

- 1 Material: Isola IS400 or similar recommended
- 2 Finish: ENIG (Electroless Nickel Immersion Gold), nickel layer $1 \div 4 \mu\text{m}$, gold layer $0.076 \div 0.2 \mu\text{m}$
- 3 All gerber files generated as a top view
- 4 Gerber files for internal power planes have to be inverted for manufacturing !
5. Fabricate according IPC-A-600
6. Non-conductive epoxy ink recommended for silkscreen
7. Silkscreen should not cover any exposed copper, silkscreen gerber data have to be trimmed eventually
8. All holes diameter refer to final diameter after eventual plating

Gerber and drill file extensions table

Gerber files	Description
.GTO	Top side silkscreen
.GTP	Top side solder paste mask
.GTS	Top side solder mask
.GTL	L1_TOP - Top Layer
.GP1	L2_GND - Internal power plane - has to be inverted for manufacturing
.GP2	L3_PWR - Internal power plane - has to be inverted for manufacturing
.GBL	L4_BOTTOM - Bottom Layer
.GBS	Bottom side solder mask
.GBP	Bottom side solder paste mask
.GBO	Bottom side silkscreen
.GM1	Board outline
Drill files	
.TXT	Layer pair L1_TOP to L4_BOTTOM Layer

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PCB fabrication notes and requirements

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1

2

3

4

5

A

A

Layer Stack		Material	Layer	Thickness	Dielectric Material	Type	Gerber
			Top Overlay			Legend	GTO
		Surface Material	Top Solder	0.0102mm(0.400mil)	Solder Resist	Solder Mask	GTS
		Copper	Top Layer	0.0700mm(2.756mil)		Signal	GTL
		Prepreg		0.3110mm(12.244mil)	2 x 7628(FZ01) IS400	Dielectric	
		Copper	Layer2	0.0700mm(2.756mil)		Signal	G1
		Core		1.0060mm(39.606mil)	4 x 7628M IS400	Dielectric	
		Copper	Power DC -	0.0700mm(2.756mil)		Signal	G2
		Prepreg		0.3110mm(12.244mil)	2 x 7628(FZ01) IS400	Dielectric	
		Copper	Bottom Layer	0.0700mm(2.756mil)		Signal	GBL
		Surface Material	Bottom Solder	0.0102mm(0.400mil)	Solder Resist	Solder Mask	GBS
			Bottom Overlay			Legend	GBO
		Total thickness: 1.9283mm(75.918mil)					

B


B

C

C

D

D

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1

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1

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A

A

B

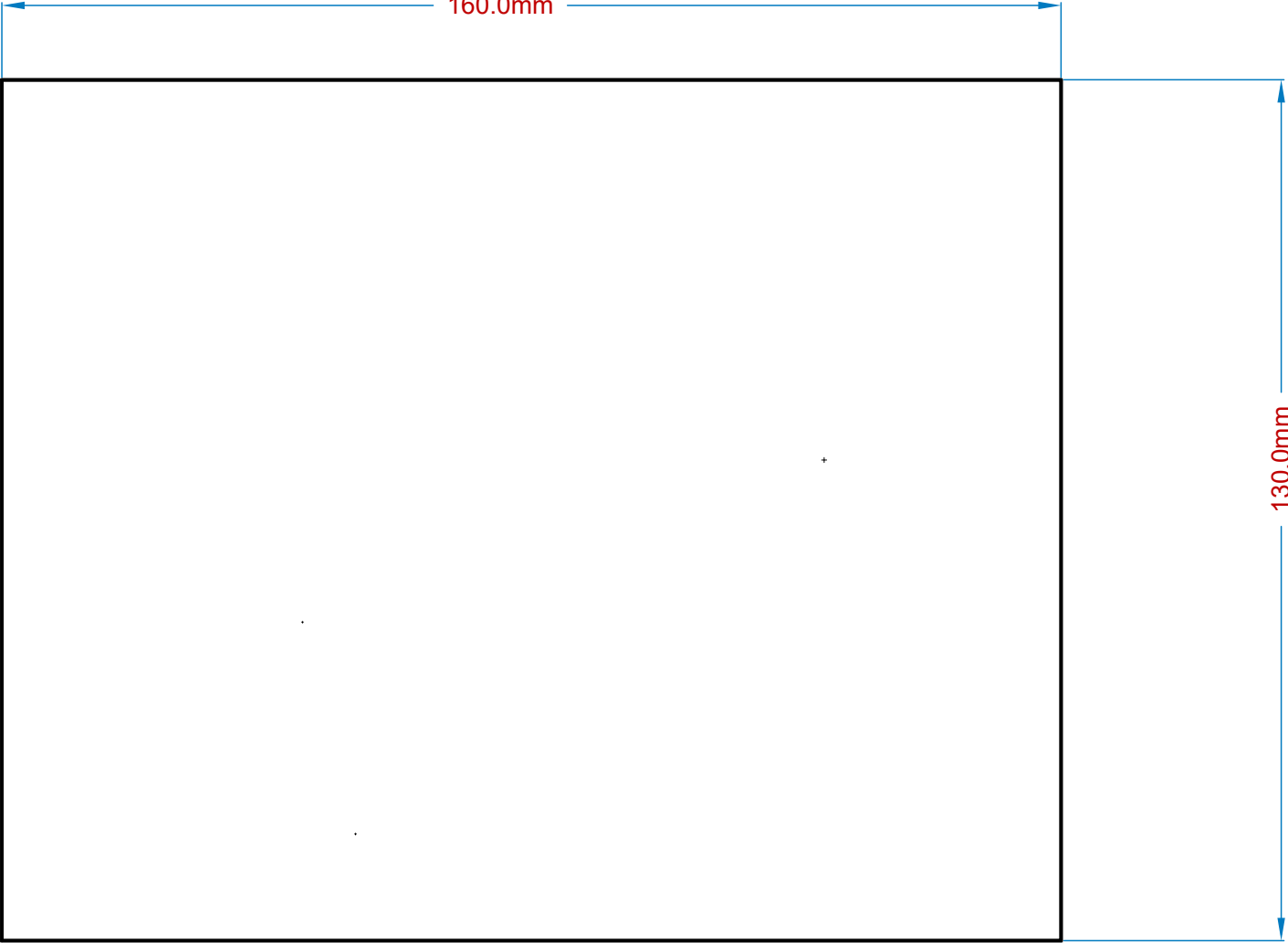
B

C

C

D

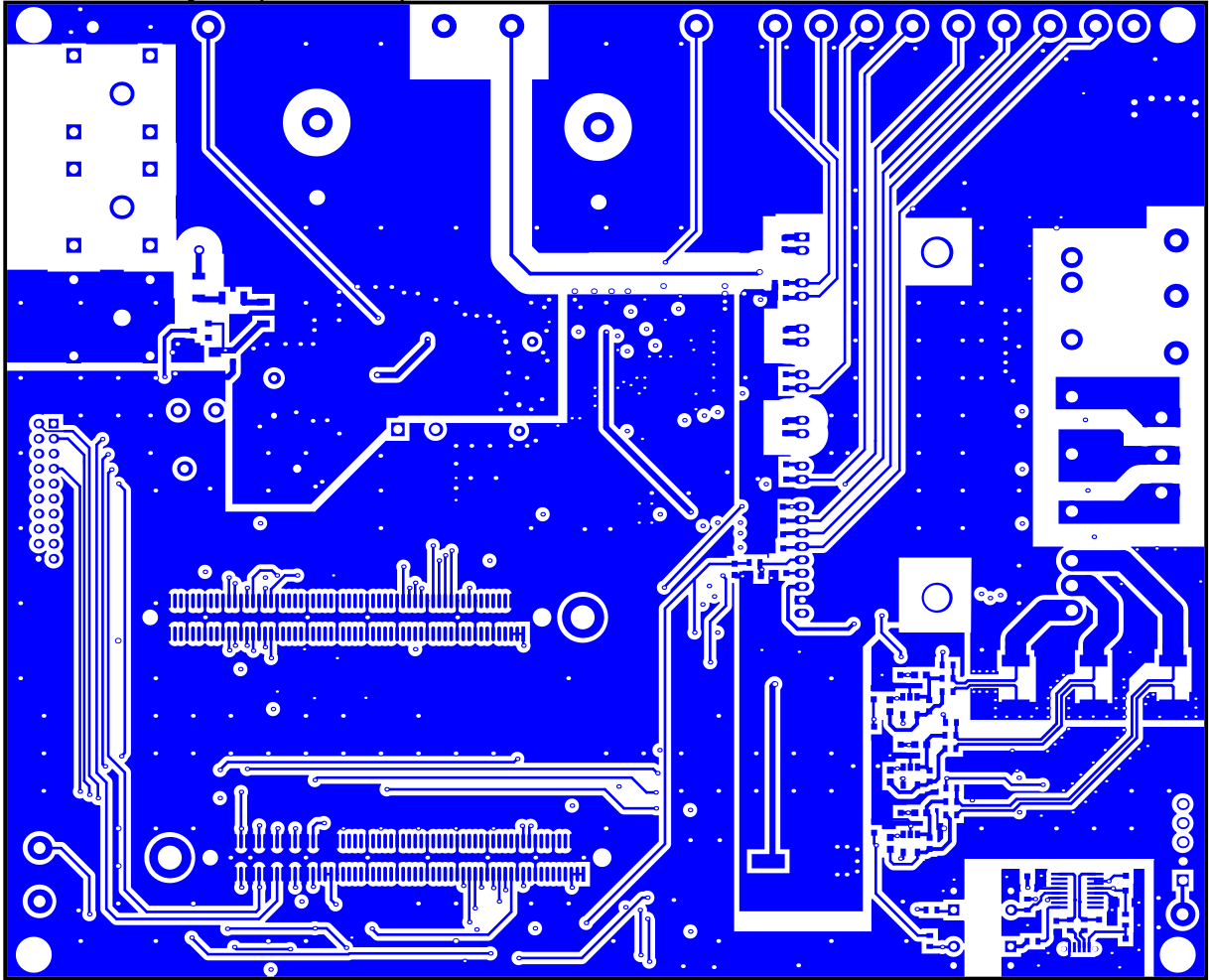
D



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<i>Board outline definition - top view 2:3</i>		Fabrication document	Sheet 3 / 9
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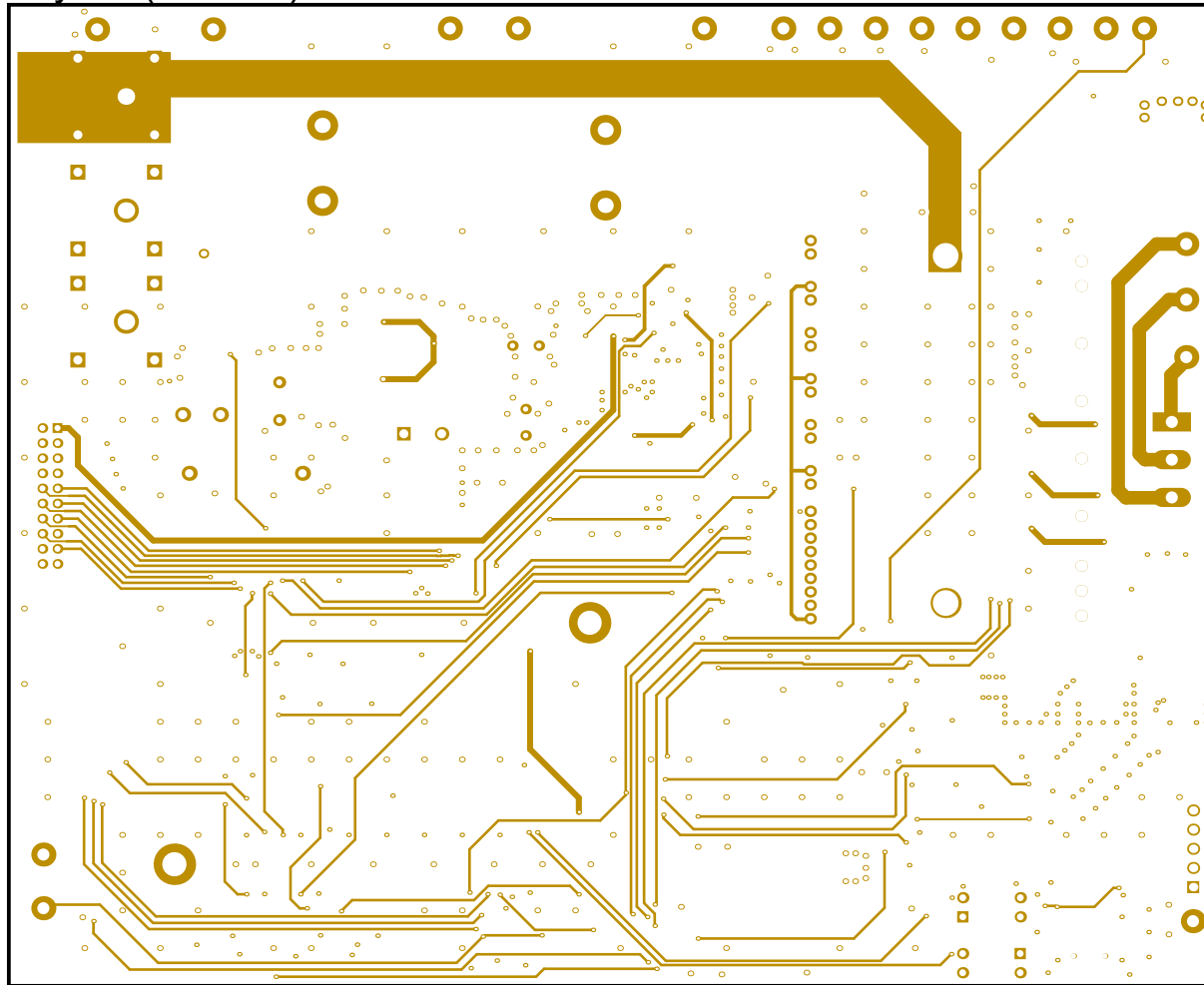
Bottom Layer (Scale 1)



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Layer2 (Scale 1)



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L2- internal power plane - top view

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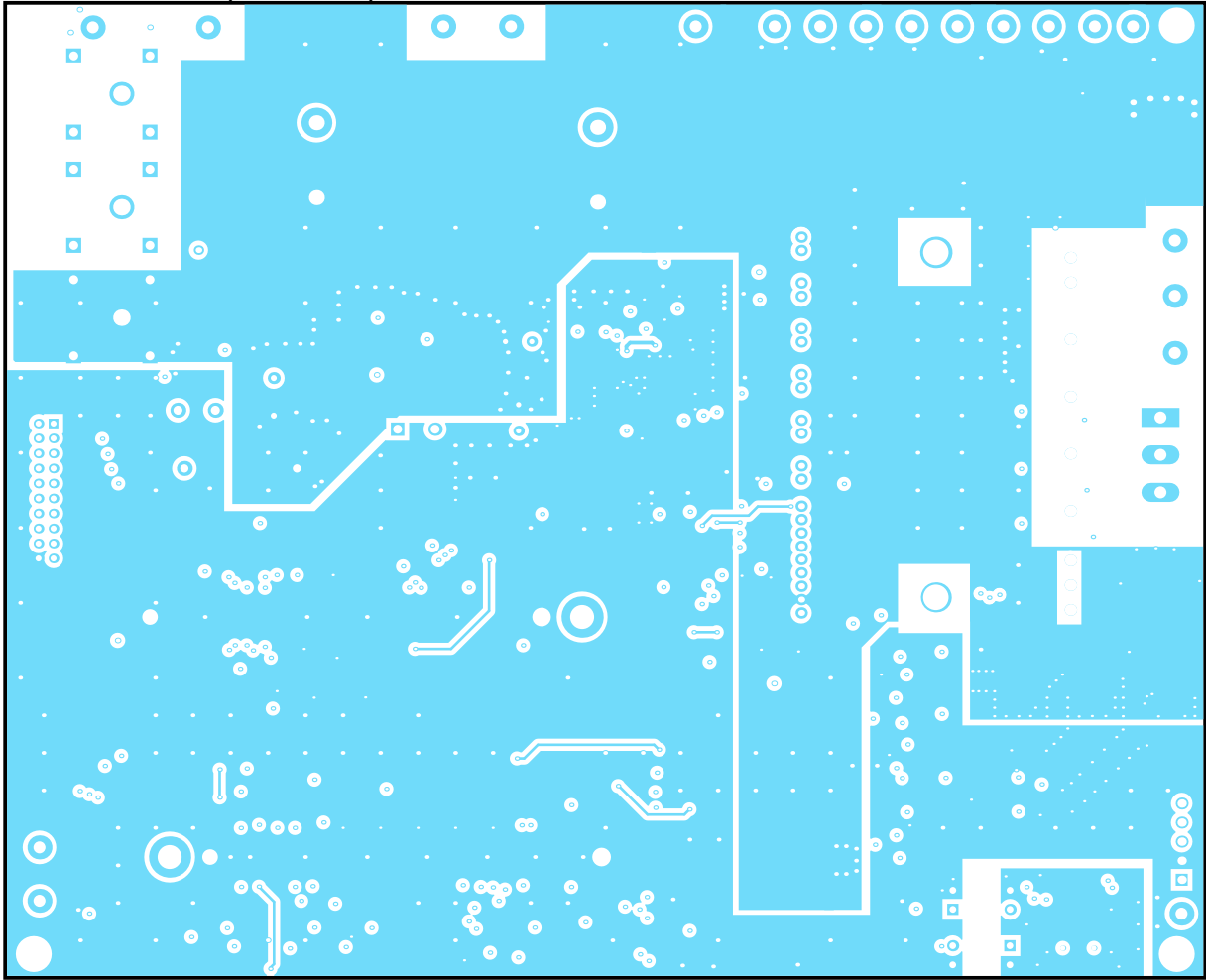
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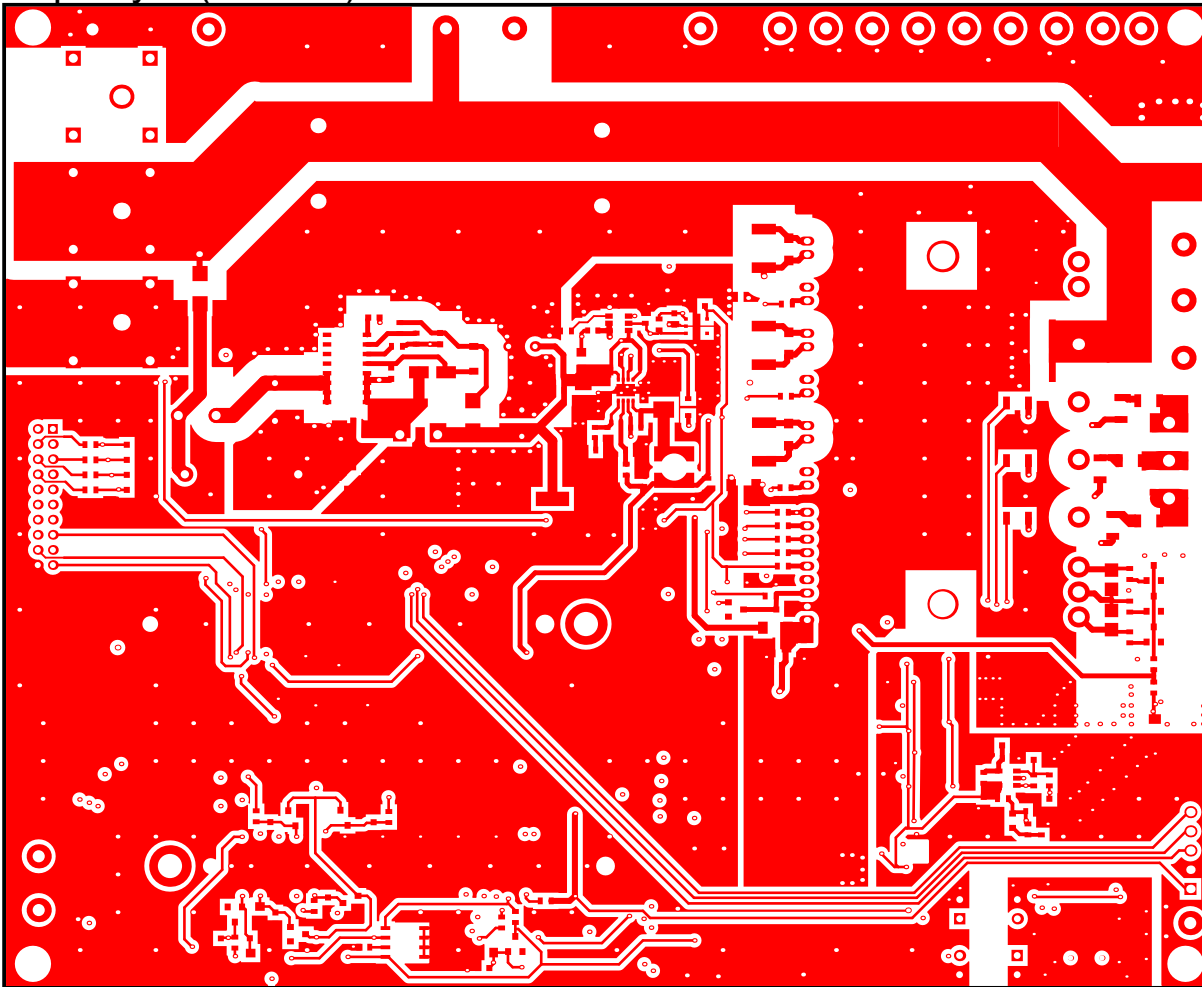
Power DC - (Scale 1)



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Top Layer (Scale 1)



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Bottom Layer - top view

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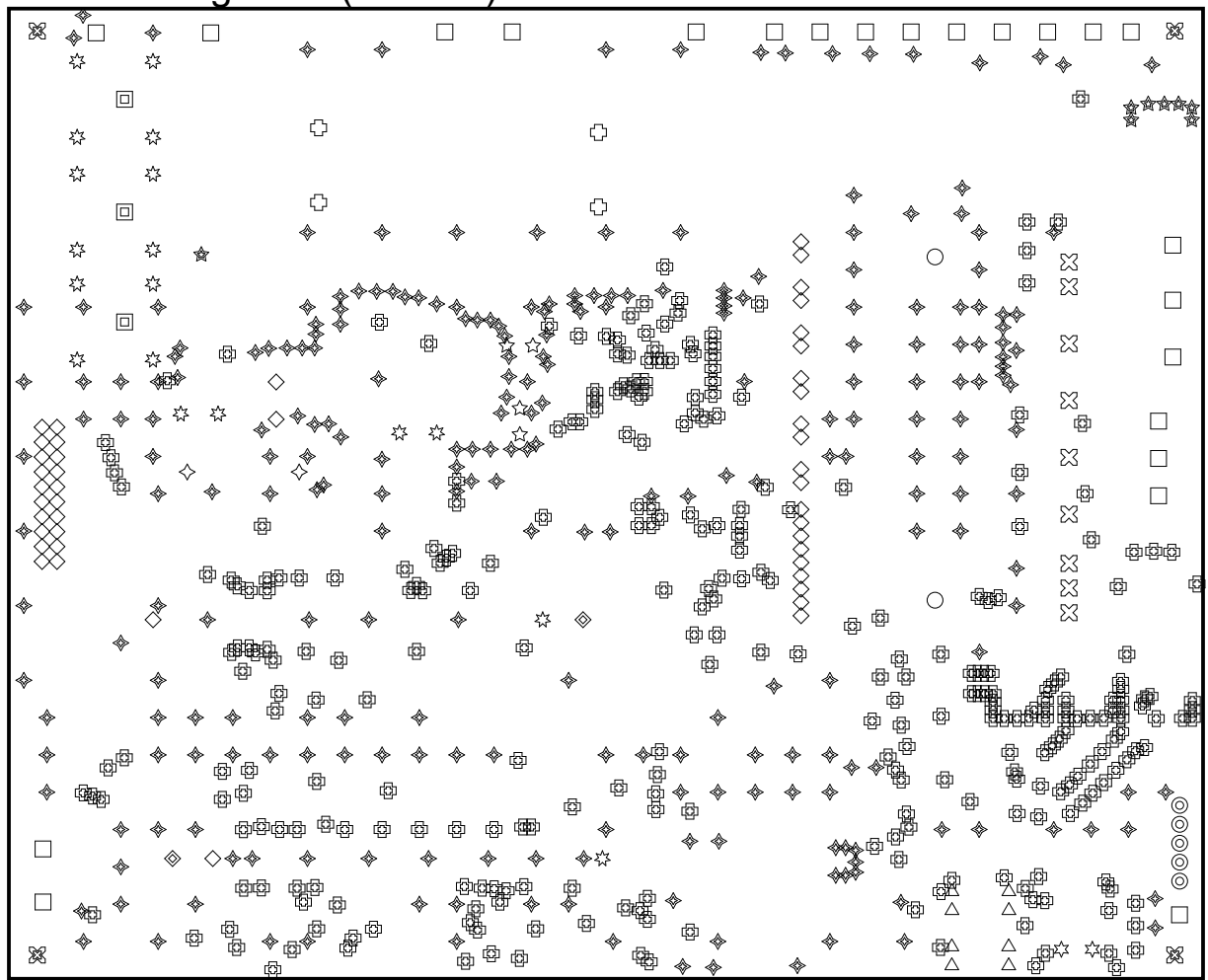
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Drill Drawing View (Scale 1)



9 Related drill table can be found on page 15

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Drill Table

Symbol	Count	Hole Size	Plated	Drill Layer Pair	Via / Pad	Template
	318	0.305mm(12.0mil)	Plated	Top Layer - Bottom Layer	Via	(Mixed)
	266	0.508mm(20.0mil)	Plated	Top Layer - Bottom Layer	Via	v76h51
	4	0.700mm(27.6mil)	Plated	Top Layer - Bottom Layer	Pad	c140h70
	2	0.700mm(27.6mil)	Non-Plated	Top Layer - Bottom Layer	Pad	c70hn70
	8	0.762mm(30.0mil)	Plated	Top Layer - Bottom Layer	Via	v127h76
	45	0.800mm(31.5mil)	Plated	Top Layer - Bottom Layer	Pad	(Mixed)
	8	0.900mm(35.4mil)	Plated	Top Layer - Bottom Layer	Pad	(Mixed)
	2	1.100mm(43.3mil)	Plated	Top Layer - Bottom Layer	Pad	c200h110
	5	1.118mm(44.0mil)	Plated	Top Layer - Bottom Layer	Pad	(Mixed)
	18	1.200mm(47.2mil)	Plated	Top Layer - Bottom Layer	Pad	(Mixed)
	9	1.524mm(60.0mil)	Plated	Top Layer - Bottom Layer	Pad	c279h152z152
	23	1.600mm(63.0mil)	Plated	Top Layer - Bottom Layer	Pad	(Mixed)
	4	2.000mm(78.7mil)	Plated	Top Layer - Bottom Layer	Pad	c400h200
	3	2.200mm(86.6mil)	Plated	Top Layer - Bottom Layer	Pad	c320h220
	2	3.200mm(126.0mil)	Plated	Top Layer - Bottom Layer	Pad	c550h320
	2	3.400mm(133.9mil)	Plated	Top Layer - Bottom Layer	Pad	(Mixed)
	4	3.500mm(137.8mil)	Plated	Top Layer - Bottom Layer	Pad	c0h350(Tol0-0)
723 Total						

⑩ Related drill drawing can be found on page 14

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