

PWB, Artemis Plus

11/5/2023

Rev: C

Page	Index	Page	Index
1	Cover Page	11	L4 (Bot) Copper
2	Layer Stack-up	12	Top Silk Screen
3	Board Outline	13	Bottom Silk Screen
4	Board Slot	14	Top Soldermask
5	Through Hole	15	Bottom Soldermask
6	L1 (Top) To L2 Microvias	16	Top Paste
7	L4 (Bot) to L3 Microvias	17	Bottom Paste
8	L1 (Top) Copper		
9	L2 Copper		
10	L3 Copper		

Released under the Creative Commons
Attribution Share-Alike 4.0 License
<https://creativecommons.org/licenses/by-sa/4.0/>
Modified Design: Sapphire Circuits LLC, J. Mizrahi
Original Design: SparkFun Electronics, N. Seidle

Project: Artemis Plus		
Title: Cover Page		
Size: A	Number: 1011	Revision: C
Date: 11/5/2023	Time: 10:15 PM	Sheet: 1 of 17
File: Artemis_Plus-PWB_PCBdWf		

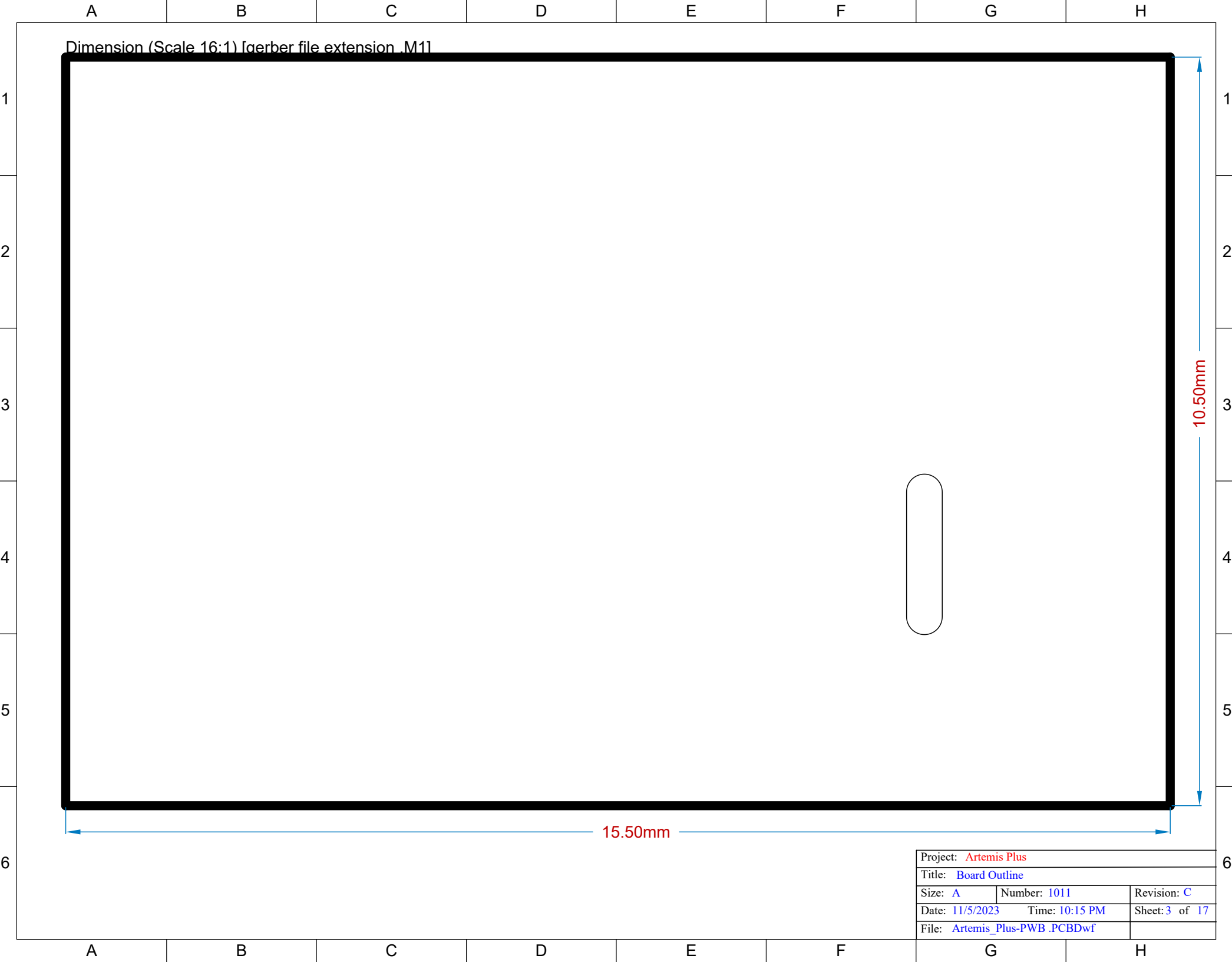
Stack up dimensions can be adjusted as needed Desired thickness is to be a ~0.8mm.

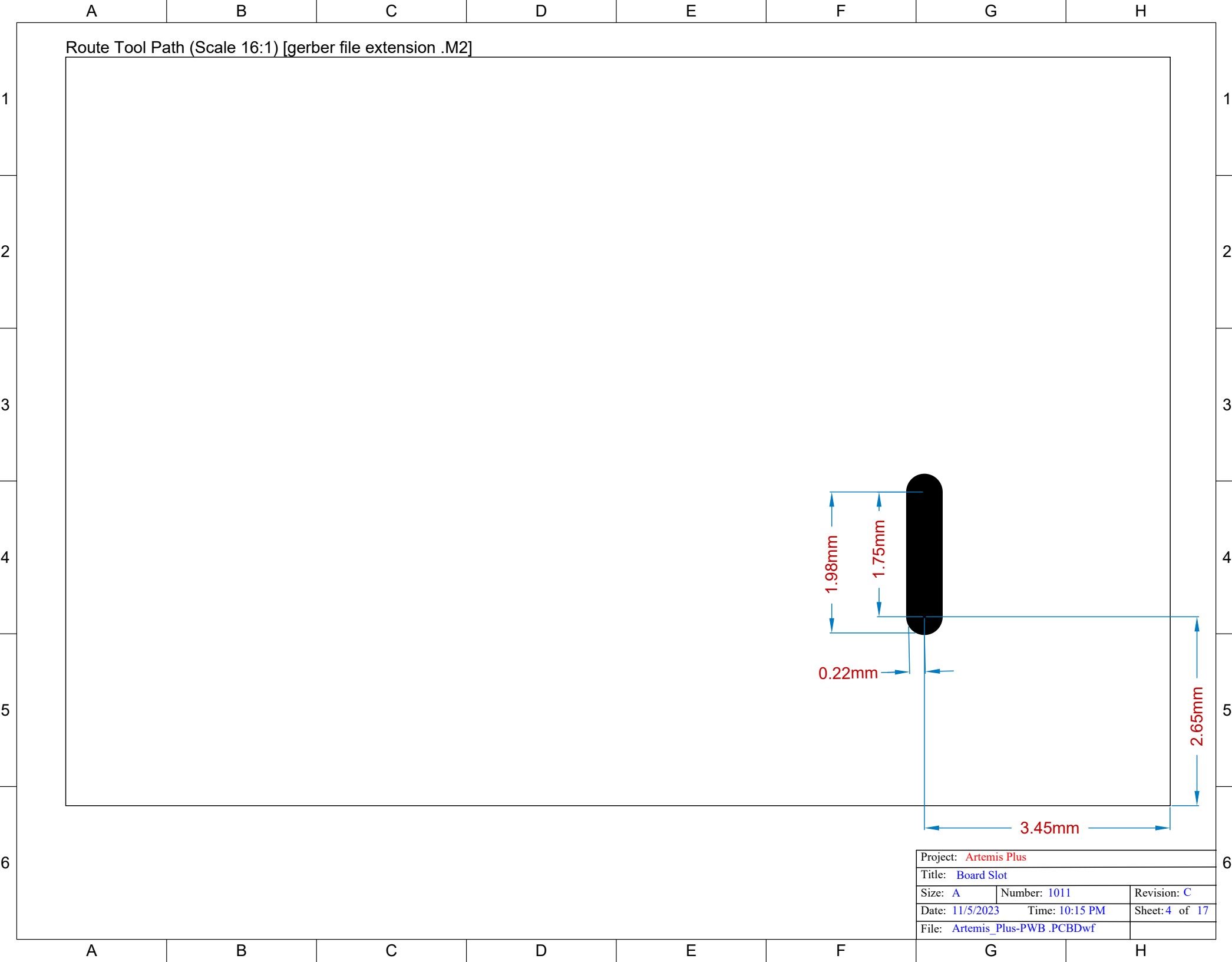
Rigid Layer Stack Legend

Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
Surface Material	Top Solder	0.02mm(0.8mil)	Solder Resist	Solder Mask	GTS
Copper	L1(Top)	0.04mm(1.6mil)		Signal	GTL
Prepreg		0.07mm(2.9mil)	FR-4	Dielectric	
Copper	L2	0.02mm(0.6mil)		Signal	G1
Core		0.57mm(22.4mil)	FR-4	Dielectric	
Copper	L3	0.02mm(0.6mil)		Signal	G2
		0.07mm(2.9mil)	FR-4	Dielectric	
Copper	L4(Bot)	0.04mm(1.6mil)		Signal	GBL
Surface Material	Bottom Solder	0.02mm(0.8mil)	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO
Total thickness: 0.87mm(34.2mil)					

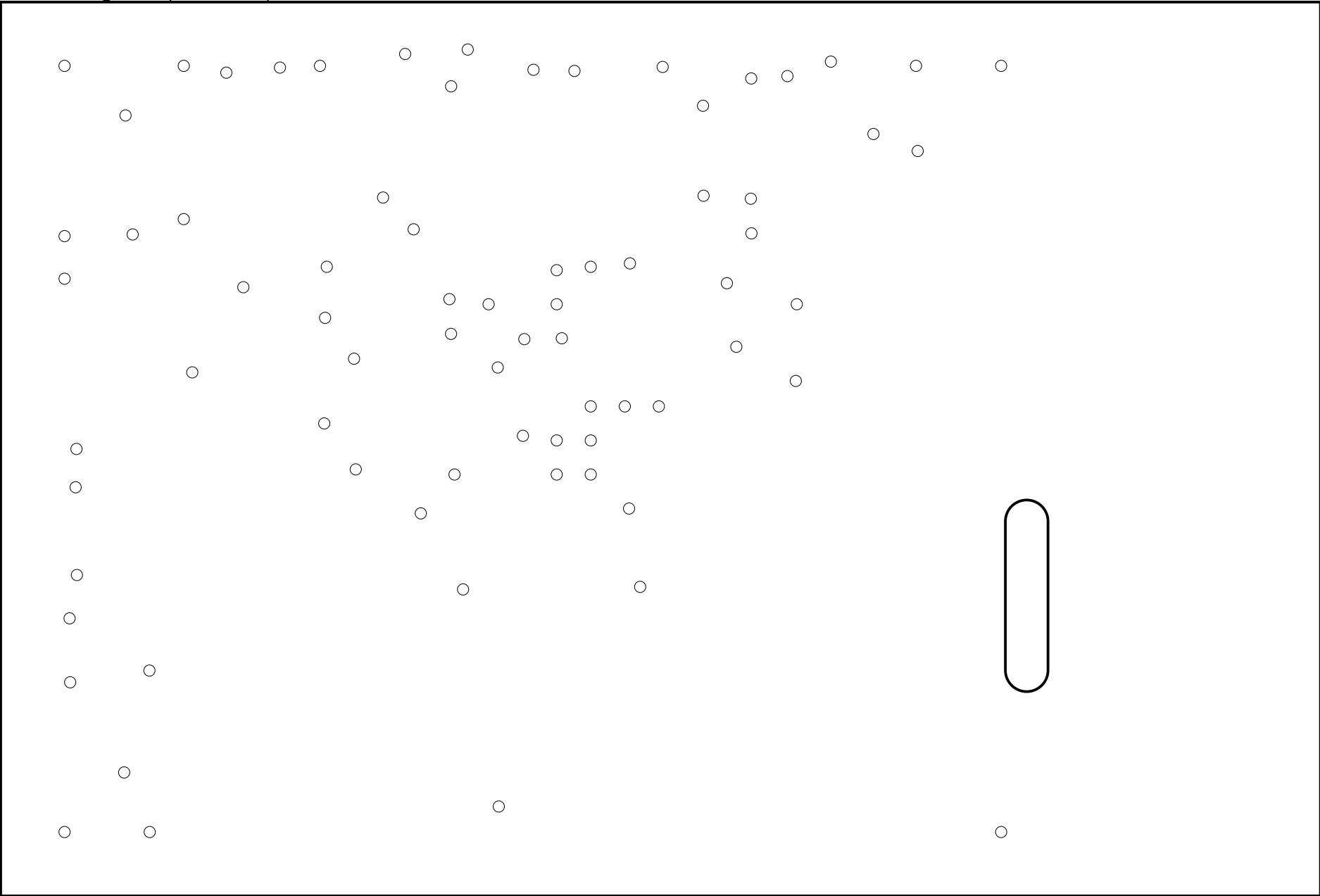
- 1) IPC 6012 Class 2
- 2) ENIG Surface Finish
- 3) Green Soldermask / White Silkscreen
- 4) All through hole vias are to be filled with non-conductive epoxy, and copper capped (Type 7).
- 5) All microvias are to be copper filled.

Project: Artemis Plus		
Title: Layer Stack-up		
Size: A	Number: 1011	Revision: C
Date: 11/5/2023	Time: 10:15 PM	Sheet: 2 of 17
File: Artemis_Plus-PWB_PCB.Dwf		





Drill Drawing View (Scale 16:1)

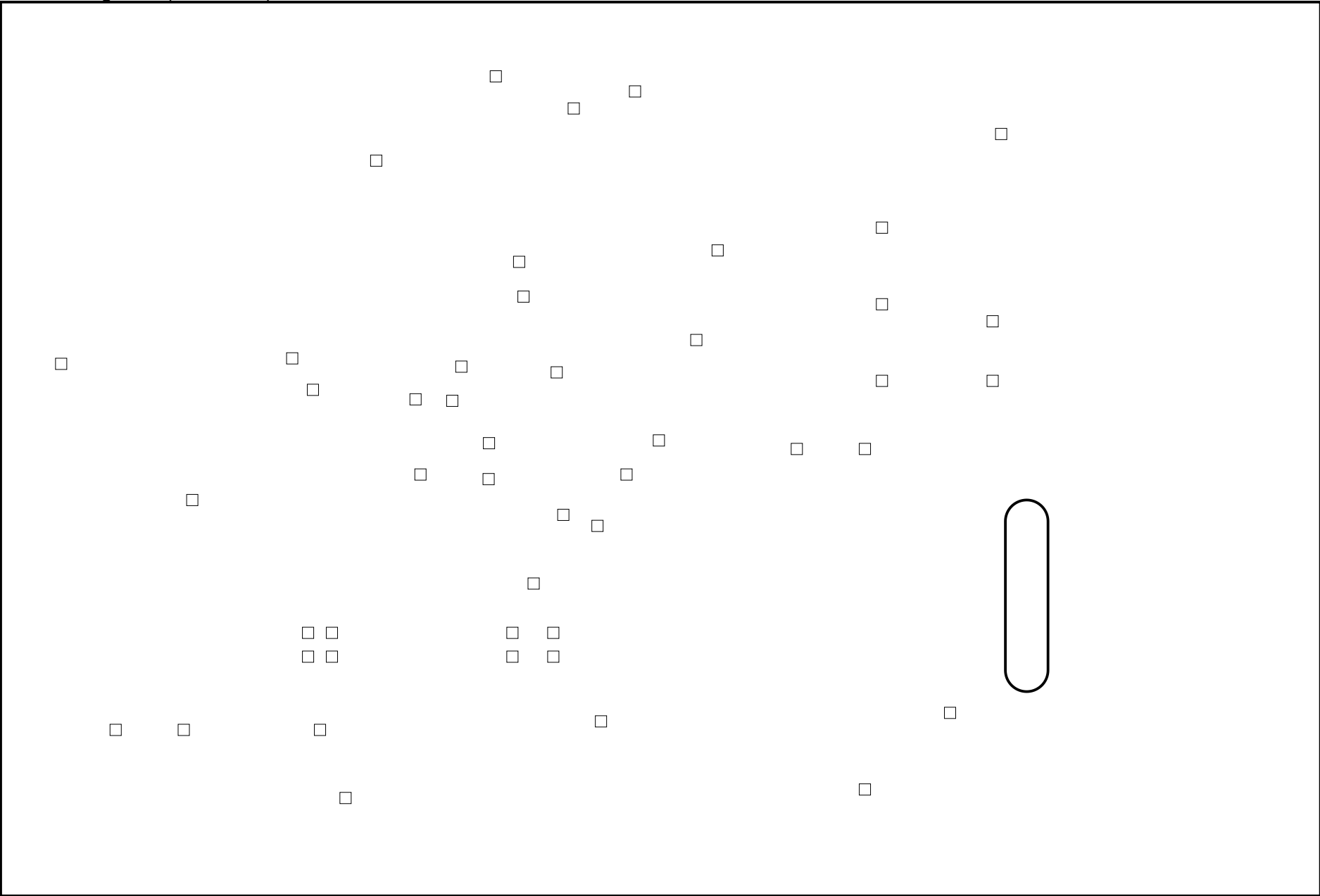


Drill Table

Symbol	Count	Hole Size	Plated	Hole Type	Drill Layer Pair	Via / Pad	Via Type	Via Feature
○	74	0.15mm	Plated	Round	L1(Top) - L4(Bot)	Via	Type 7	Filling, Capping Both
	74 Total							

Project: Artemis Plus		
Title: Through Hole Drills		
Size: A	Number: 1011	Revision: C
Date: 11/5/2023	Time: 10:15 PM	Sheet: 5 of 17
File: Artemis_Plus-PWB_PCB.Dwf		

Drill Drawing View (Scale 16:1)



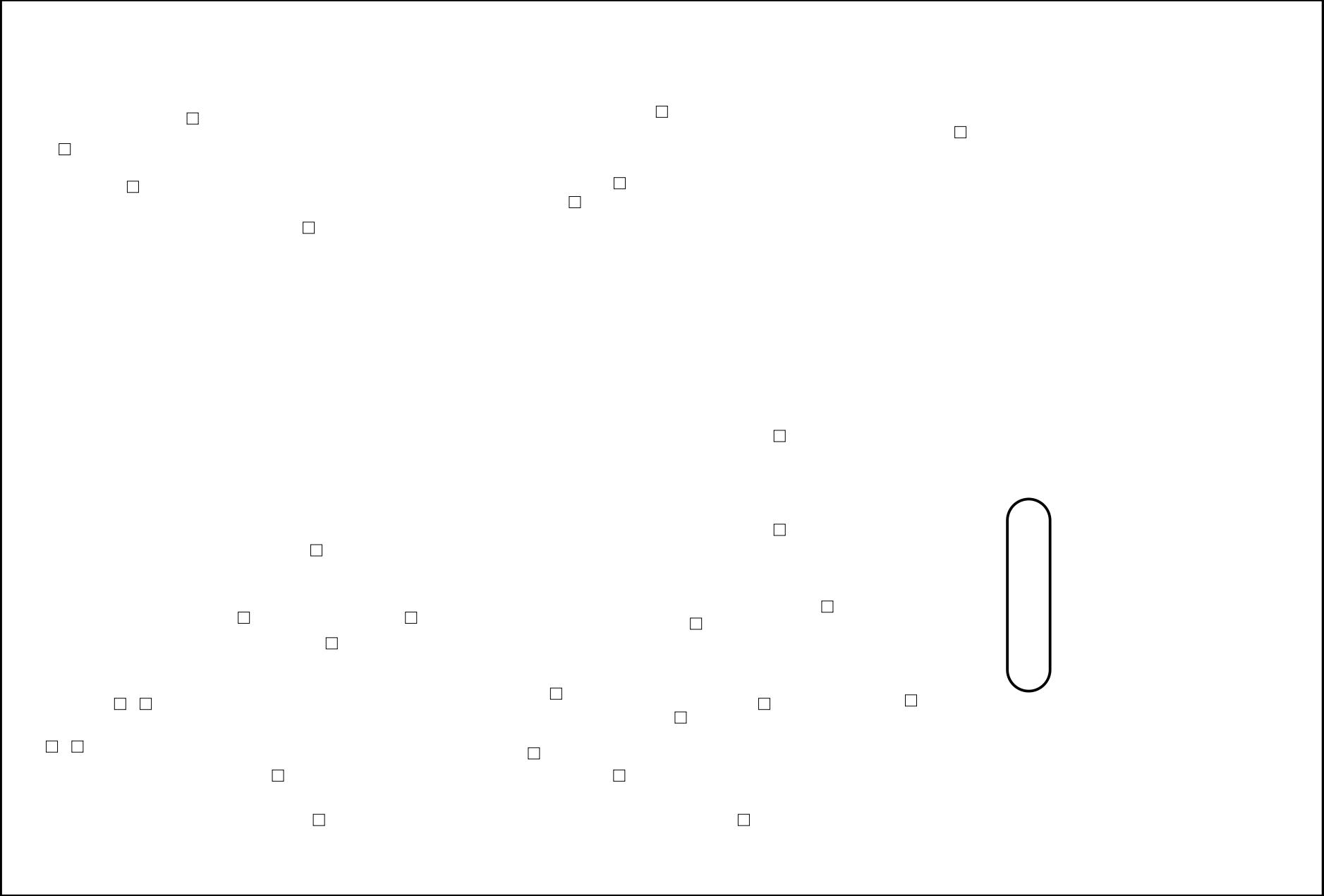
Drill Table

Symbol	Count	Hole Size	Plated	Hole Type	Drill Layer Pair	Via / Pad
□	47	0.12mm	Plated	Round	[UVIA] L1(Top) - L2	Via
	47 Total					

All microvias are to be copper filled.

Project: Artemis Plus		
Title: L1(Top) to L2 Microvias		
Size: A	Number: 1011	Revision: C
Date: 11/5/2023	Time: 10:15 PM	Sheet: 6 of 17
File: Artemis_Plus-PWB.PCBDwf		

Drill Drawing View (Scale 16:1)



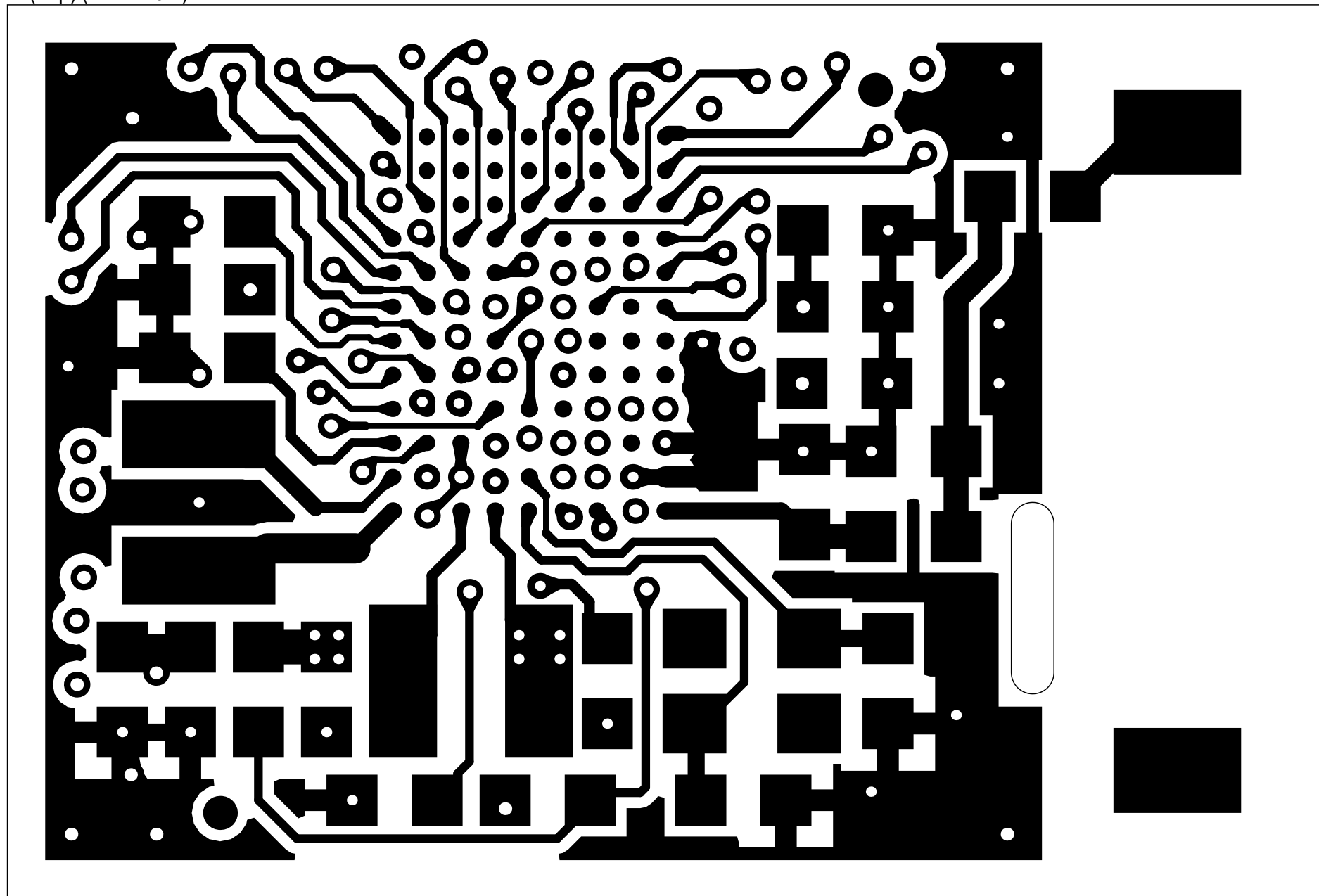
Drill Table

Symbol	Count	Hole Size	Plated	Hole Type	Drill Layer Pair	Via / Pad
□	29	0.12mm	Plated	Round	[UVIA] L3 - L4(Bot)	Via
	29 Total					

All microvias are to be copper filled.

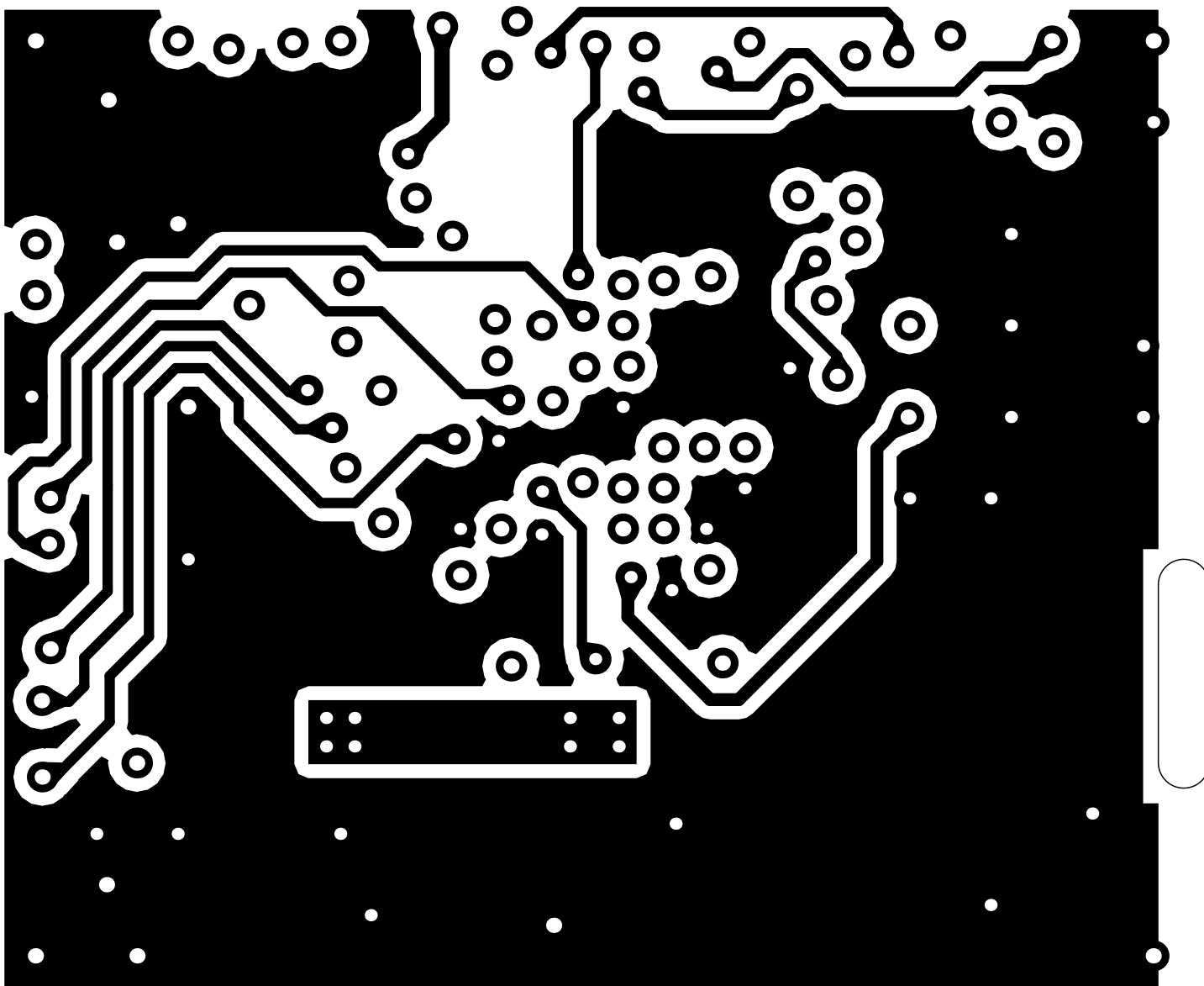
Project: Artemis Plus		
Title: L4(Bot) to L3 Microvias		
Size: A	Number: 1011	Revision: C
Date: 11/5/2023	Time: 10:15 PM	Sheet: 7 of 17
File: Artemis_Plus-PWB.PCBDwf		

L1(Top) (Scale 16:1)



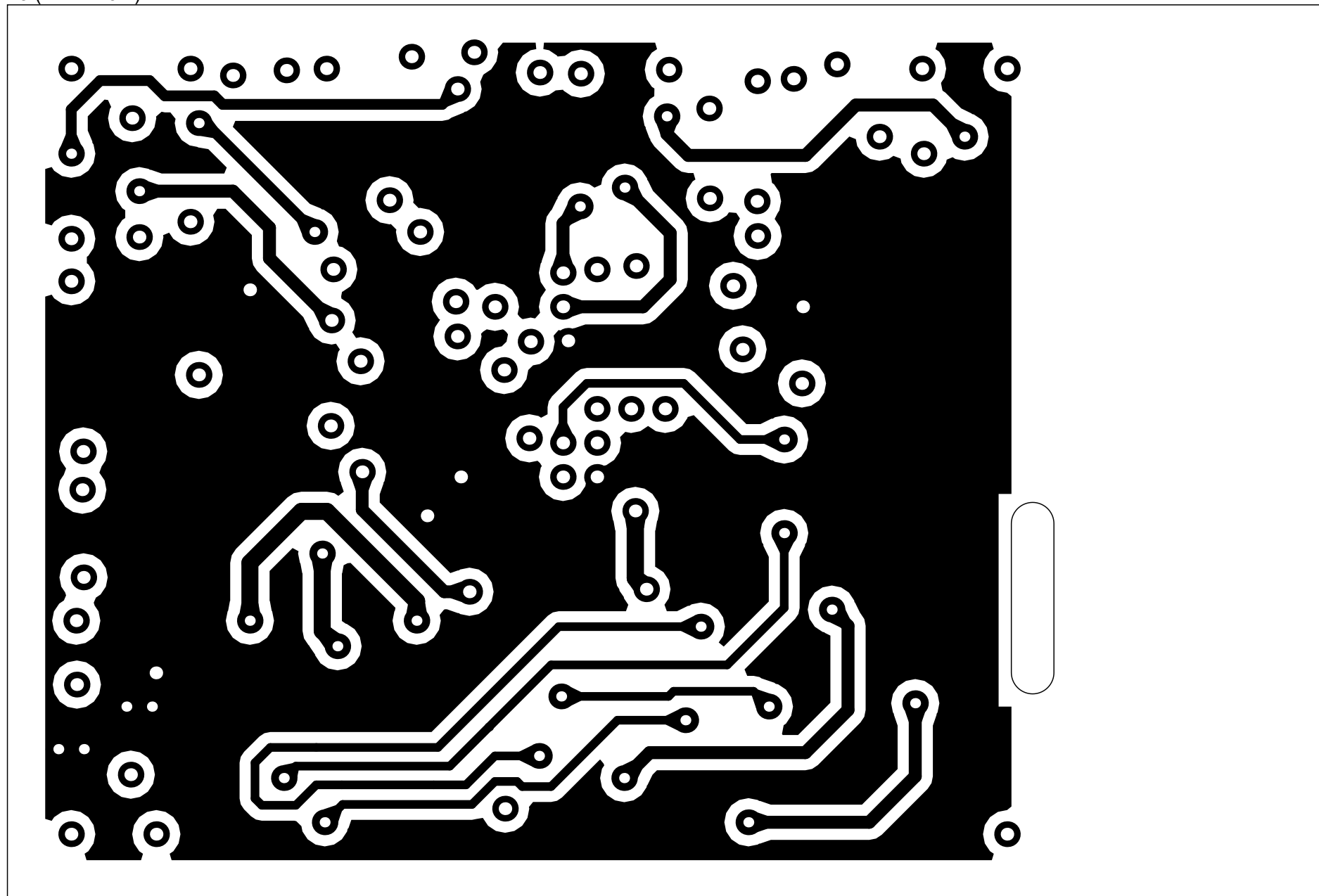
Project: Artemis Plus		
Title: L1 (Top) Copper		
Size: A	Number: 1011	Revision: C
Date: 11/5/2023	Time: 10:15 PM	Sheet: 8 of 17
File: Artemis_Plus-PWB_PCB.Dwf		

L2 (Scale 16:1)



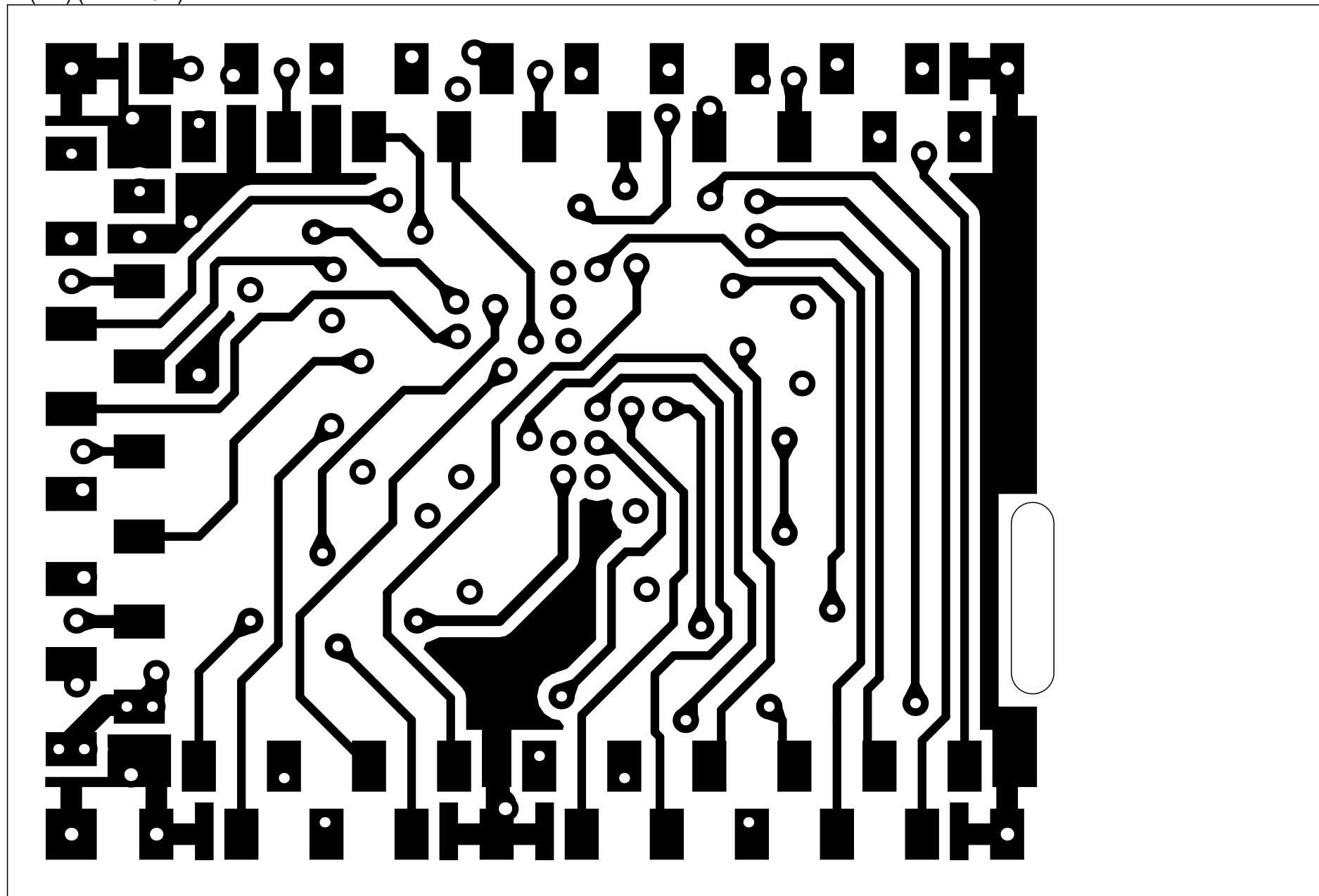
Project: Artemis Plus		
Title: L2 Copper		
Size: A	Number: 1011	Revision: C
Date: 11/5/2023	Time: 10:15 PM	Sheet: 9 of 17
File: Artemis_Plus-PWB_PCB.Dwf		

L3 (Scale 16:1)

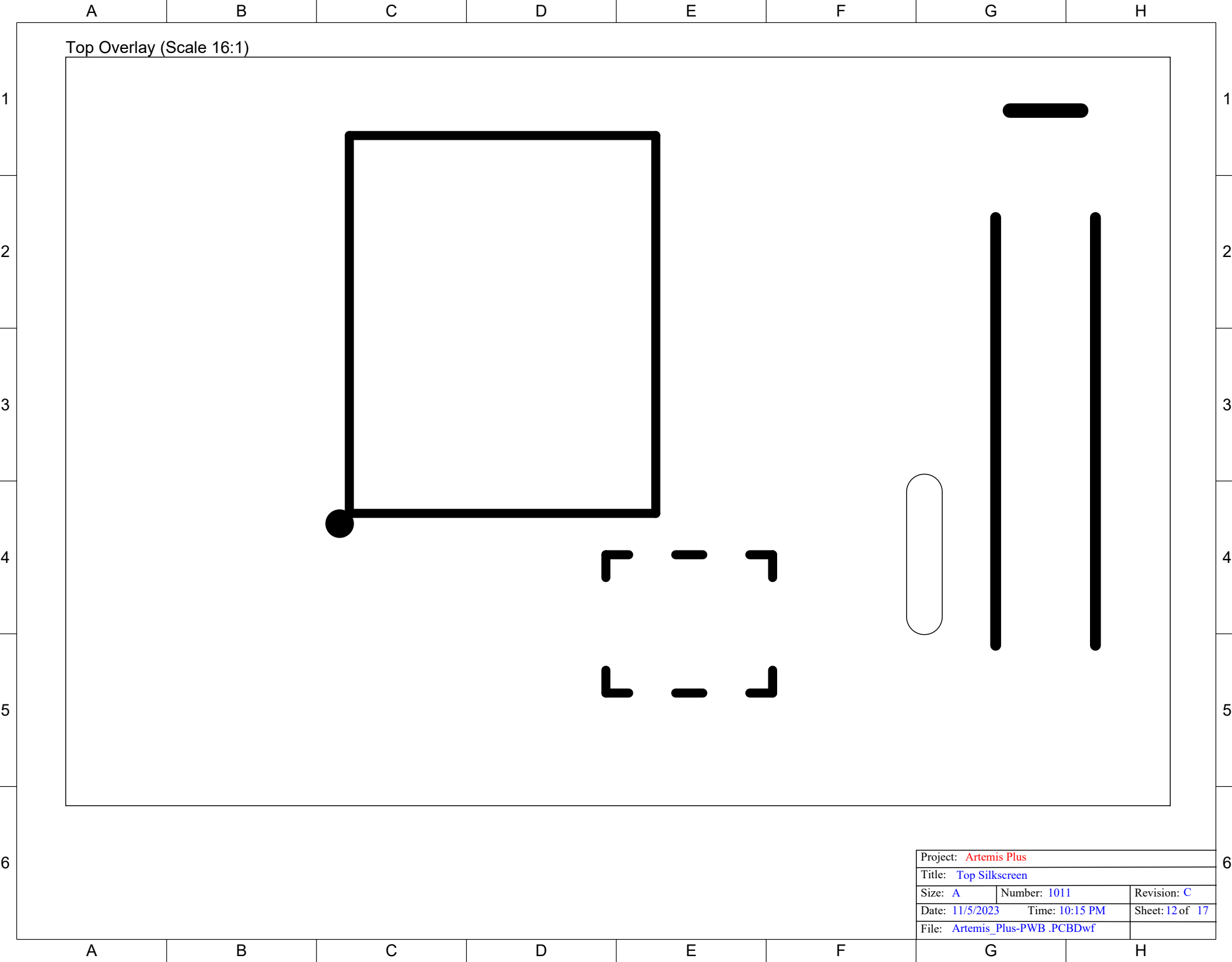


Project: Artemis Plus		
Title: L3 Copper		
Size: A	Number: 1011	Revision: C
Date: 11/5/2023	Time: 10:15 PM	Sheet: 10 of 17
File: Artemis_Plus-PWB_PCB.Dwf		

L4(Bot) (Scale 16:1)



Project: Artemis Plus		
Title: L4 Copper		
Size: A	Number: 1011	Revision: C
Date: 11/5/2023	Time: 10:15 PM	Sheet: 11 of 17
File: Artemis_Plus-PWB_PCB.Dwf		



Project: Artemis Plus		
Title: Top Silkscreen		
Size: A	Number: 1011	Revision: C
Date: 11/5/2023	Time: 10:15 PM	Sheet: 12 of 17
File: Artemis_Plus-PWB_PCB.Dwf		

Bottom Overlay (Scale 16:1)

No silkscreen features on bottom PCB

Project: Artemis Plus		
Title: Bottom Silkscreen		
Size: A	Number: 1011	Revision: C
Date: 11/5/2023	Time: 10:15 PM	Sheet: 13 of 17
File: Artemis_Plus-PWB.PCBDwf		

