

- 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 - Round holes
.TXT	Layer pair L1_TOP to L4_BOTTOM Layer - Square holes

MULTI-SENSE-GEVB

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2.2

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PCB fabrication notes and requirements

Engineer: T. Duris

Date: 5.Sep 2019 17:44PM

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A

A

Layer Stack

Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Paste			Paste Mask	GTP
	Top Overlay			Legend	GTO
Surface Material	Top Solder	0.0102mm(0.400mil)	Solder Resist	Solder Mask	GTS
Copper	L1_TOP	0.0180mm(0.709mil)		Signal	GTL
Prepreg		0.1980mm(7.795mil)	Isola IS400 7628 FZ01	Dielectric	
Prepreg		0.1980mm(7.795mil)	Isola IS4007628 FZ01	Dielectric	
Copper	L2_GND	0.0350mm(1.378mil)		Internal Plane	GP1
Core		0.7130mm(28.071mil)	4x Isola IS400 7628M	Dielectric	
Copper	L3_POWER	0.0350mm(1.378mil)		Internal Plane	GP2
Prepreg		0.1980mm(7.795mil)	Isola IS400 7628 FZ01	Dielectric	
Prepreg		0.1980mm(7.795mil)	Isola IS400 7628 FZ01	Dielectric	
Copper	L4_BOTTOM	0.0180mm(0.709mil)		Signal	GBL
Surface Material	Bottom Solder	0.0102mm(0.400mil)	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO
	Bottom Paste			Paste Mask	GBP
Total thickness: 1.6313mm(64.226mil)					

B

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C

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D

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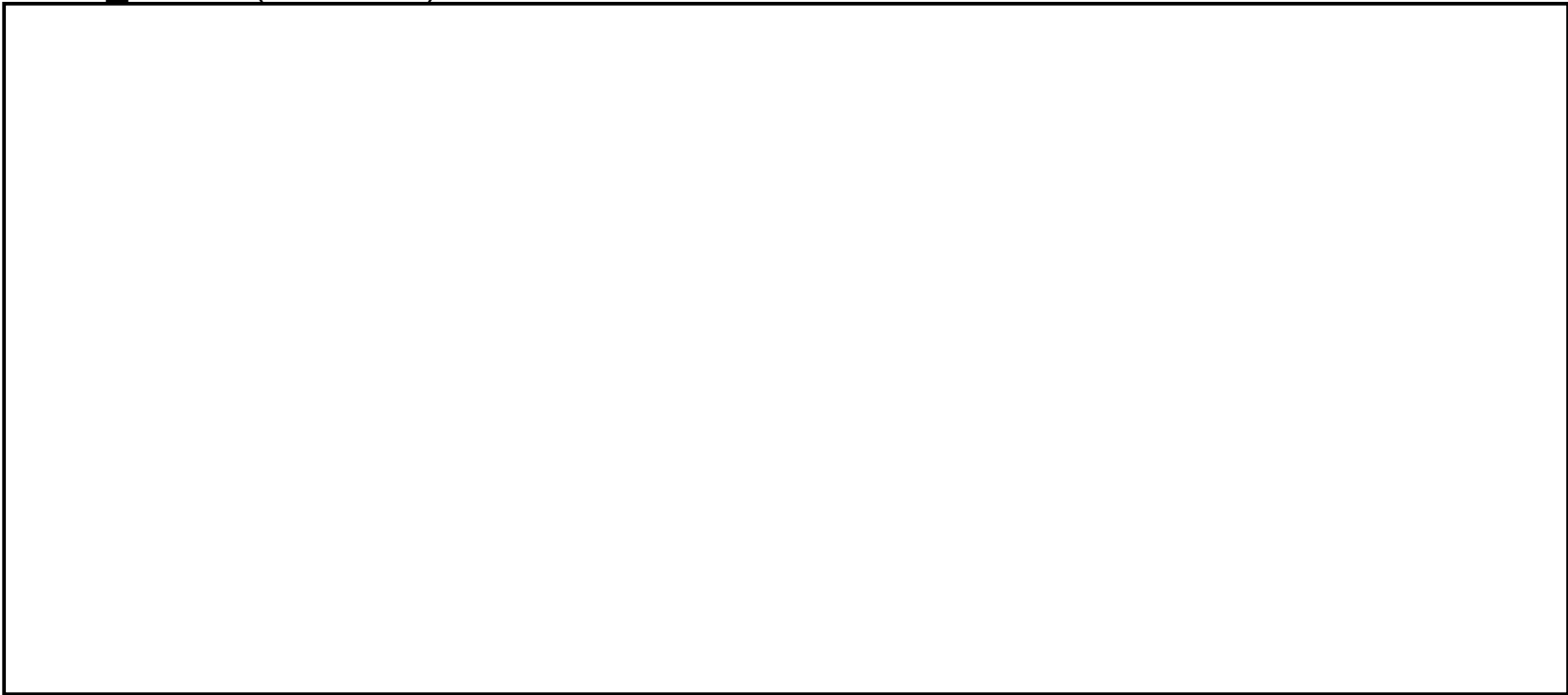
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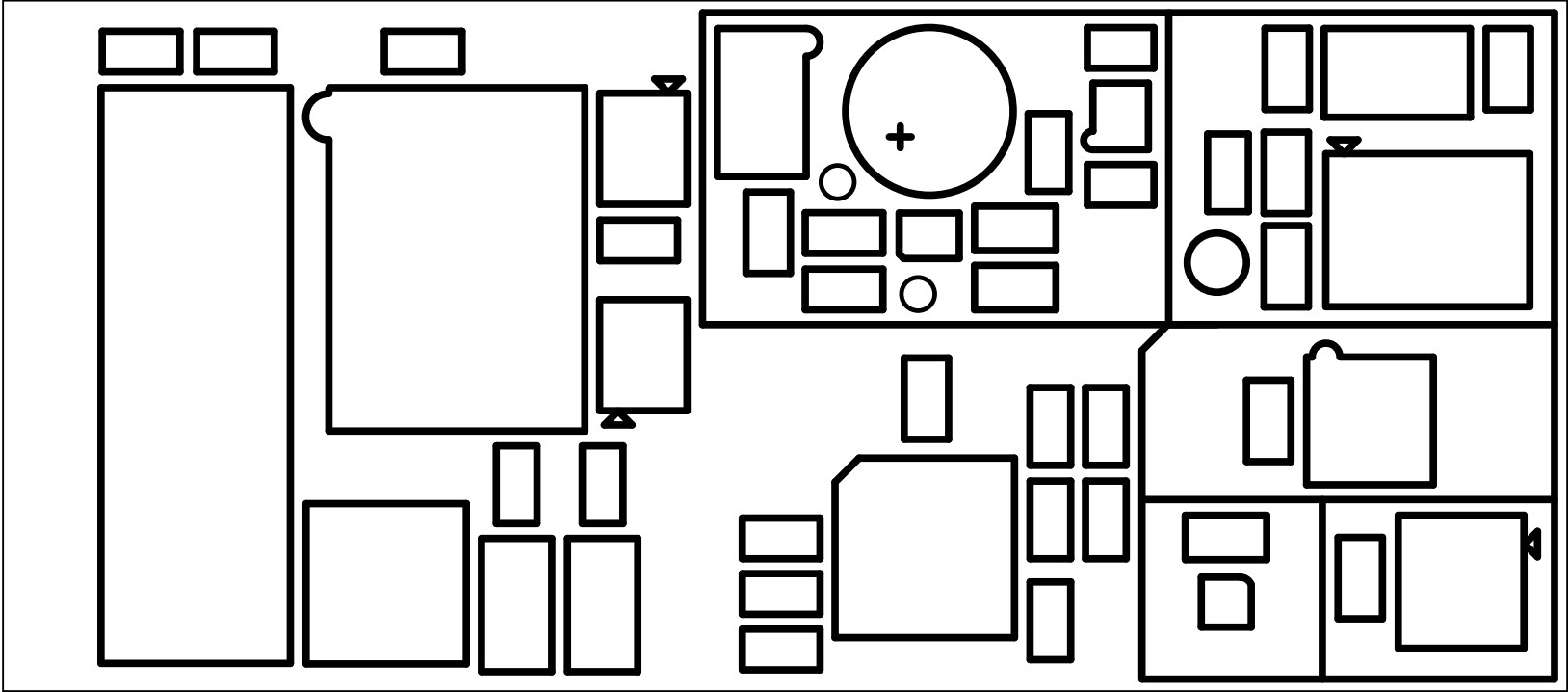
Board_outline (Scale 5:1)




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<i>Board outline definition - top view 2:3</i>		Fabrication document	Sheet 3 / 14
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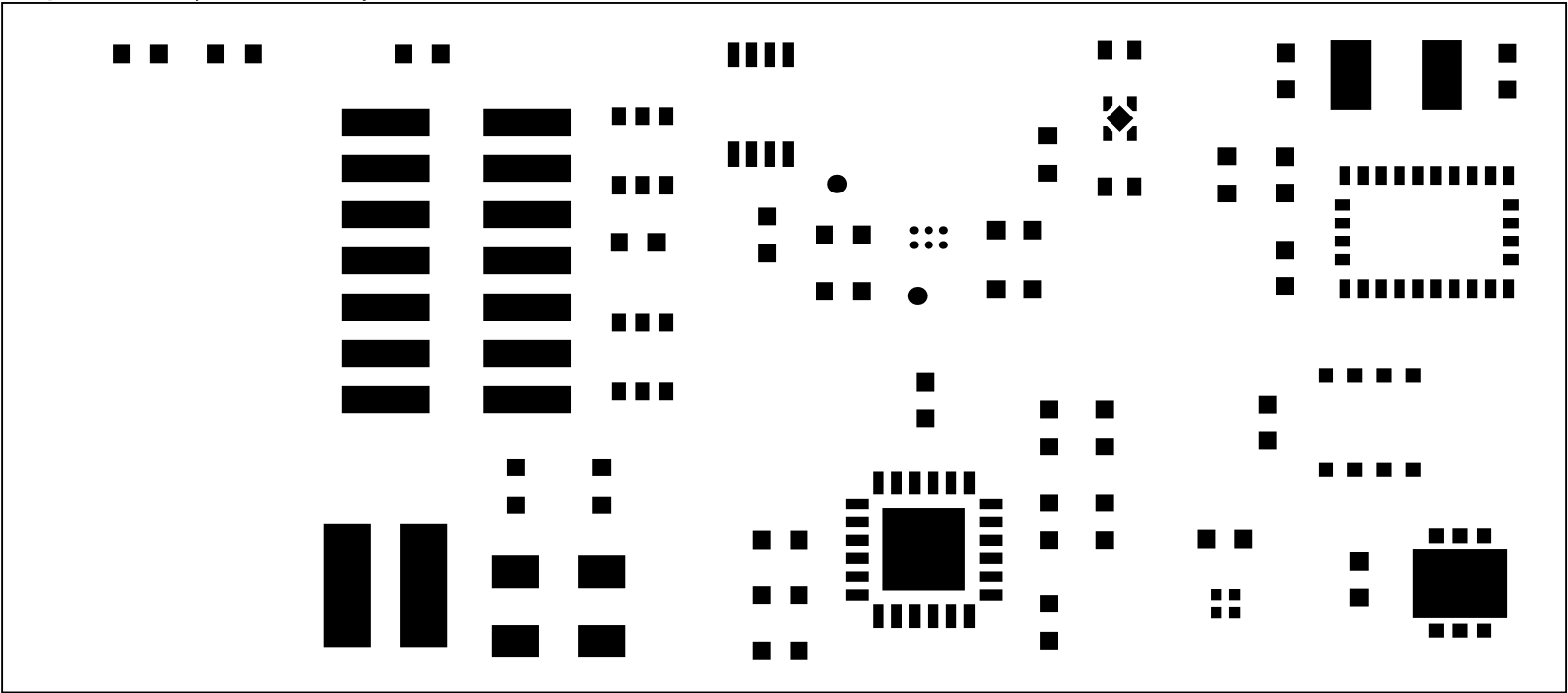
Top Overlay (Scale 5:1)



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Top side silkscreen - top view		Fabrication document	Sheet 4 / 14
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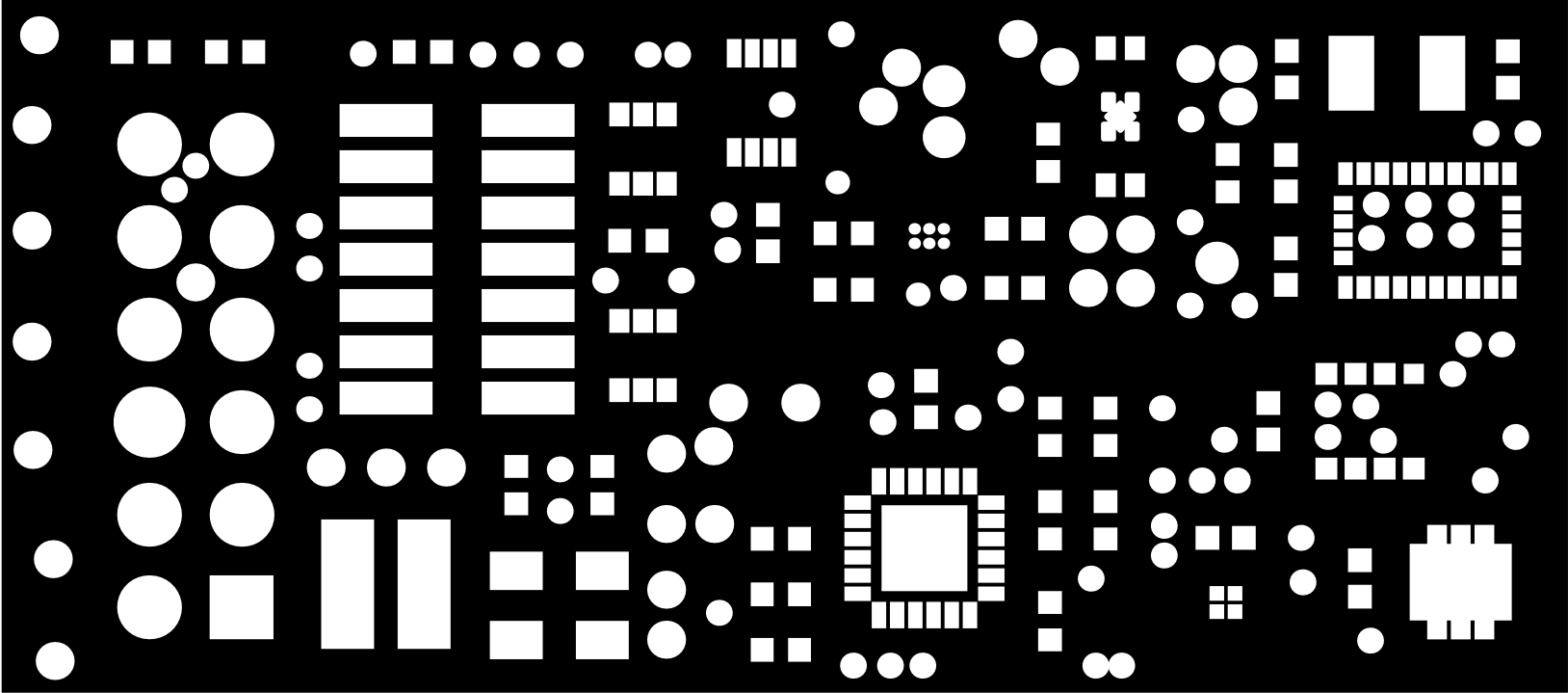
Top Paste (Scale 5:1)




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Top side solder paste - top view		Fabrication document	Sheet 5 / 14
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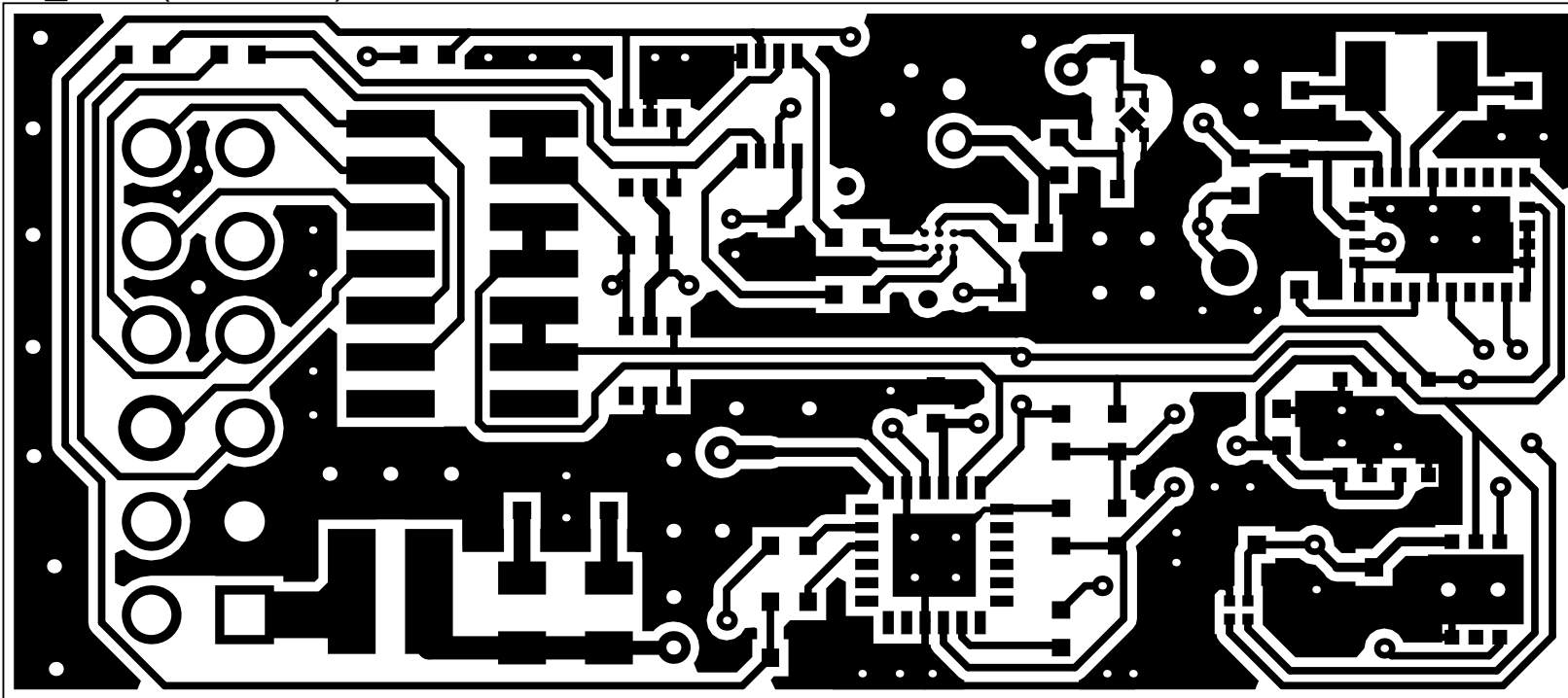
Top Solder (Scale 5:1)



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Top side solder mask - top view		Fabrication document	Sheet 6 / 14
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L1_TOP (Scale 5:1)



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Top Layer - top view

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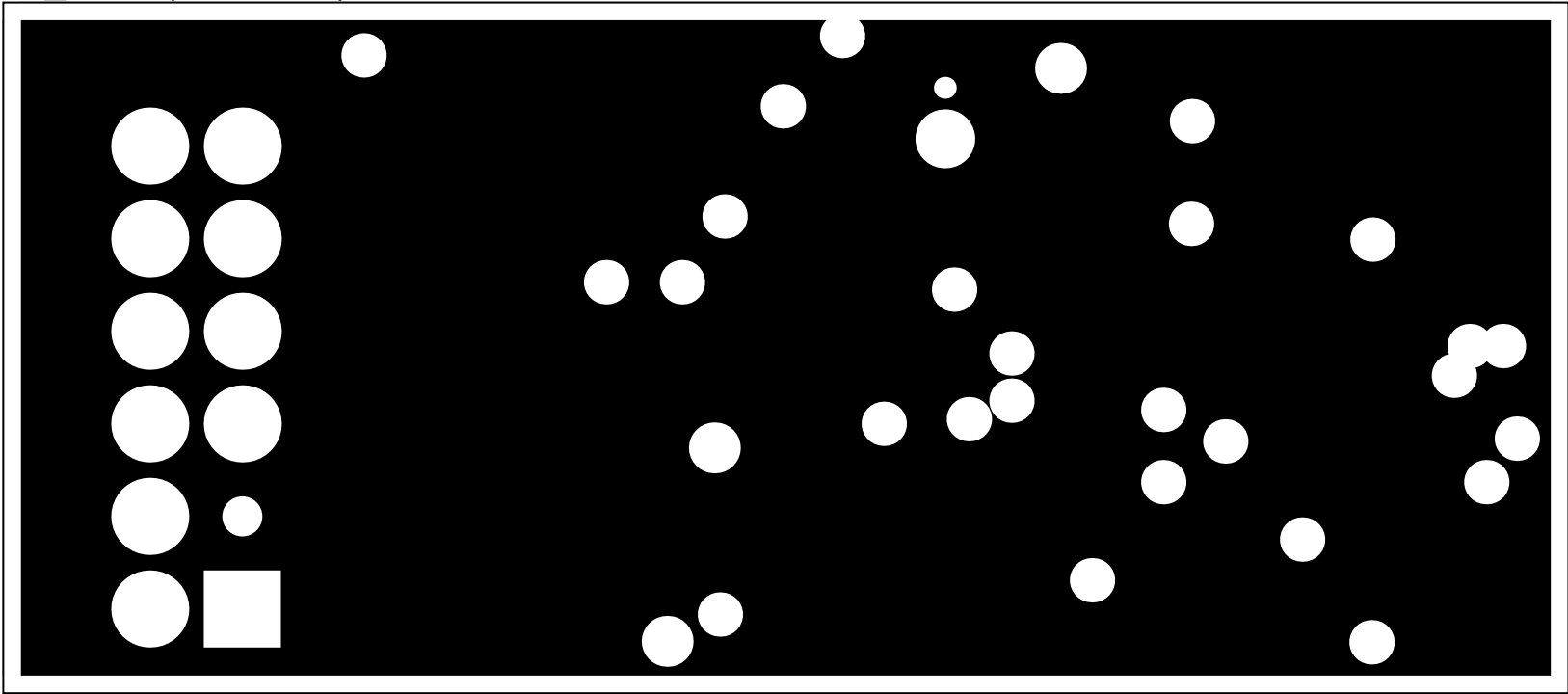
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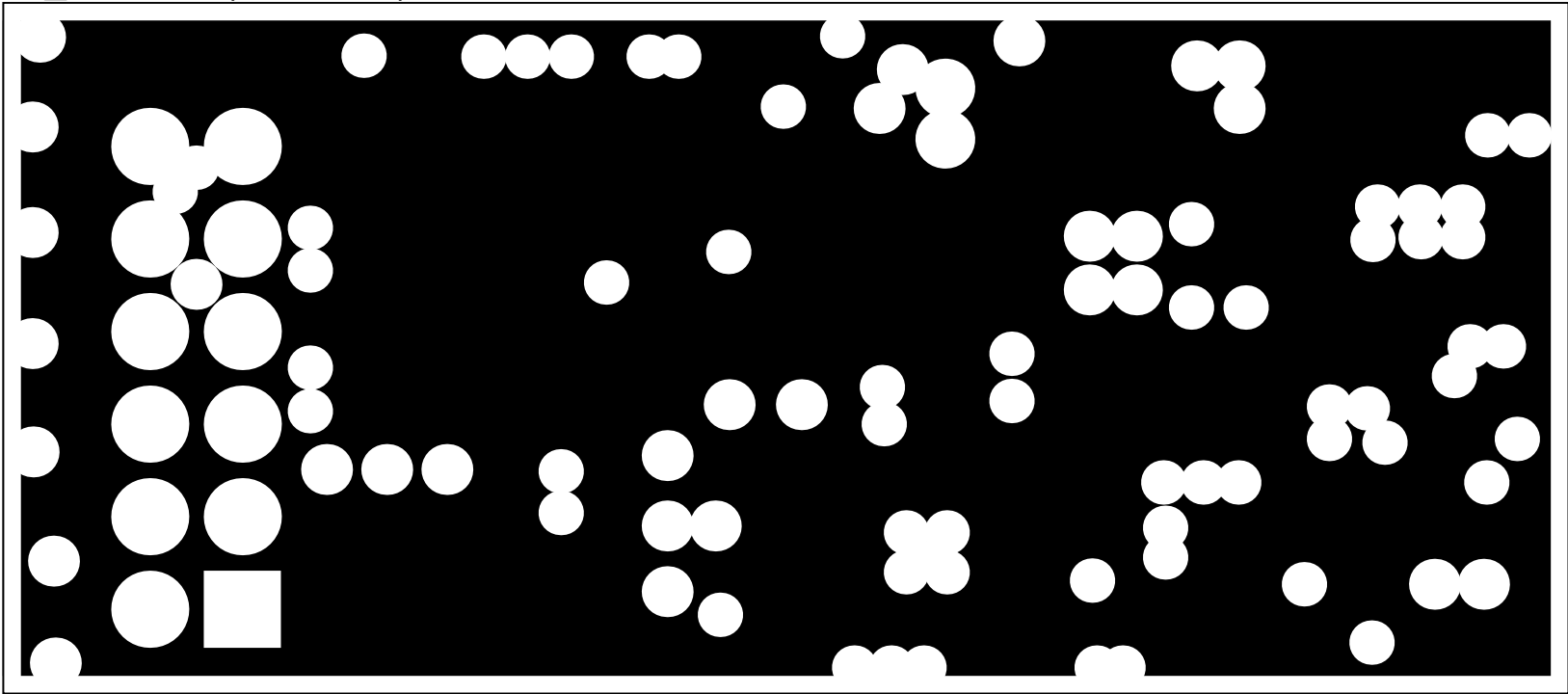
L2_GND (Scale 5:1)




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L2_GND - internal power plane - top view		Fabrication document	Sheet 8 / 14
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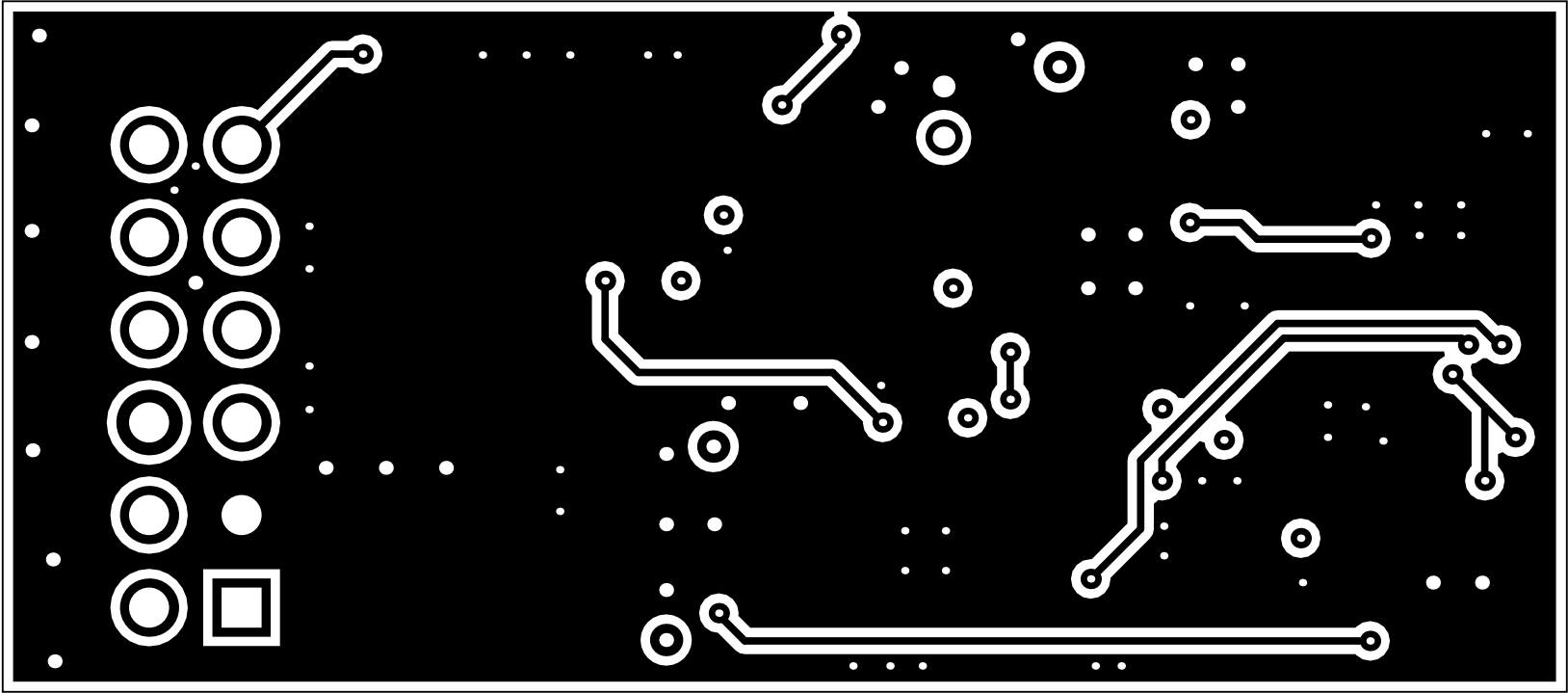
L3_POWER (Scale 5:1)




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L3_PWR - internal power plane - top view		Fabrication document	Sheet 9 / 14
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L4_BOTTOM (Scale 5:1)



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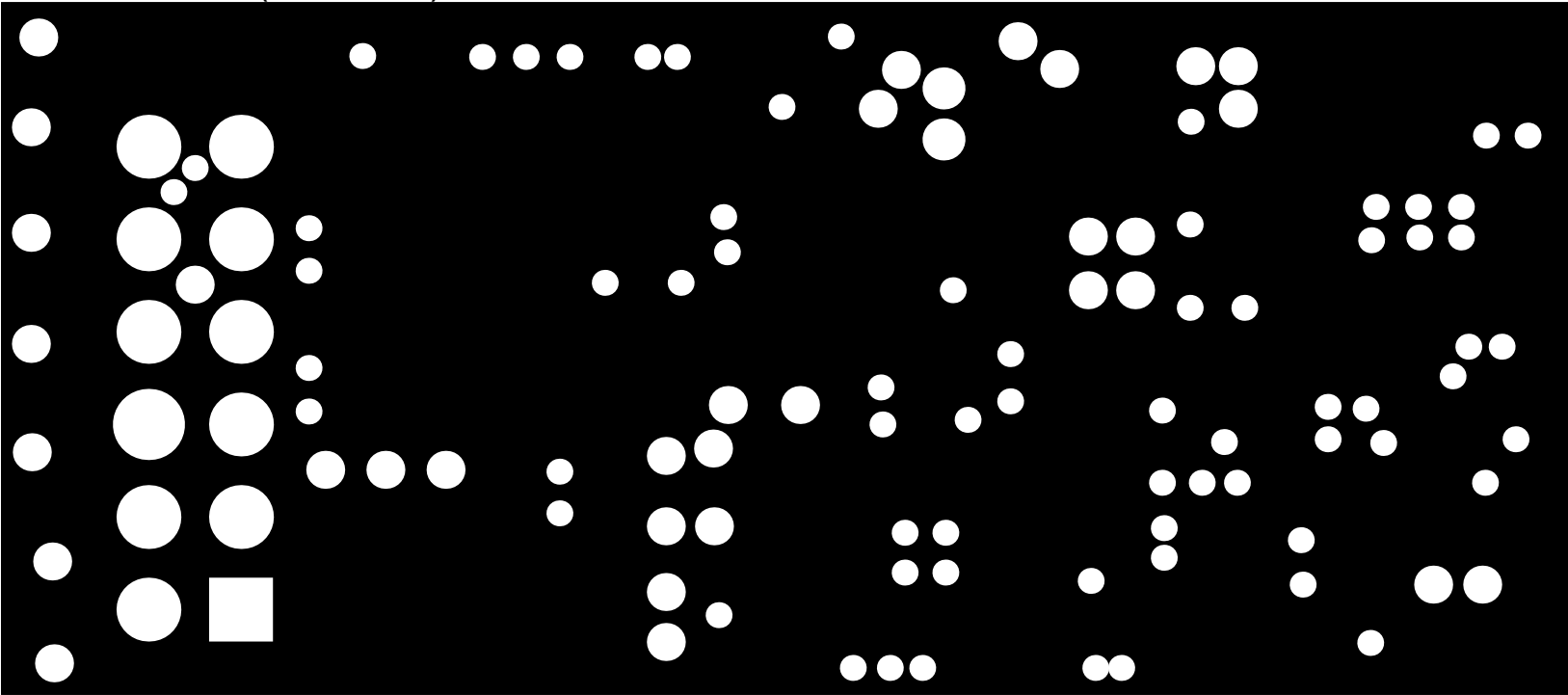
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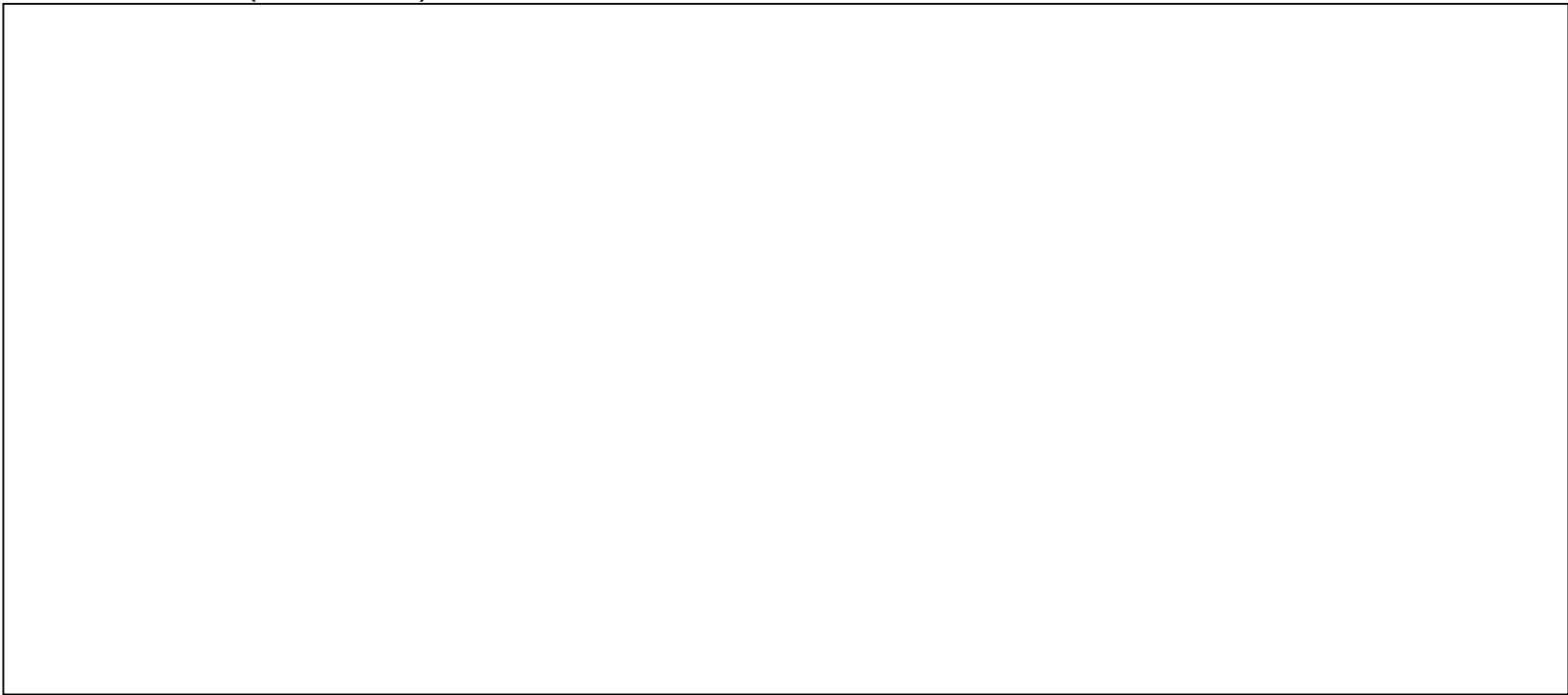
Bottom Solder (Scale 5:1)



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Bottom side solder mask - top view		Fabrication document	Sheet 11 / 14
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Bottom Paste (Scale 5:1)



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Bottom Overlay (Scale 5:1)

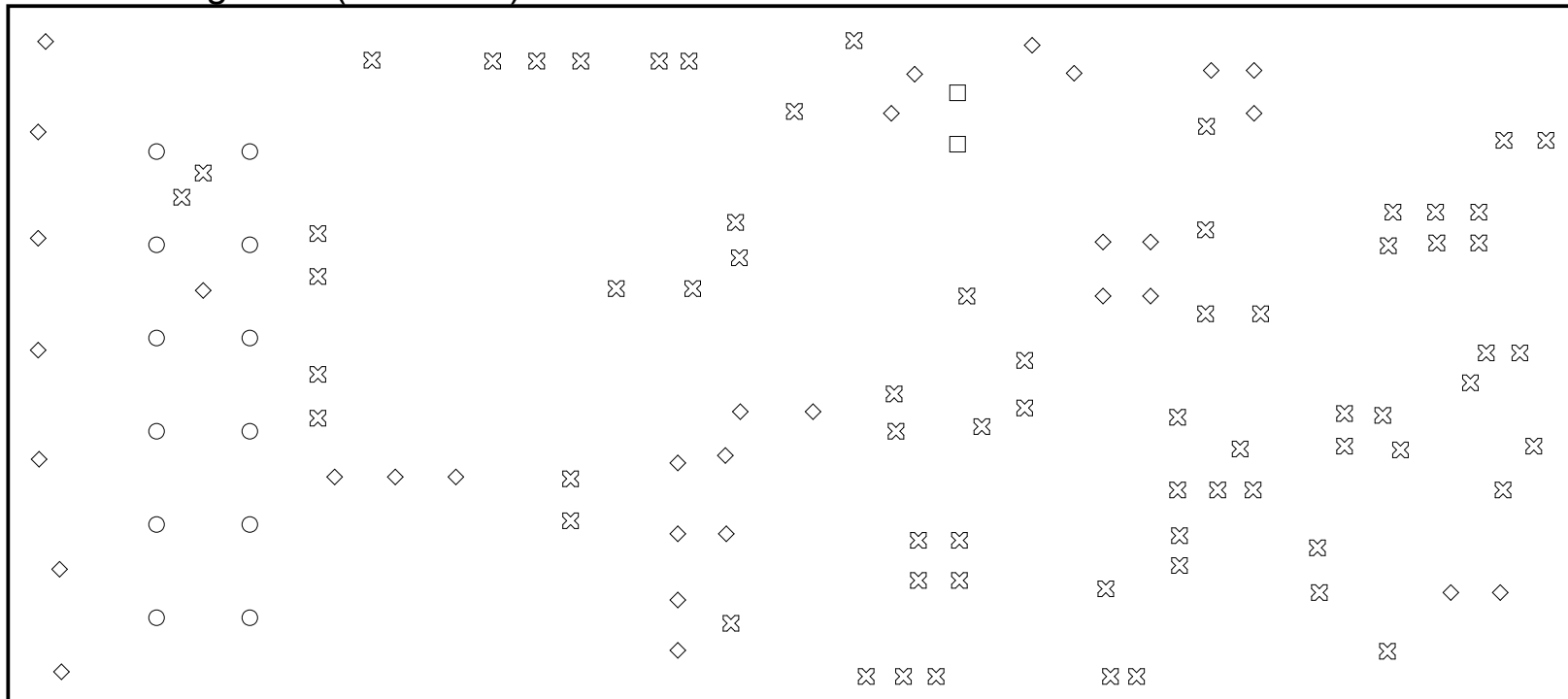
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Bottom side silkscreen - bottom view		Fabrication document	Sheet 13 / 14
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Drill Drawing View (Scale 5:1)



Drill Table

Symbol	Count	Hole Size	Plated	Drill Layer Pair	Via / Pad	Template
⊗	68	0.203mm(8.0mil)	Plated	L1_TOP - L4_BOTTOM	Via	v56h20
◇	32	0.381mm(15.0mil)	Plated	L1_TOP - L4_BOTTOM	Via	v89h38
□	2	0.600mm(23.6mil)	Plated	L1_TOP - L4_BOTTOM	Pad	c100h60
○	12	1.100mm(43.3mil)	Plated	L1_TOP - L4_BOTTOM	Pad	(Mixed)
114 Total						

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Drill drawing & drill table

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