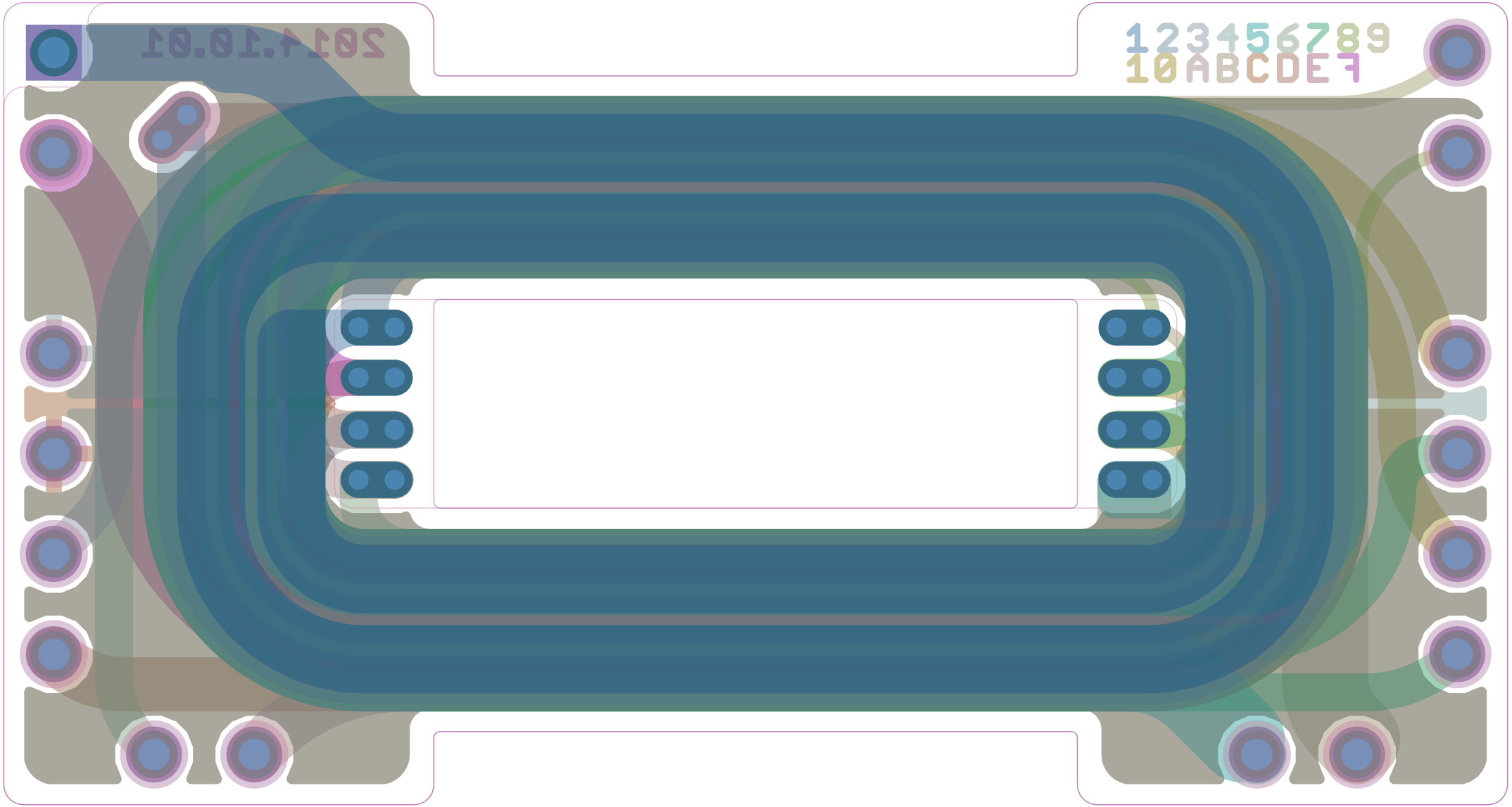
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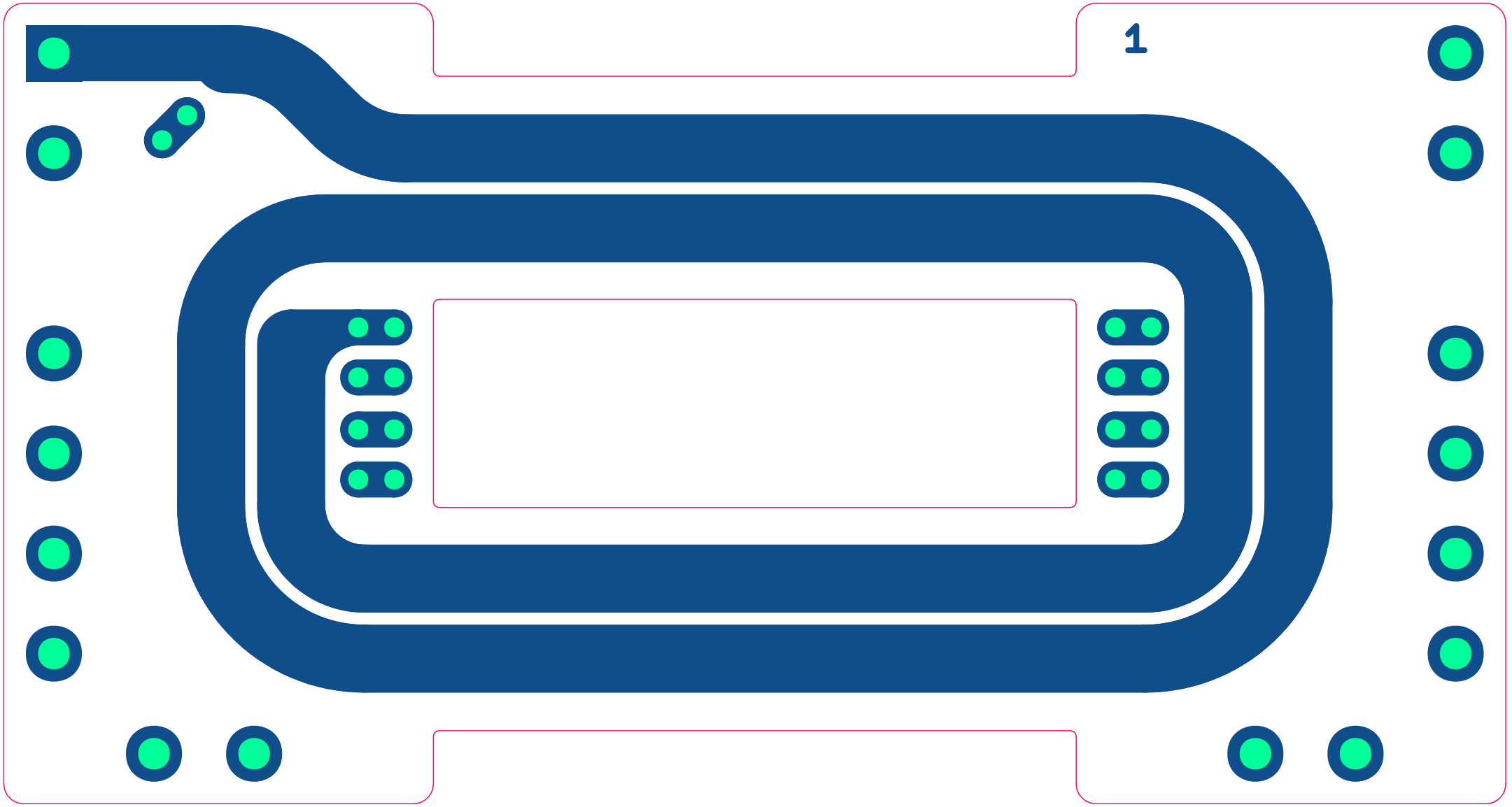
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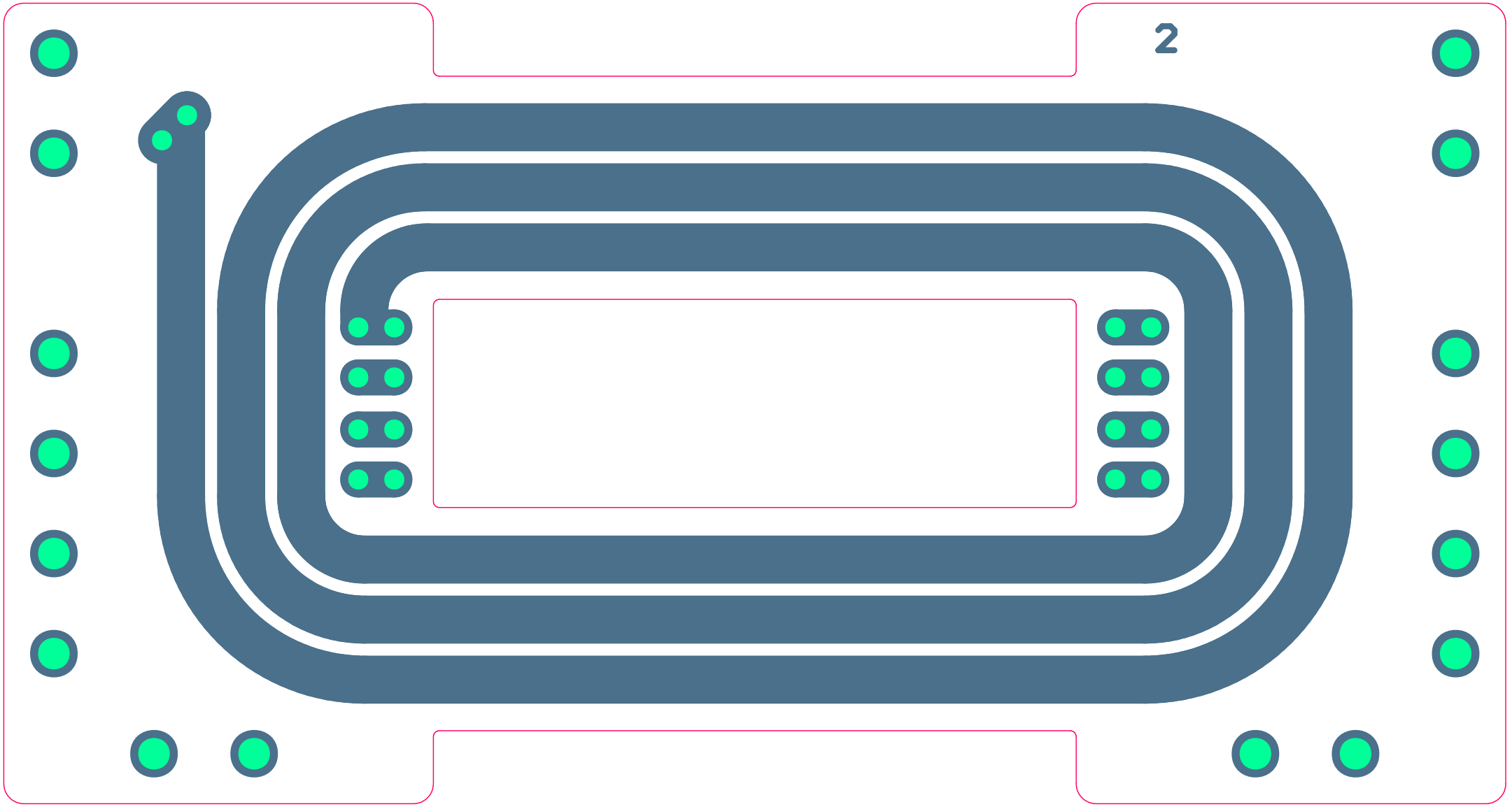
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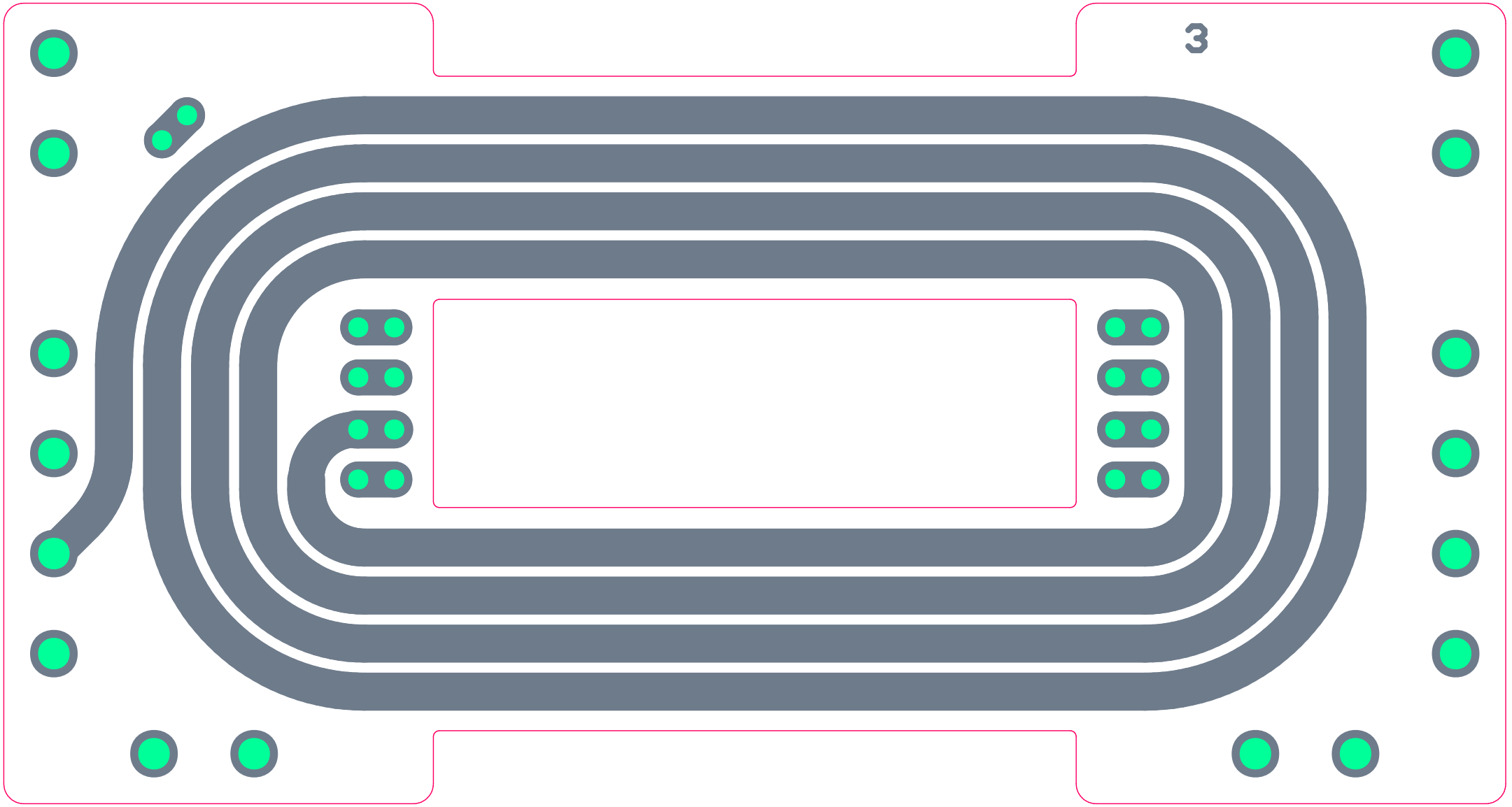
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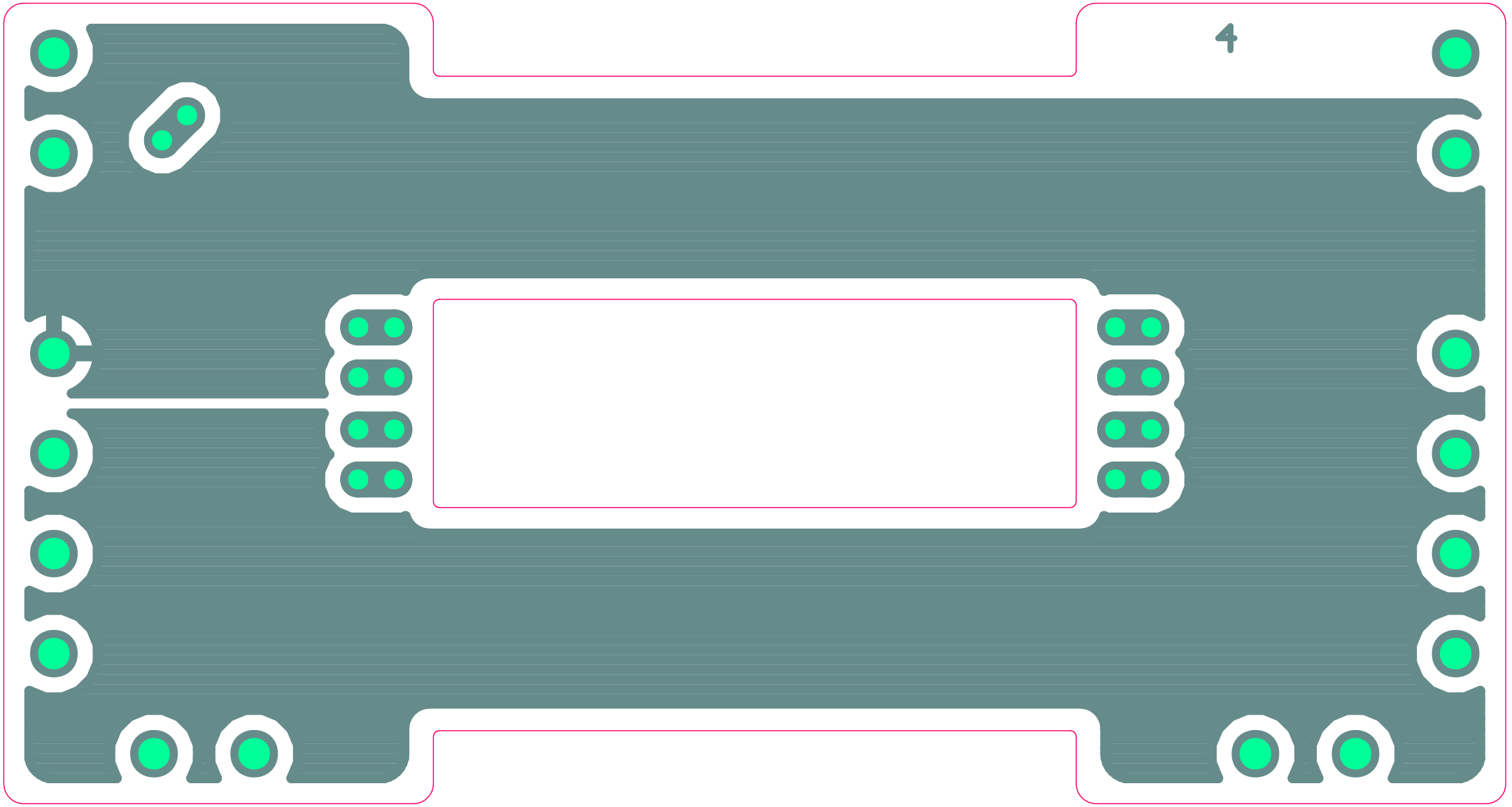
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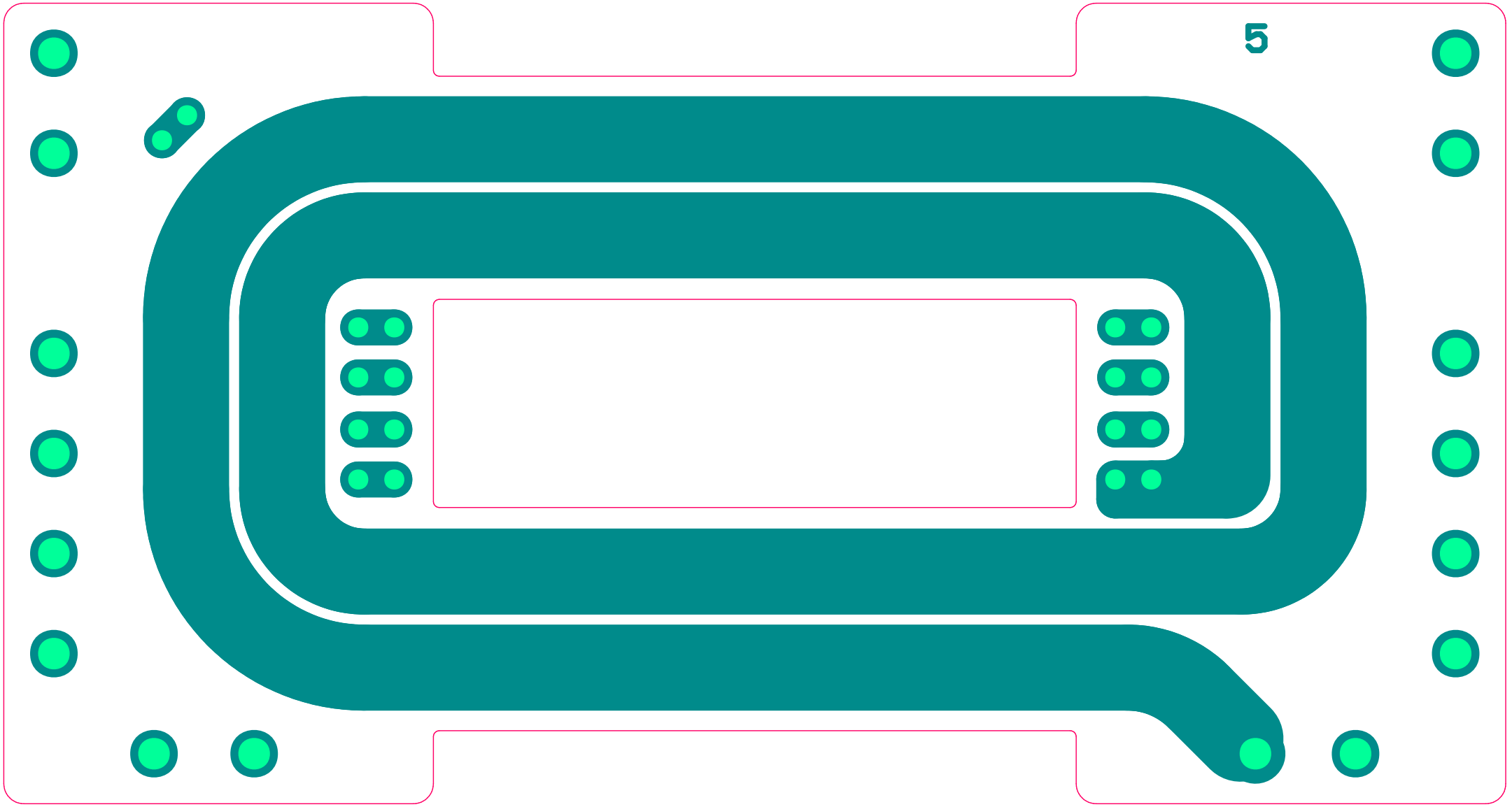
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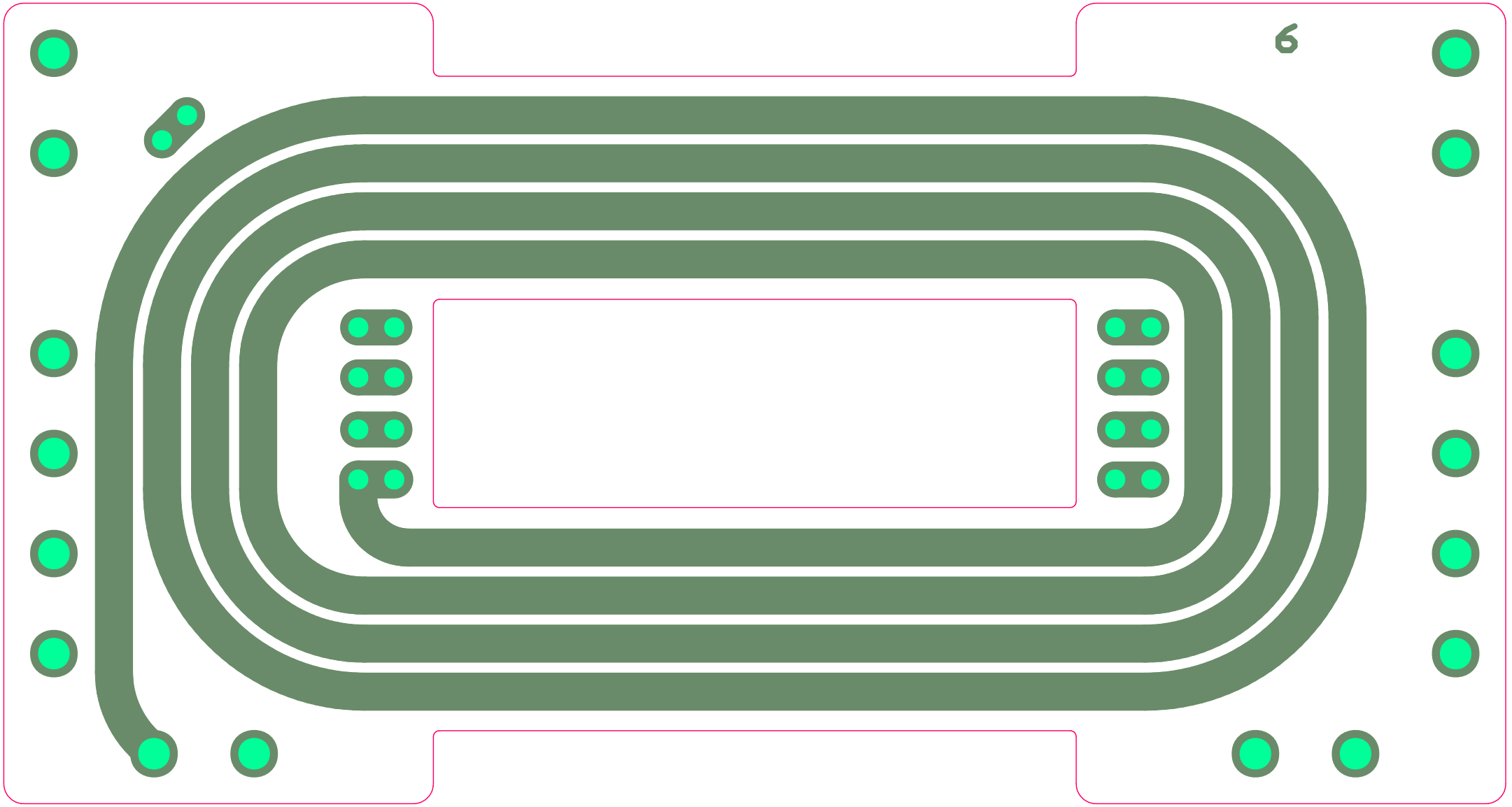
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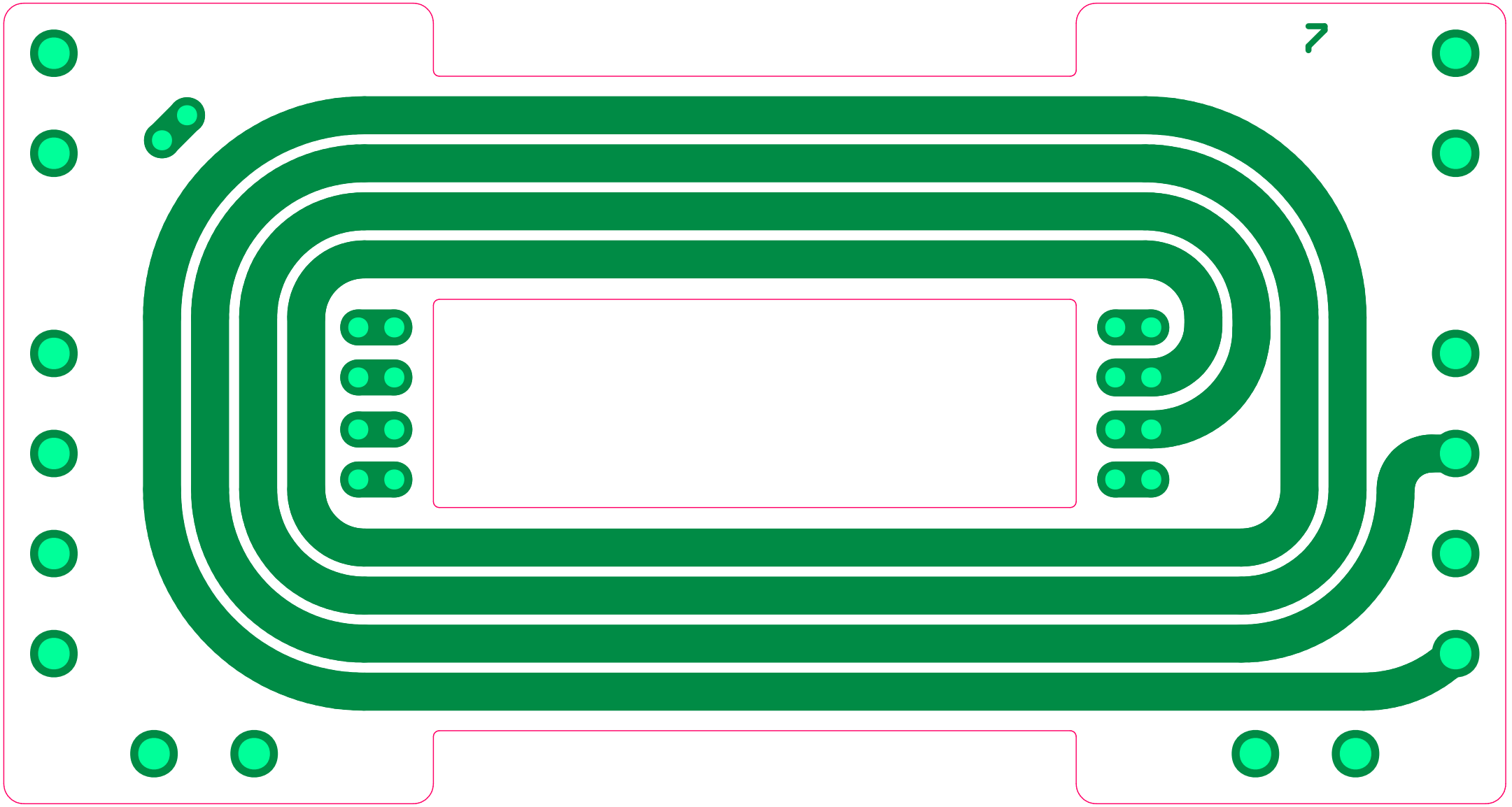
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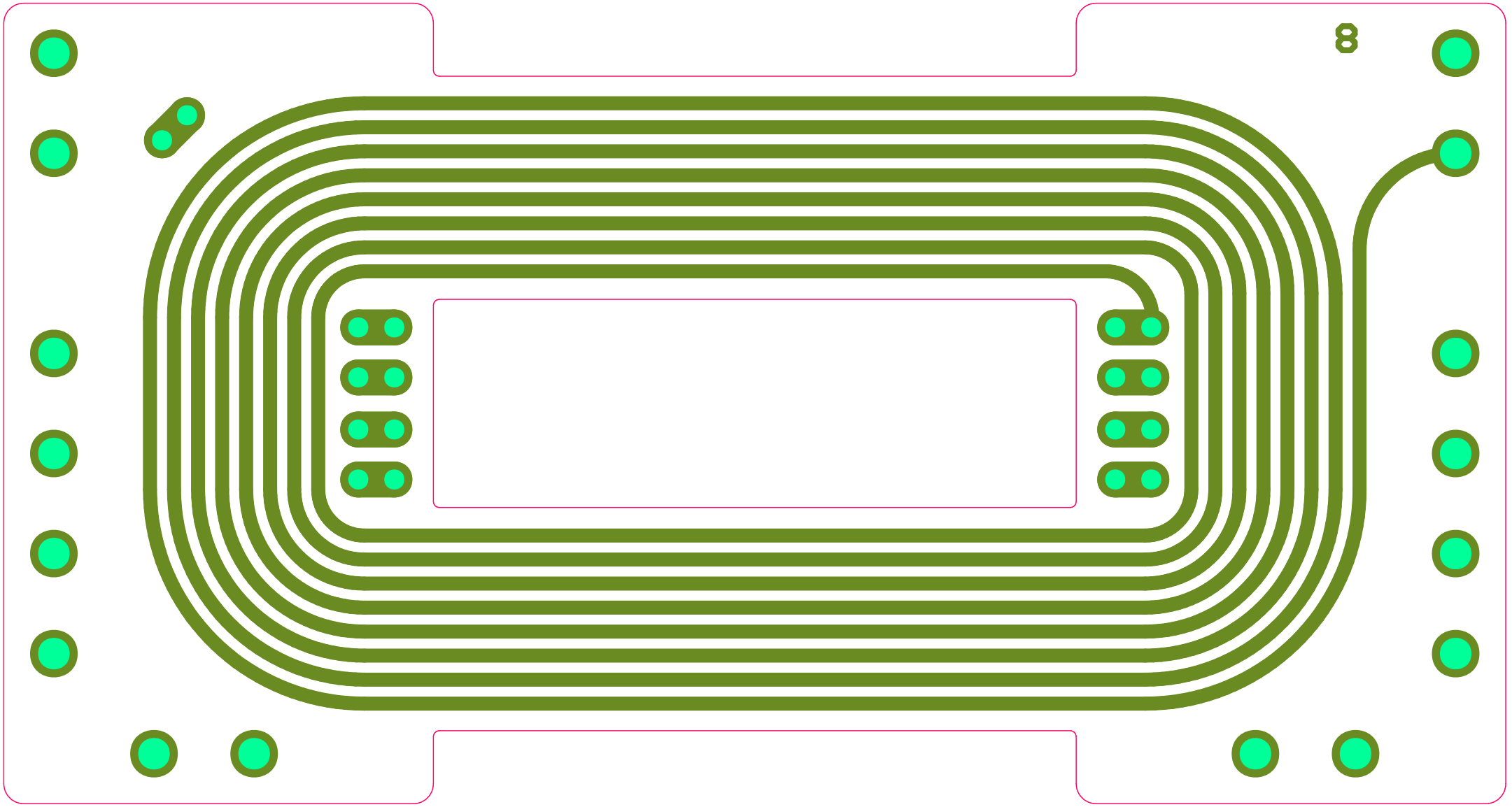
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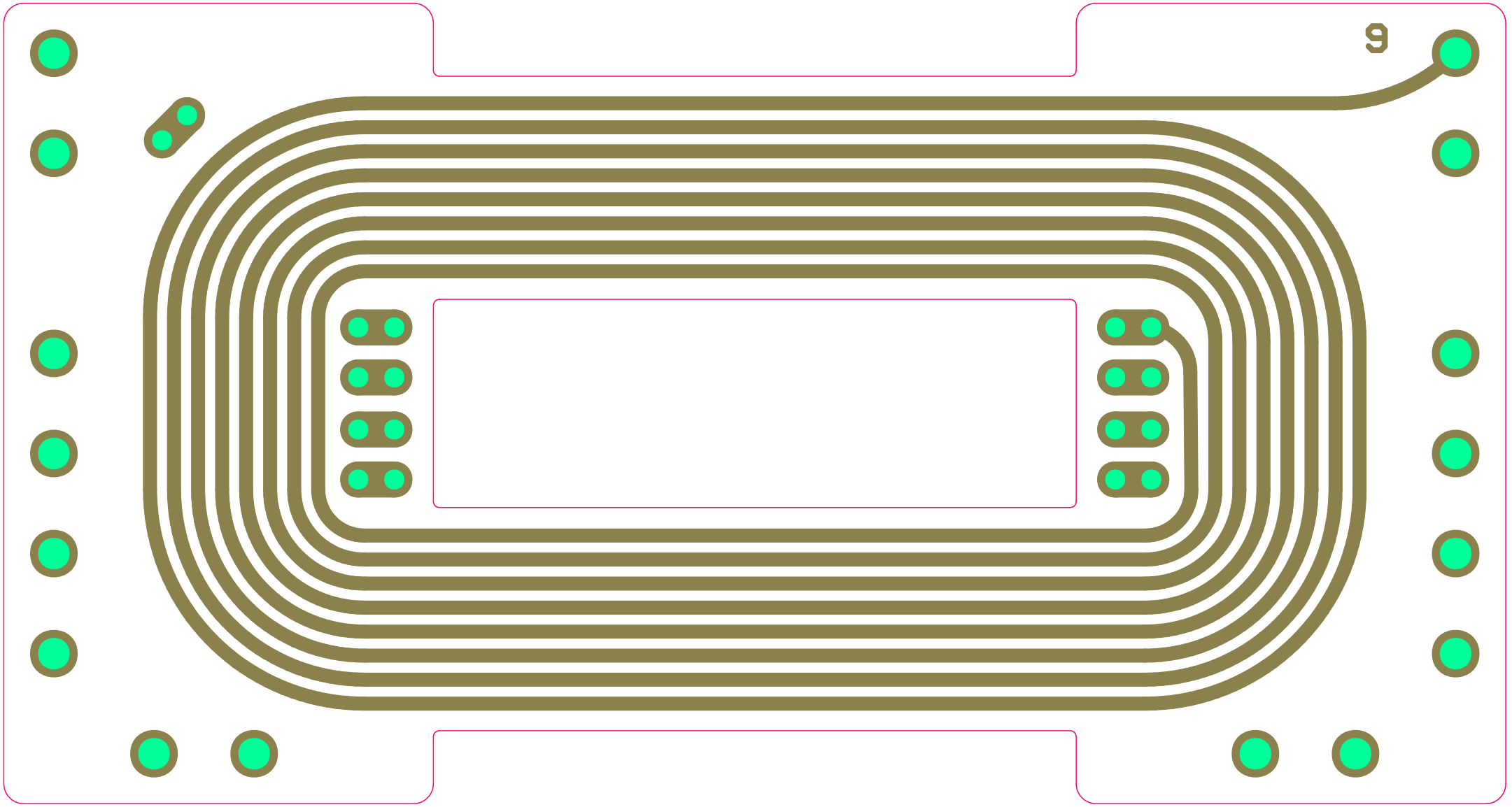
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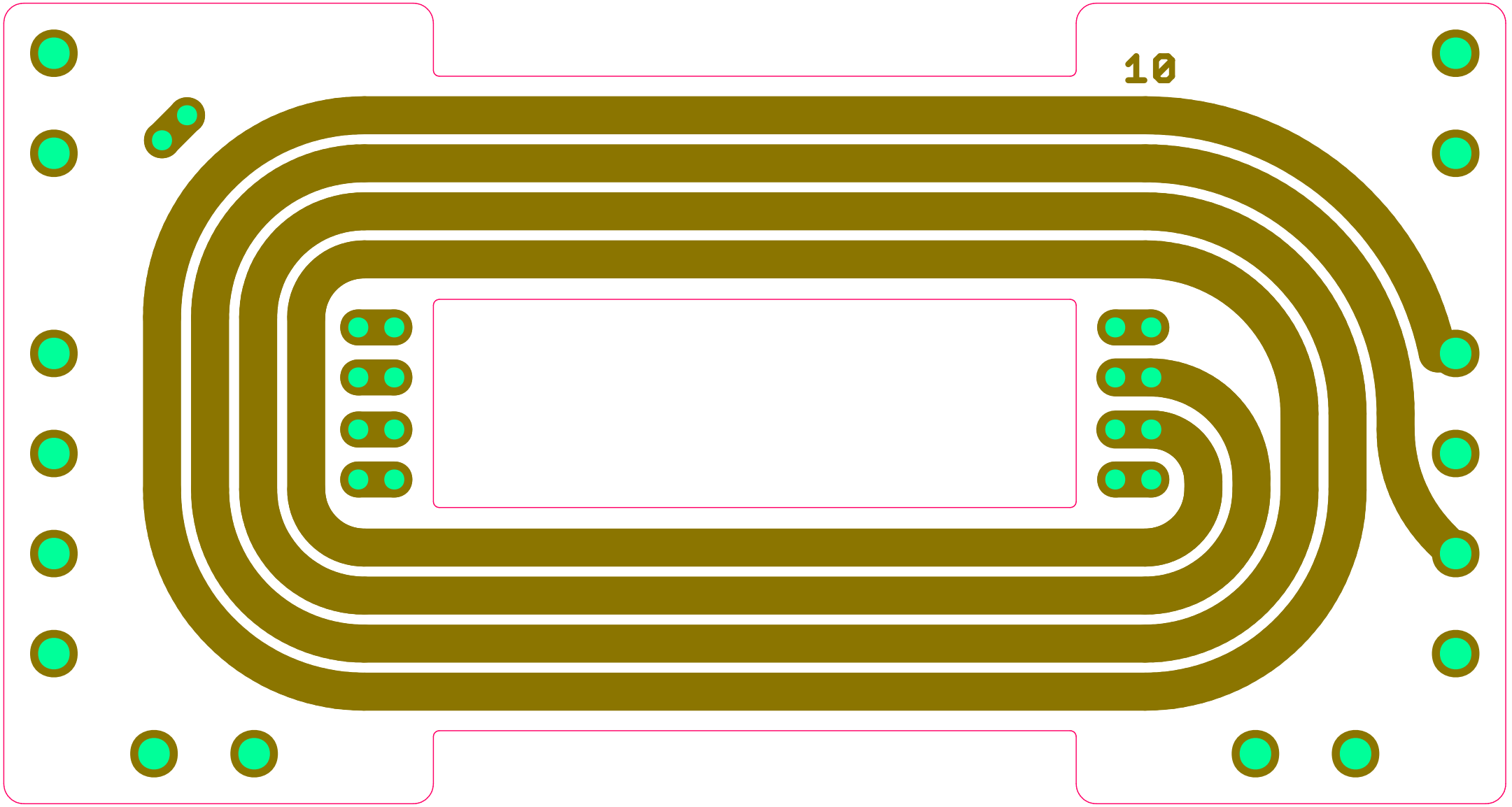
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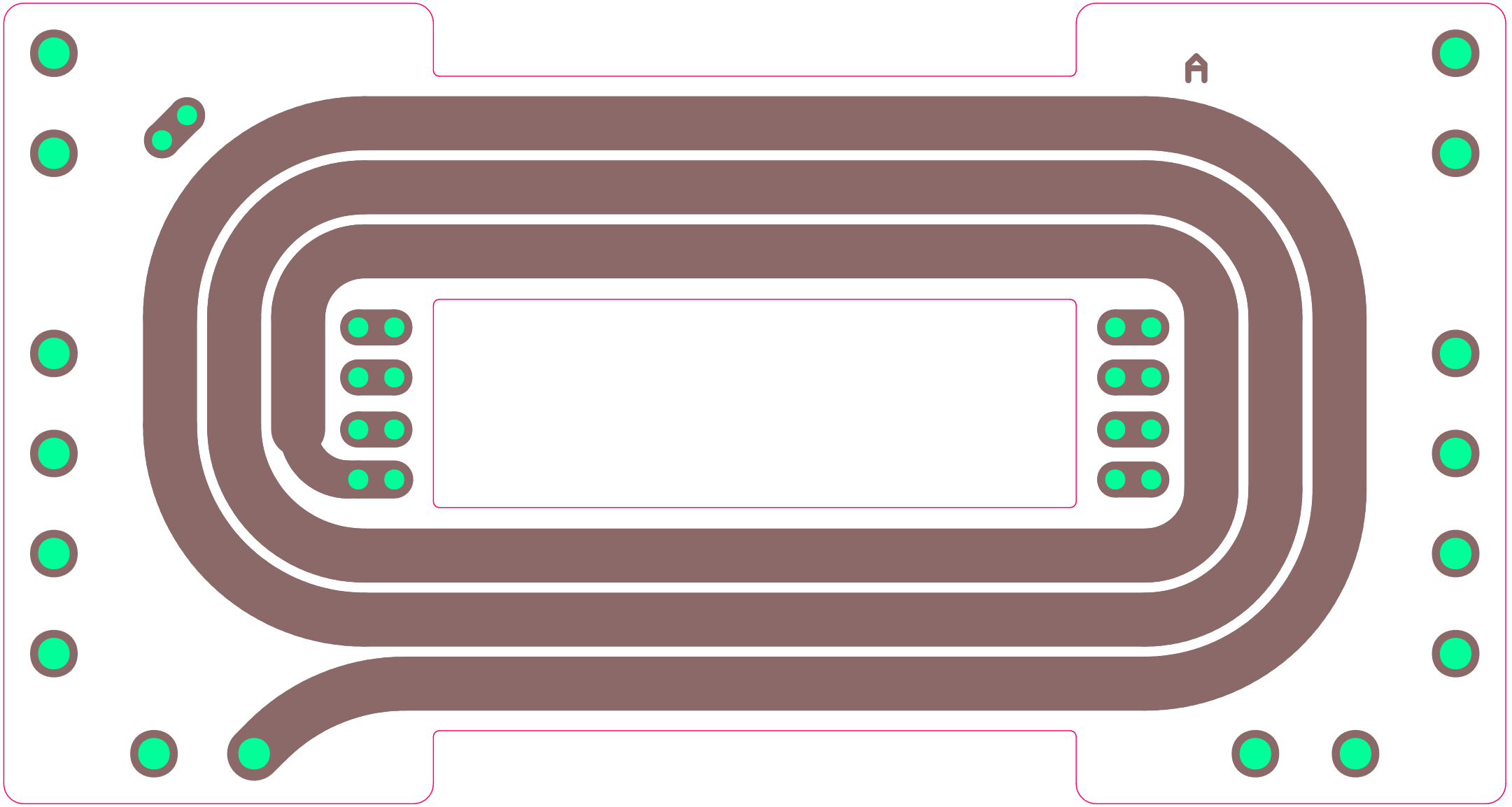
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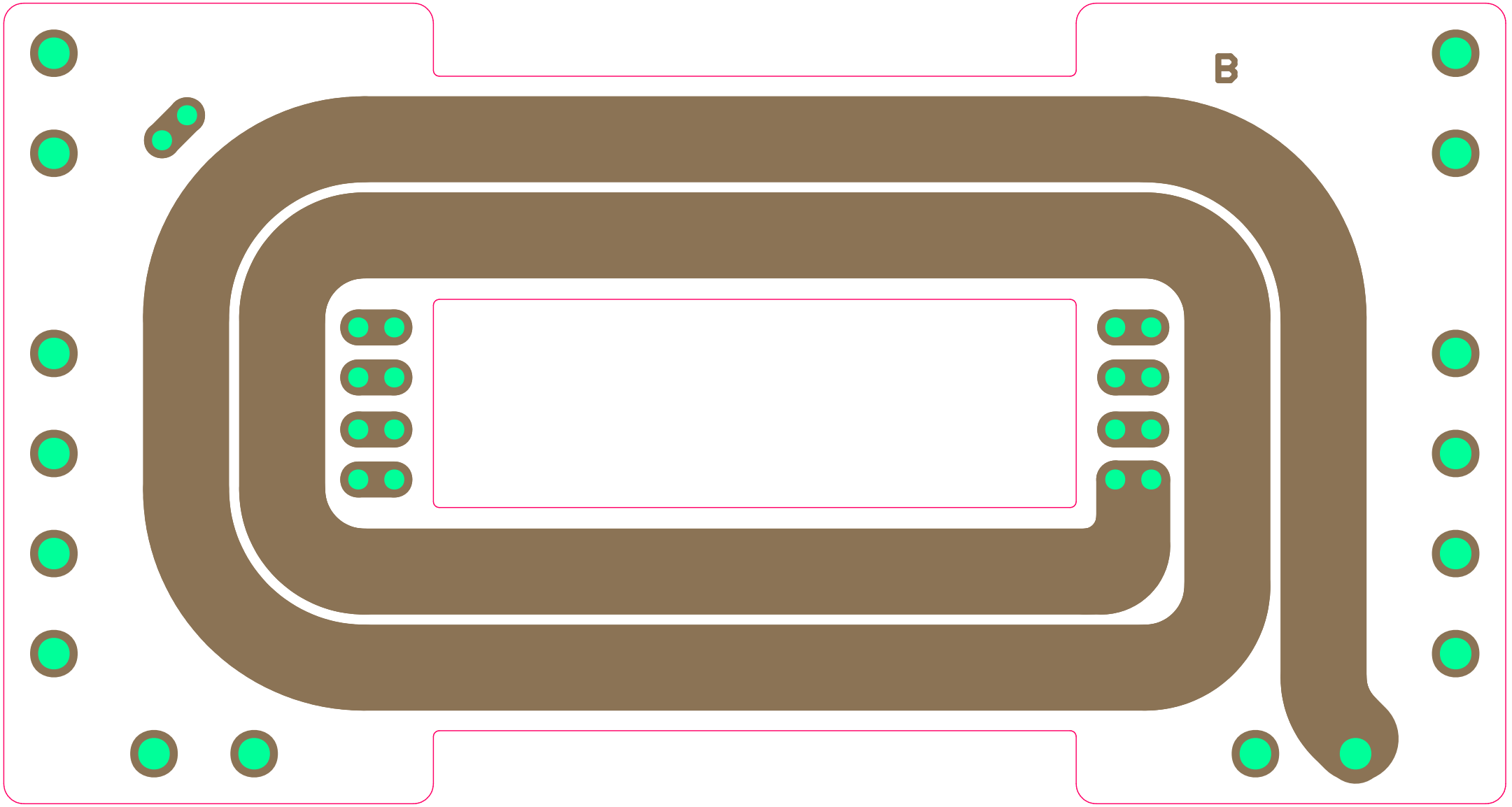
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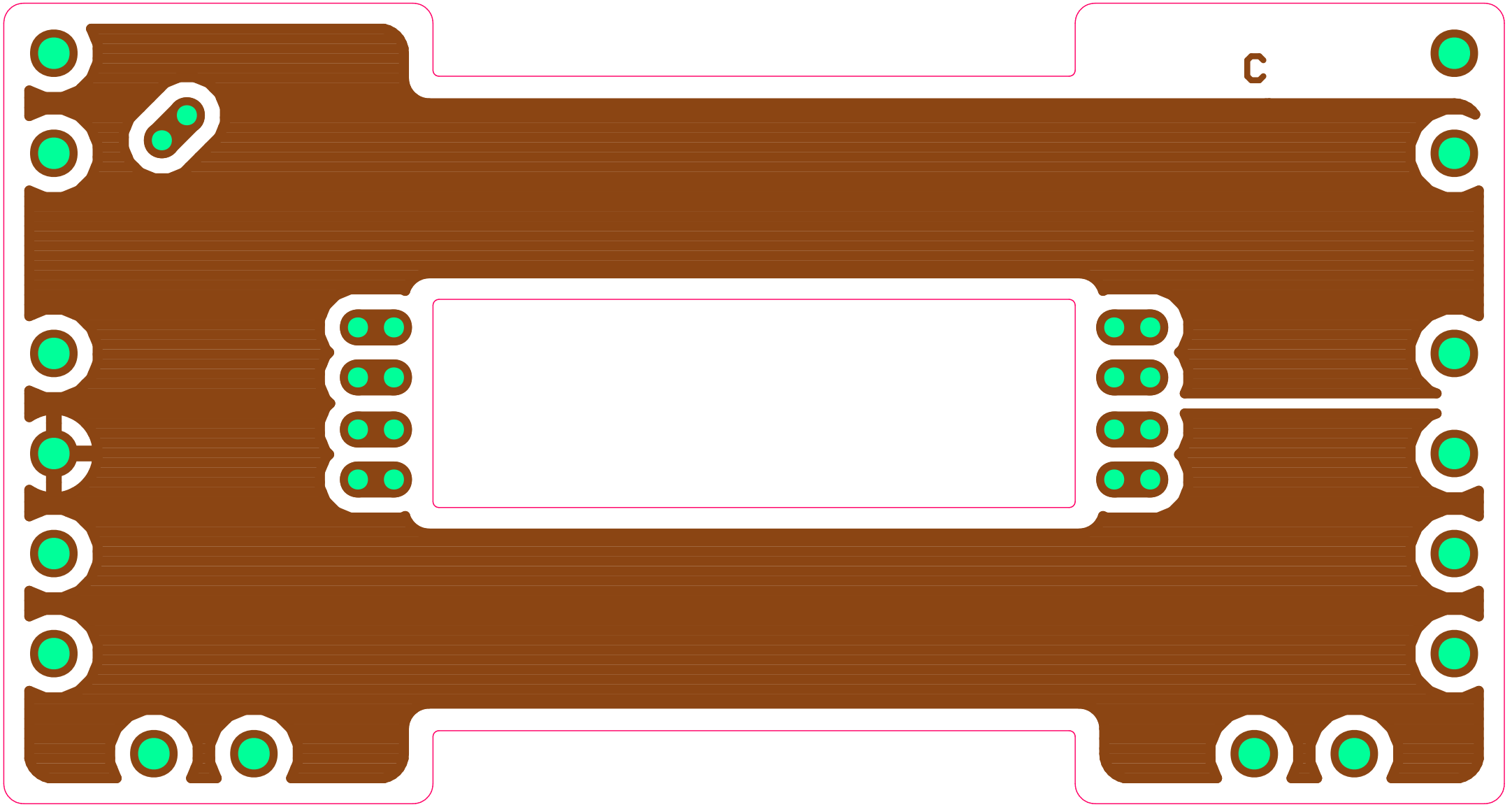
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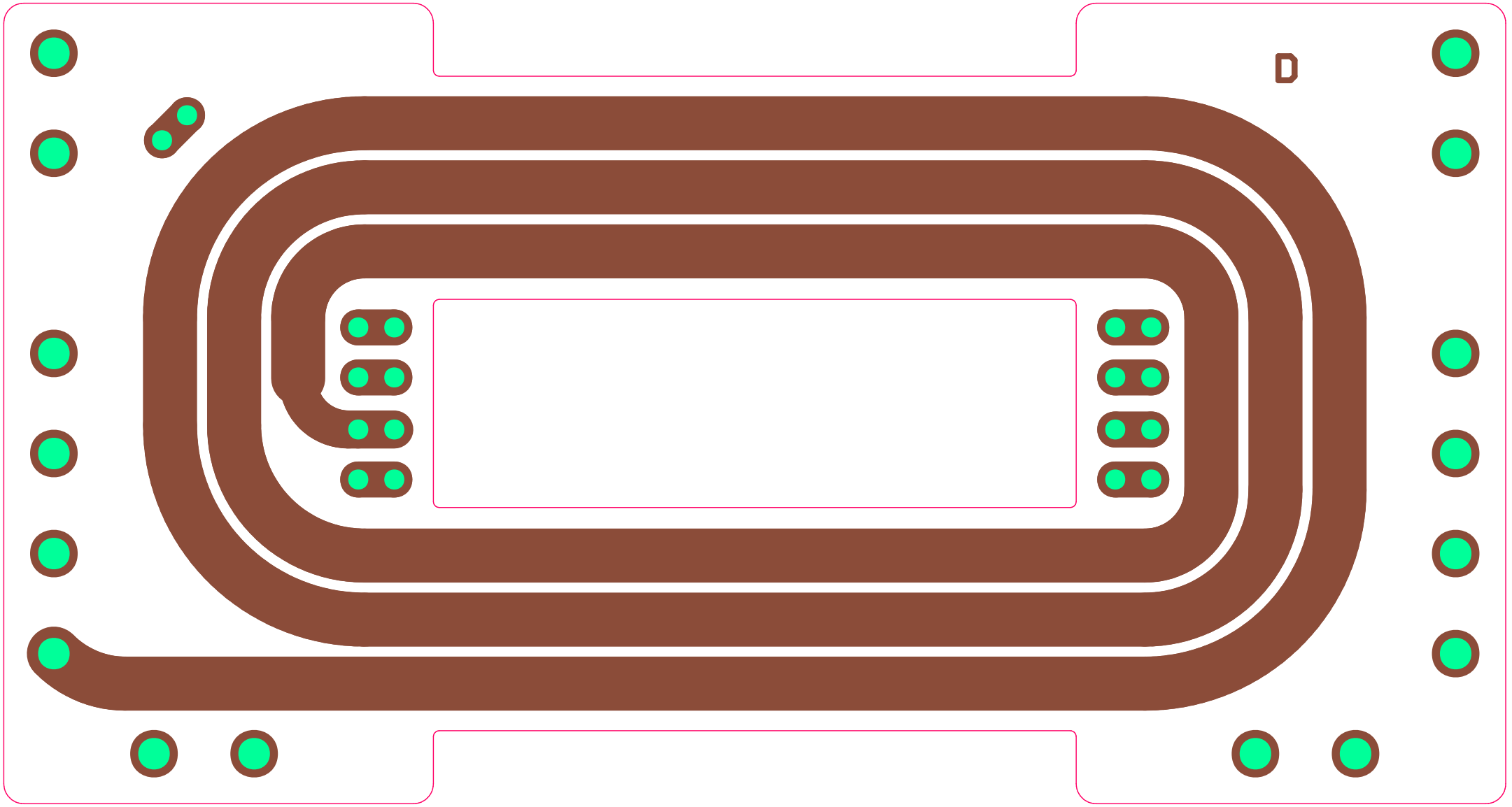
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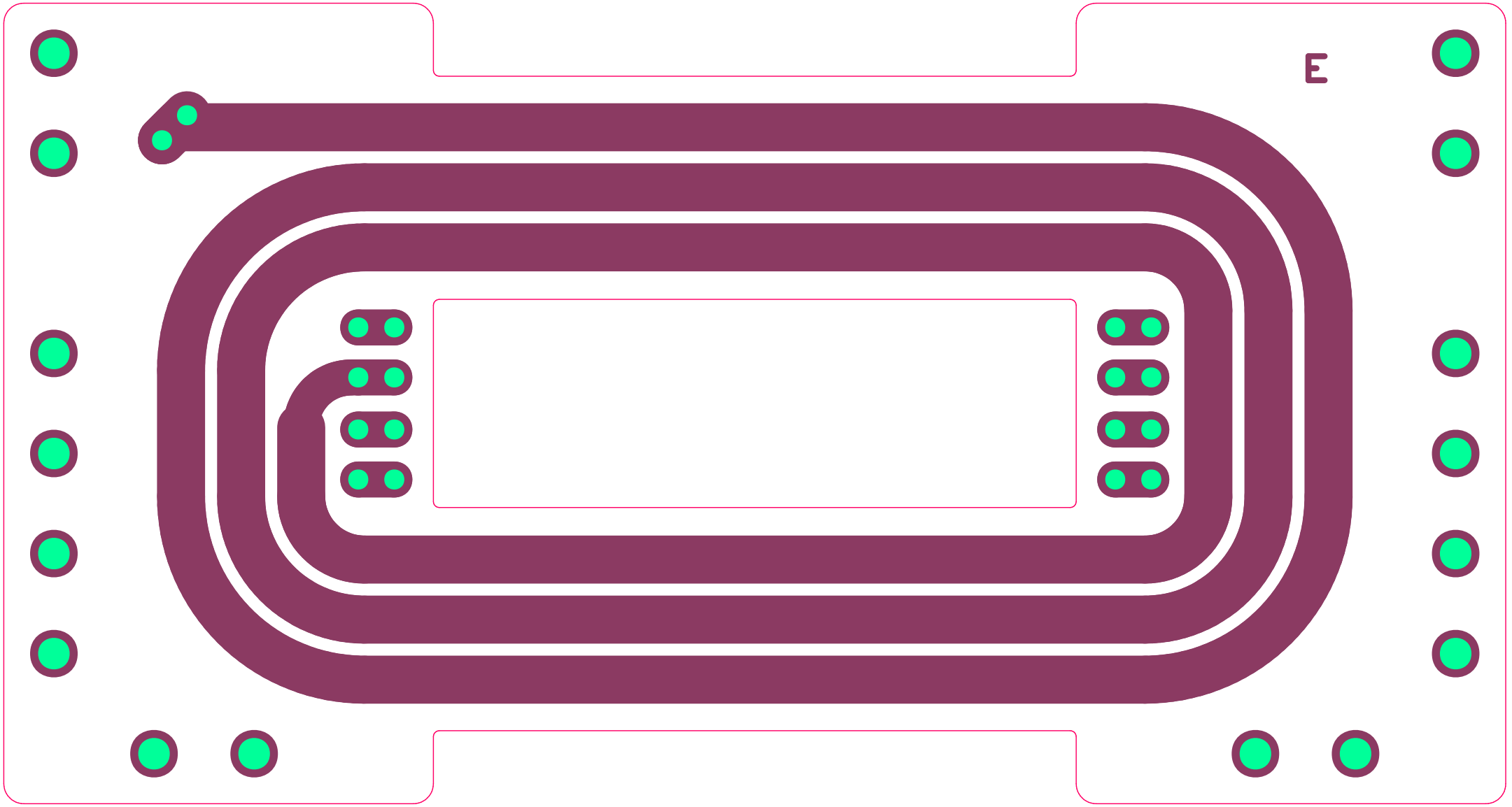
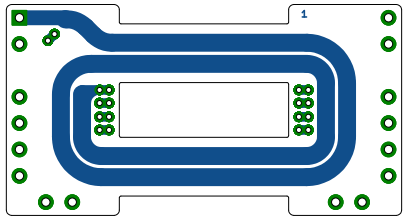

E

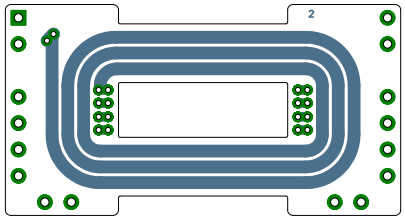
2014.10.01
F


coverfoil

Solar Orbiter LVPS Planar Trafo for HET-EPT & STEP - 2014.10.01



PRIM 1 of 4



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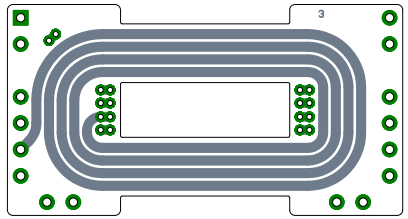
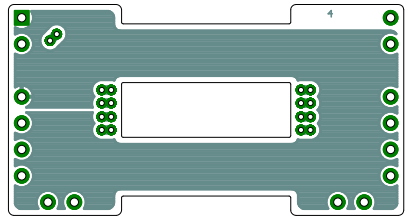
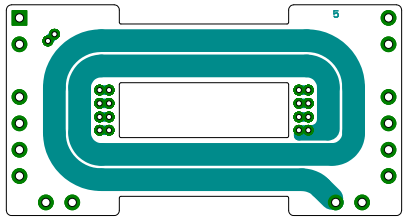


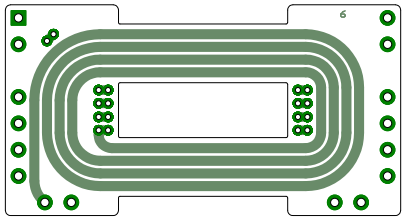
12V_SEC 1 of 2



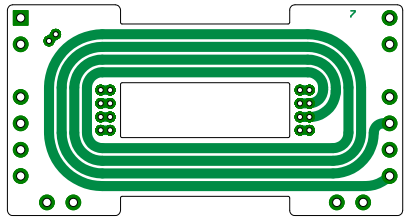
SHIELD Layer 4



DIG 1 of 2



HEATER 1 of 2



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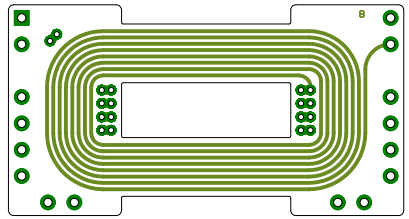

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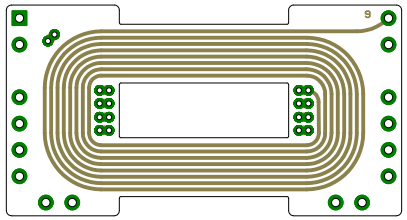

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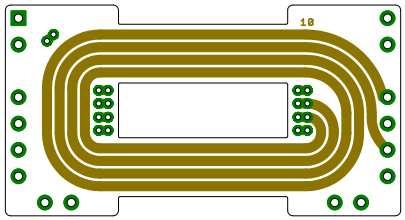

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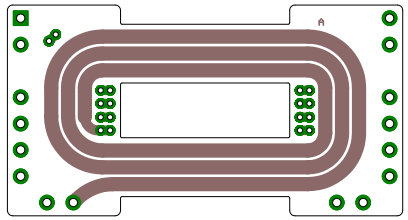

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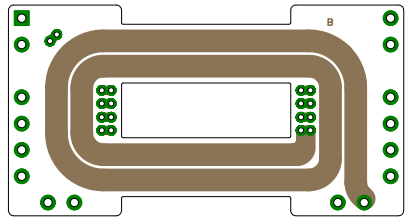

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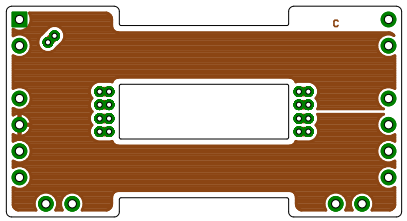
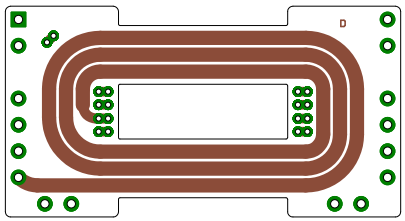
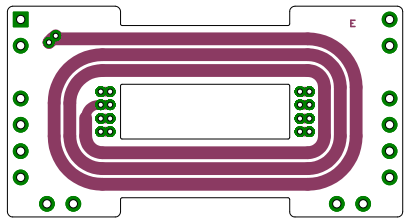


SHIELD Layer 13



12V_SEC 2 of 2



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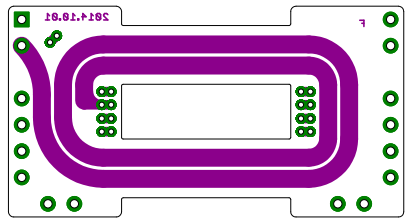

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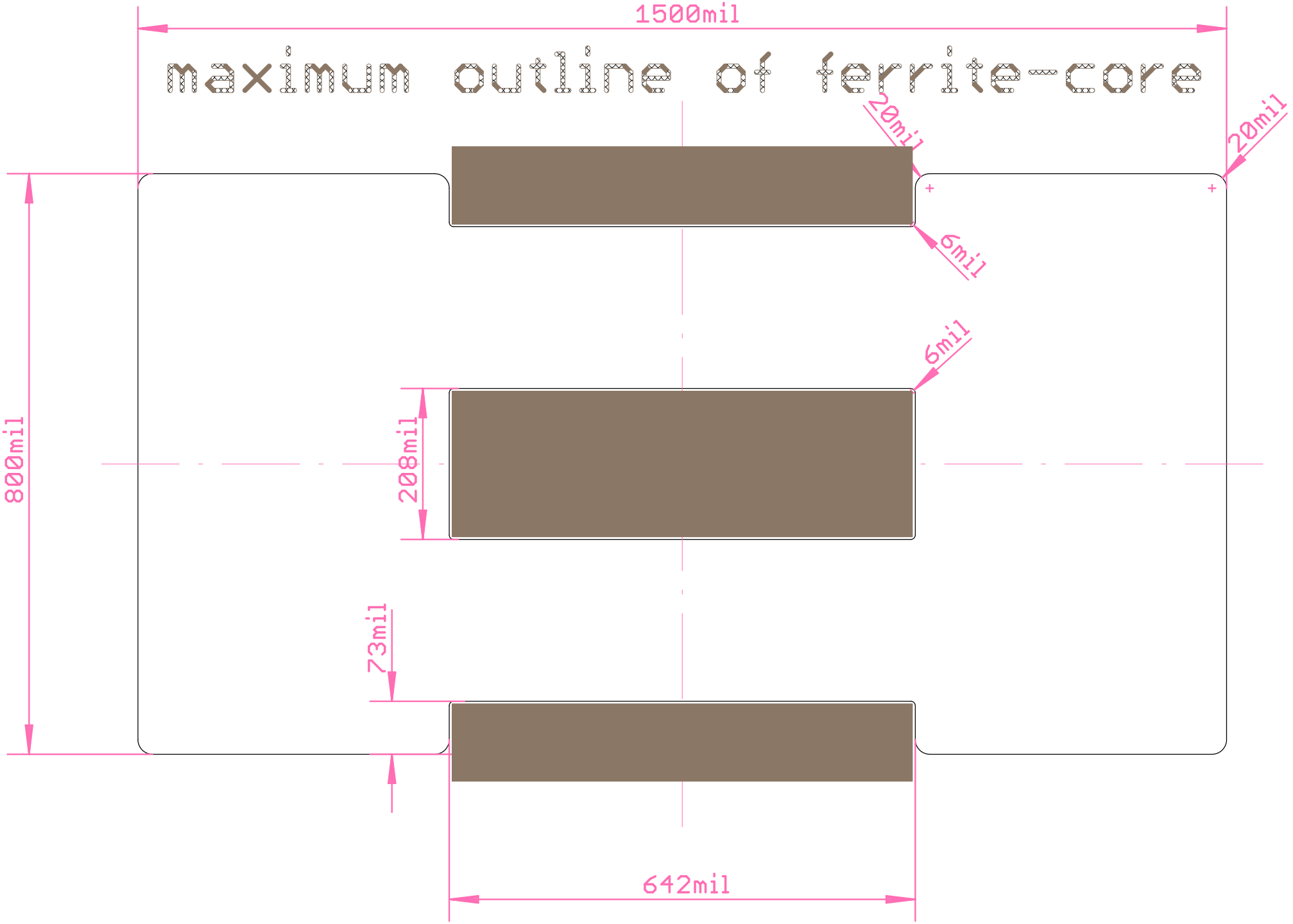

maximum outline of ferrite-core
1500mil
20mil
20mil
6mil
6mil
800mil
208mil
73mil
642mil

planartrafo-layerstack

Layer	Signal Name	Name	Layer	Thickness / µm
		cover foil, 50µm acrylic glue & 25µm polyimide foil	Cover Foil	50
1	PRIM 1 of 4	Copper 35µm + 35µm	Copper	70
		2 x 106 + 1 x 1080 polyimide prepreg	Prepreg	135
2	PRIM 2 of 4	Copper 70µm	Copper	70
		polyimide laminate 100µm	Laminate	100
3	12V_SEC_ON_PRIM 1 of 2	Copper 70µm	Copper	70
		2 x 106 + 1 x 1080 polyimide prepreg	Prepreg *	135
4	SHIELD Layer 4	Copper 70µm	Copper	70
		polyimide laminate 100µm	Laminate	100
5	DIG 1 of 2	Copper 70µm	Copper	70
		2 x 106 + 1 x 1080 polyimide prepreg	Prepreg	100
6	12V_HEATER 1 of 2	Copper 70µm	Copper	70
		polyimide laminate 100µm	Laminate	100
7	ANA+ ANA- 1 0f 2	Copper 70µm	Copper	70
		2 x 106 + 1 x 1080 polyimide prepreg	Prepreg	100
8	BIAS 1 of 2	Copper 70µm	Copper	70
		polyimide laminate 100µm	Laminate	100
9	BIAS 2 of 2	Copper 70µm	Copper	70
		2 x 106 + 1 x 1080 polyimide prepreg	Prepreg	100
10	ANA+ ANA- 2 of 2	Copper 70µm	Copper	70
		polyimide laminate 100µm	Laminate	100
11	12V_HEATER 2 of 2	Copper 70µm	Copper	70
		2 x 106 + 1 x 1080 polyimide prepreg	Prepreg	100
12	DIG 2 of 2	Copper 70µm	Copper	70
		polyimide laminate 100µm	Laminate	100
13	SHIELD Layer 13	Copper 70µm	Copper	70
		2 x 106 + 1 x 1080 polyimide prepreg	Prepreg *	135
14	12V_SEC_ON_PRIM 2 of 2	Copper 70µm	Copper	70
		polyimide laminate 100µm	Laminate	100
15	PRIM 3 of 4	Copper 70µm	Copper	70
		2 x 106 + 1 x 1080 polyimide prepreg	Prepreg	135
16	PRIM 4 of 4	Copper 35µm + 35µm	Copper	70
		cover foil, 50µm acrylic glue & 25µm polyimide foil	Cover Foil	50
		Thickness total		**2860**

PCB according MIL-PRF 31032 with SnPb HAL fsinish
Absolute Maximum PCB Thickness 3.00mm
* Copperarea of Shieldlayer is > 67%, this results in a thicker prepreg than the other layers

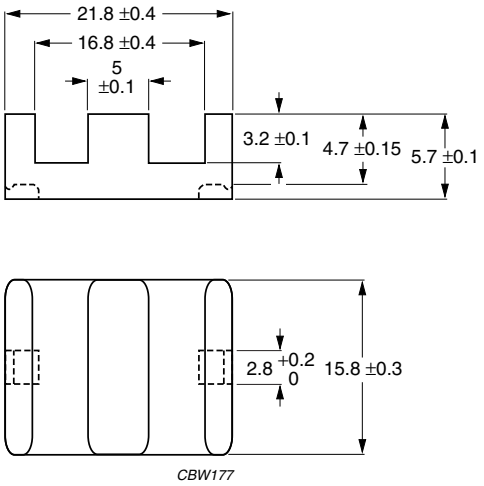
CORES

Effective core parameters of an E/PLT combination

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.324	mm^{-1}
V_e	effective volume	2100	mm^3
l_e	effective length	26.1	mm
A_e	effective area	78.5	mm^2
A_{min}	minimum area	72.6	mm^2
m	mass of E core half	≈ 6.5	g
m	mass of plate	≈ 4	g

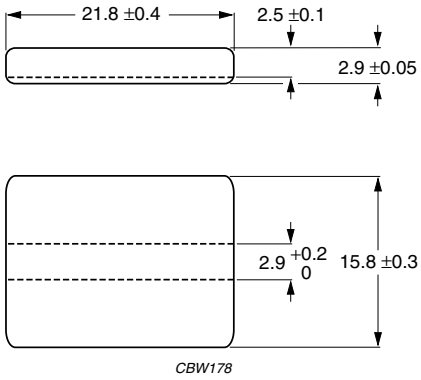
Ordering information for plates

GRADE	TYPE NUMBER
3C90	PLT22/16/2.5/S-3C90
3C92 des	PLT22/16/2.5/S-3C92
3C93 des	PLT22/16/2.5/S-3C93
3C94	PLT22/16/2.5/S-3C94
3C95 des	PLT22/16/2.5/S-3C95
3C96 des	PLT22/16/2.5/S-3C96
3F3	PLT22/16/2.5/S-3F3
3F35 des	PLT22/16/2.5/S-3F35
3F4 des	PLT22/16/2.5/S-3F4
3F45 prot	PLT22/16/2.5/S-3F45
3E6	PLT22/16/2.5/S-3E6



Dimensions in mm.

Fig.1 E22/6/16/R.



Dimensions in mm.

Fig.2 PLT22/16/2.5/S.