIDE
AD2	-24	486.5	
AD3	-12	-21.5	
AD4	-12	486.5	

M3X0.5-6H贯穿
通过CNC制程在两侧倒角去毛刺

M4X0.7-6H贯穿
通过CNC制程在两侧倒角去毛刺

贯穿通孔，在图示正面

贯穿通孔，在图示背面倒角

贯穿通孔，在图示正面

Hole Table			
TAG	X LOC	Y LOC	SIZE
A1	-628.5	7.5	∅ 4.6±0.10 THRU ALL ⌵ ∅ 9.3 +0.10 -0.20 X 90° FAR SIDE
A2	-628.5	87.5	
A3	-628.5	182.5	
A4	-628.5	232.5	
A5	-628.5	282.5	
A6	-628.5	377.5	
A7	-628.5	457.5	
B1	-624	0	
B2	-624	67.9	
B3	-624	99.5	
B4	-624	167.4	
B5	-624	199	
B6	-624	266.9	
B7	-624	298.5	
B8	-624	366.4	
B9	-624	398	
B10	-624	465.9	
B11	-579.8	0	
B12	-579.8	67.9	
B13	-579.8	99.5	
B14	-579.8	167.4	
B15	-579.8	199	
B16	-579.8	266.9	
B17	-579.8	298.5	
B18	-579.8	366.4	
B19	-579.8	398	
B20	-579.8	465.9	
B41	-513.5	2.6	
B42	-513.5	65.4	
B43	-513.5	102.1	

贯穿通孔，在图示背面倒角

M3X0.5 - 6H THRU ALL CHAMFER DEBURR BOTH SIDES BY CNC OPERATION

M3X0.5-6H贯穿
通过CNC制程在两侧倒角去毛刺

Hole Table			
TAG	X LOC	Y LOC	SIZE
B44	-513.5	164.9	M3X0.5 - 6H THRU ALL CHAMFER DEBURR BOTH SIDES BY CNC OPERATION
B45	-513.5	201.6	
B46	-513.5	264.4	
B47	-513.5	301.1	
B48	-513.5	363.9	
B49	-513.5	400.6	
B50	-513.5	463.4	
B51	-498.4	-7.3	
B52	-498.4	75.3	
B53	-498.4	92.2	
B54	-498.4	174.8	
B55	-498.4	191.7	
B56	-498.4	274.3	
B57	-498.4	291.2	
B58	-498.4	373.8	
B59	-498.4	390.7	
B60	-498.4	473.3	
B81	-467.9	75.3	
B82	-467.9	174.8	
B83	-467.9	274.3	
B84	-467.9	373.8	
B85	-467.9	473.3	
B86	-465.3	-7.3	
B87	-465.3	92.2	
B88	-465.3	191.7	
B89	-465.3	291.2	
B90	-465.3	390.7	
B91	-454.2	-7.3	
B92	-454.2	75.2	
B93	-454.2	92.2	

M3X0.5-6H贯穿
通过CNC制程在两侧倒角去毛刺

Hole Table			
TAG	X LOC	Y LOC	SIZE
B94	-454.2	174.7	M3X0.5 - 6H THRU ALL CHAMFER DEBURR BOTH SIDES BY CNC OPERATION
B95	-454.2	191.7	
B96	-454.2	274.2	
B97	-454.2	291.2	
B98	-454.2	373.7	
B99	-454.2	390.7	
B100	-454.2	473.2	
B101	-450.2	2.6	
B102	-450.2	65.4	
B103	-450.2	102.1	
B104	-450.2	164.9	
B105	-450.2	201.6	
B106	-450.2	264.4	
B107	-450.2	301.1	
B108	-450.2	363.9	
B109	-450.2	400.6	
B110	-450.2	463.4	
B131	-423.7	-7.3	
B132	-423.7	92.2	
B133	-423.7	191.7	
B134	-423.7	291.2	
B135	-423.7	390.7	
B136	-421.1	75.2	
B137	-421.1	174.7	
B138	-421.1	274.2	
B139	-421.1	373.7	
B140	-421.1	473.2	
B161	-339.7	0	
B162	-339.7	67.9	
B163	-339.7	99.5	

M3X0.5-6H贯穿
通过CNC制程在两侧倒角去毛刺

Hole Table			
TAG	X LOC	Y LOC	SIZE
B164	-339.7	167.4	M3X0.5 - 6H THRU ALL CHAMFER DEBURR BOTH SIDES BY CNC OPERATION
B165	-339.7	199	
B166	-339.7	266.9	
B167	-339.7	298.5	
B168	-339.7	366.4	
B169	-339.7	398	
B170	-339.7	465.9	
B171	-328.5	0	
B172	-328.5	67.9	
B173	-328.5	99.5	
B174	-328.5	167.4	
B175	-328.5	199	
B176	-328.5	266.9	
B177	-328.5	298.5	
B178	-328.5	366.4	
B179	-328.5	398	
B180	-328.5	465.9	
B181	-295.5	0	
B182	-295.5	67.9	
B183	-295.5	99.5	
B184	-295.5	167.4	
B185	-295.5	199	
B186	-295.5	266.9	
B187	-295.5	298.5	
B188	-295.5	366.4	
B189	-295.5	398	
B190	-295.5	465.9	
B191	-284.3	0	
B192	-284.3	67.9	
B193	-284.3	99.5	

M3X0.5-6H贯穿
通过CNC制程在两侧倒角去毛刺

Hole Table			
TAG	X LOC	Y LOC	SIZE
B194	-284.3	167.4	M3X0.5 - 6H THRU ALL CHAMFER DEBURR BOTH SIDES BY CNC OPERATION
B195	-284.3	199	
B196	-284.3	266.9	
B197	-284.3	298.5	
B198	-284.3	366.4	
B199	-284.3	398	
B200	-284.3	465.9	
B221	-218	2.6	
B222	-218	65.4	
B223	-218	102.1	
B224	-218	164.9	
B225	-218	201.6	
B226	-218	264.4	
B227	-218	301.1	
B228	-218	363.9	
B229	-218	400.6	
B230	-218	463.4	
B231	-202.9	75.3	
B232	-202.9	174.8	
B233	-202.9	274.3	
B234	-202.9	373.8	
B235	-202.9	473.3	
B236	-200.3	-7.3	
B237	-200.3	92.2	
B238	-200.3	191.7	
B239	-200.3	291.2	
B240	-200.3	390.7	
B261	-169.8	-7.3	
B262	-169.8	75.3	
B263	-169.8	92.2	

M3X0.5-6H贯穿
通过CNC制程在两侧倒角去毛刺

DESCRIPTION

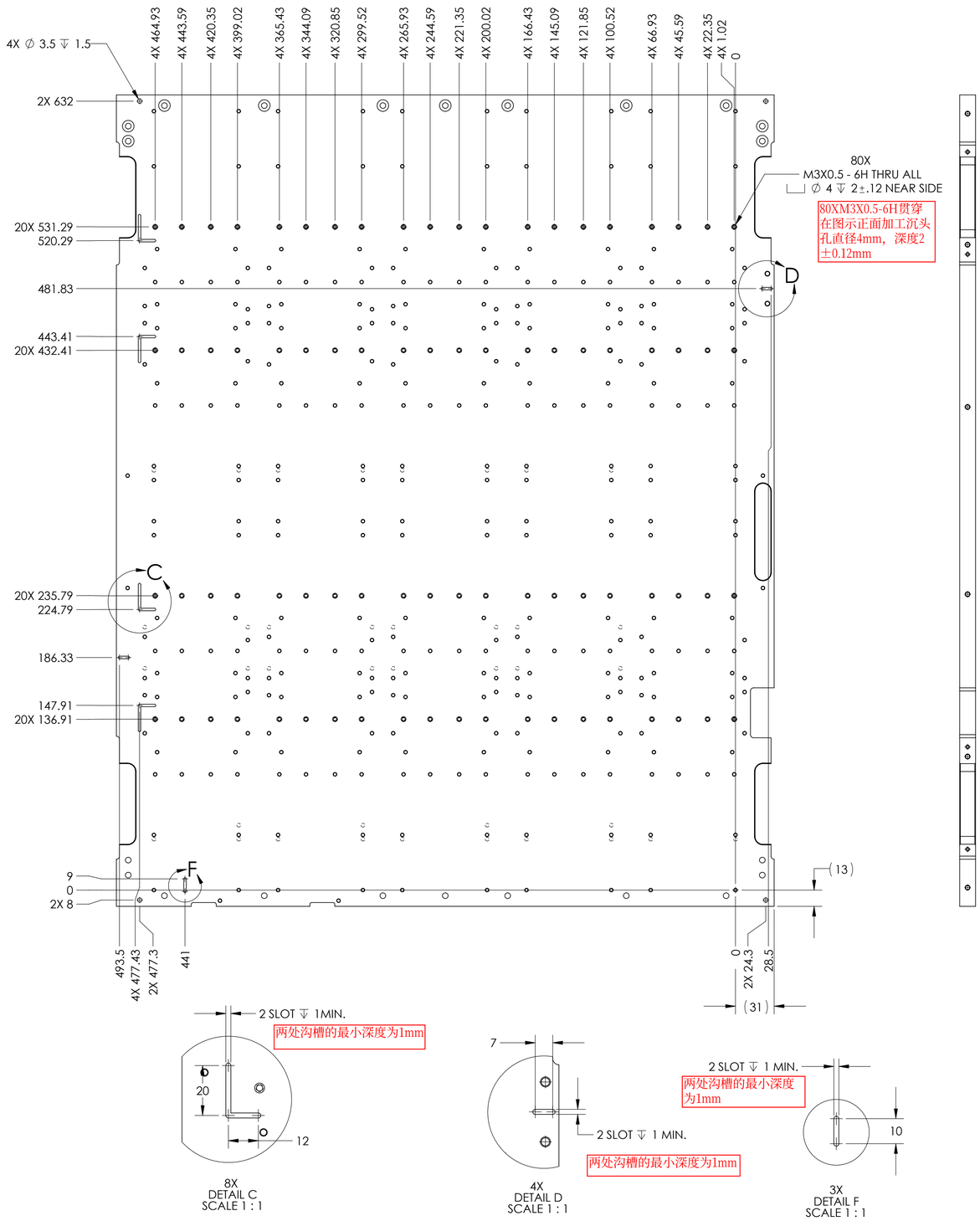
PLATE,COPPER C11000,FSW LCP
684678,650X527X12.7,MM(GP)

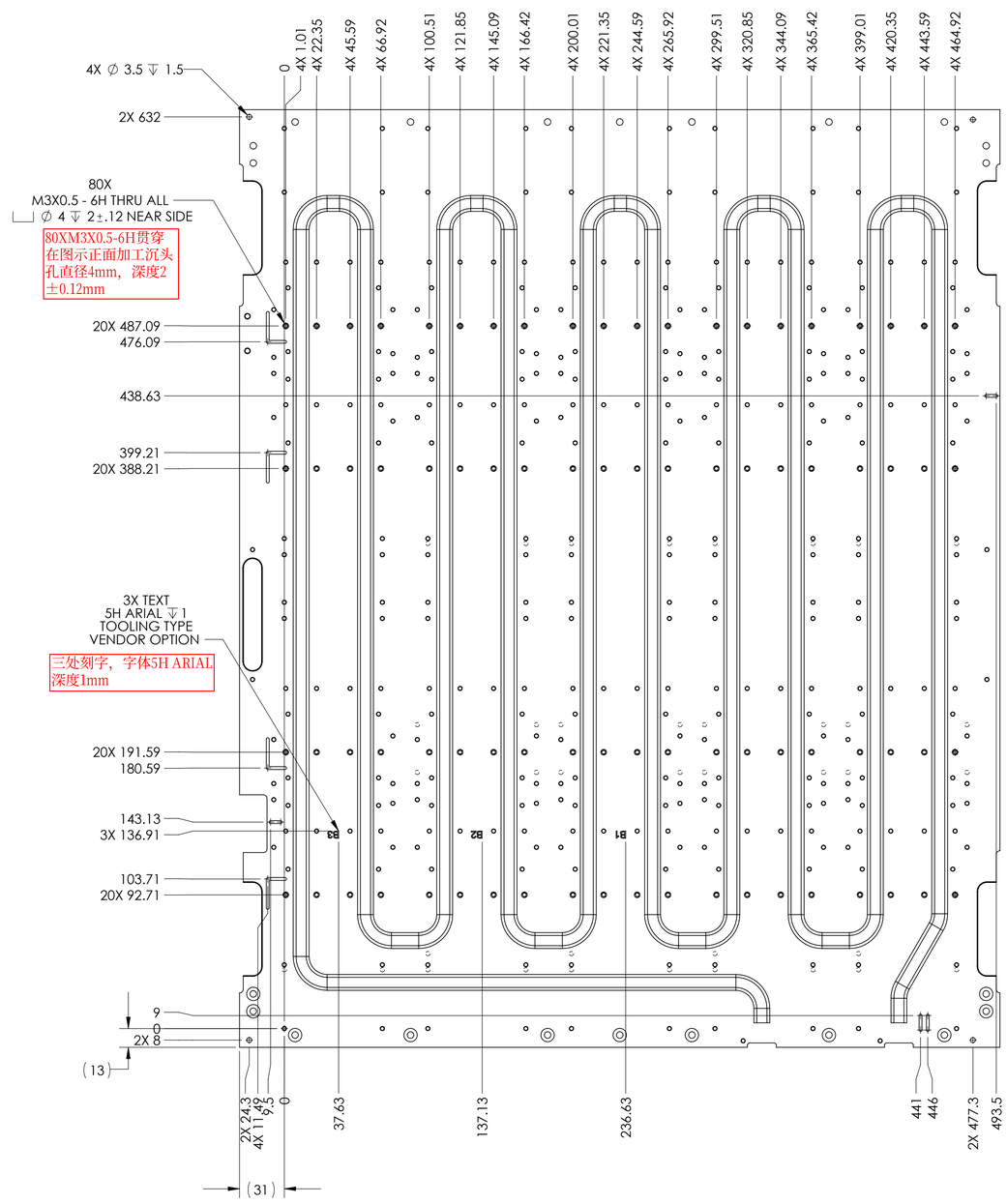
DRAWING NUMBER 684772

REV 07

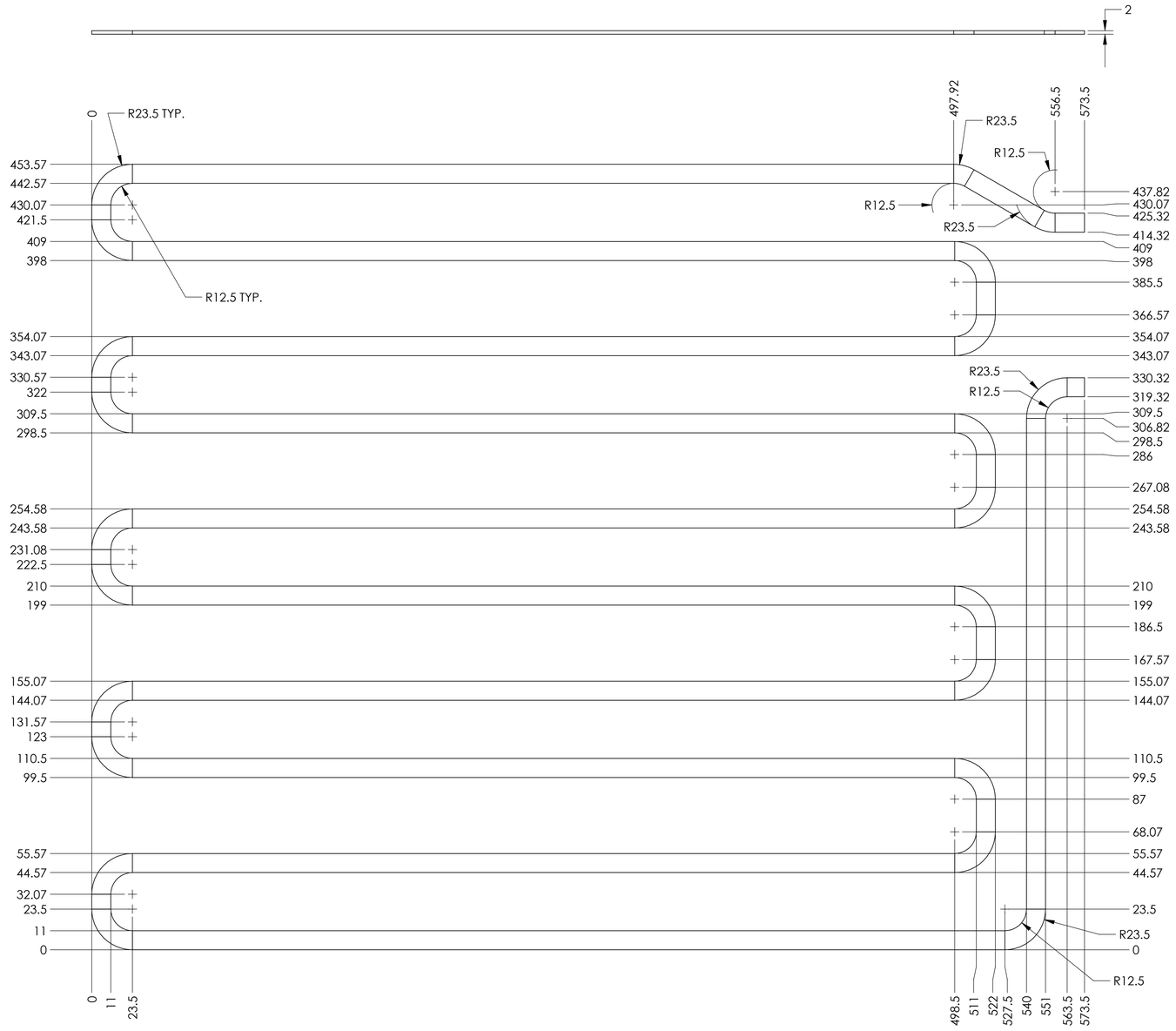
DO NOT SCALE

SHEET 4 OF 6





		DESCRIPTION PLATE,COPPER C11000,FSW LCP 684678,650X527X12.7,MM(GP)	
DO NOT SCALE	SHEET 5 OF 6	DRAWING NUMBER 684772	REV 07



DIMENSIONS SHOWN FOR REFERENCE ONLY,
SUPPLIER OPTION TO FABRICATE PLATE IN ORDER
TO FACILITATE WELDING REQUIREMENTS.

此页尺寸仅供参考

		DESCRIPTION	
		PLATE,COPPER C11000,FSW LCP 684678,650X527X12.7,MM(GP)	
DO NOT SCALE	SHEET 6 OF 6	DRAWING NUMBER 684772	REV 07