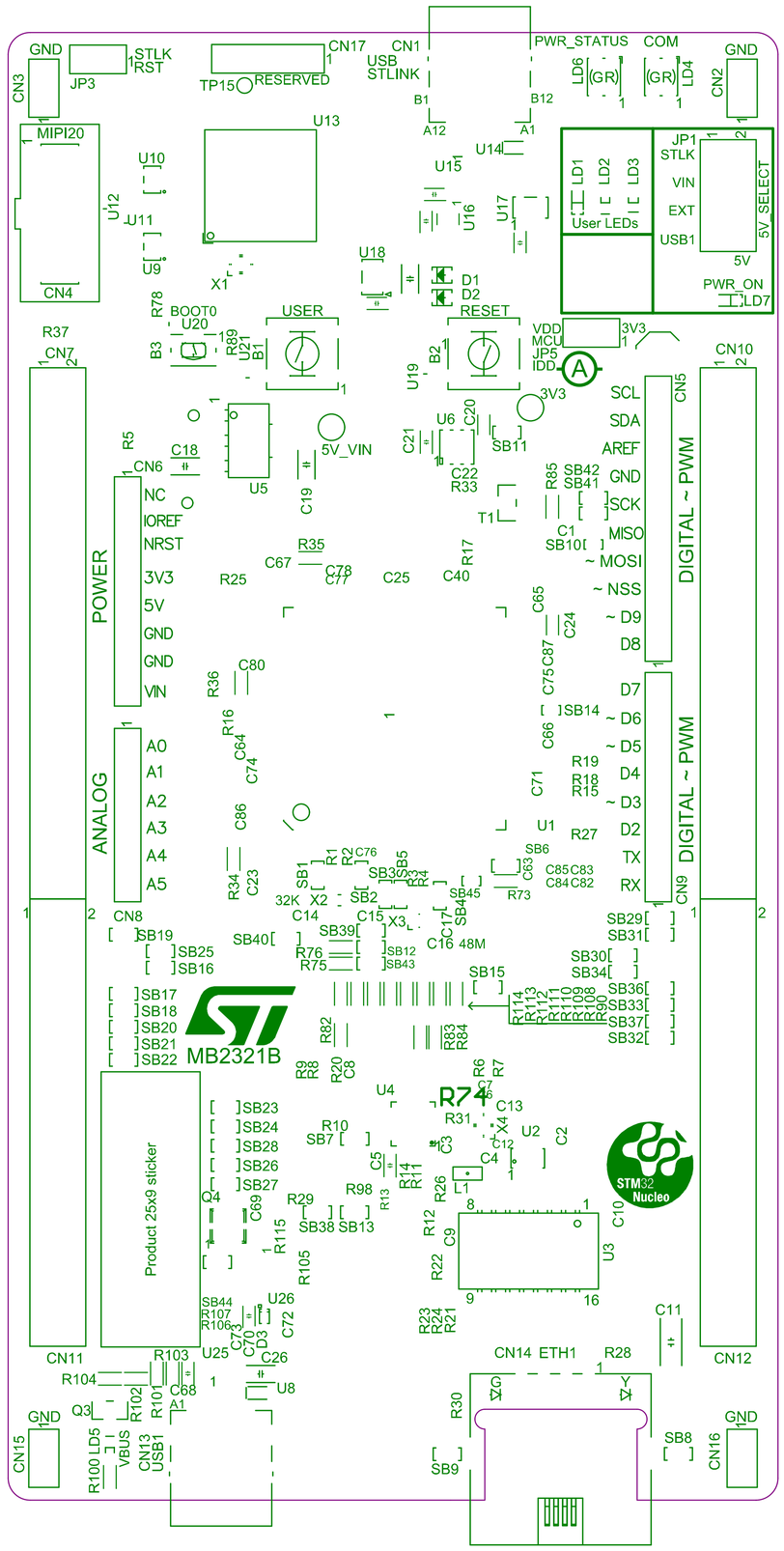
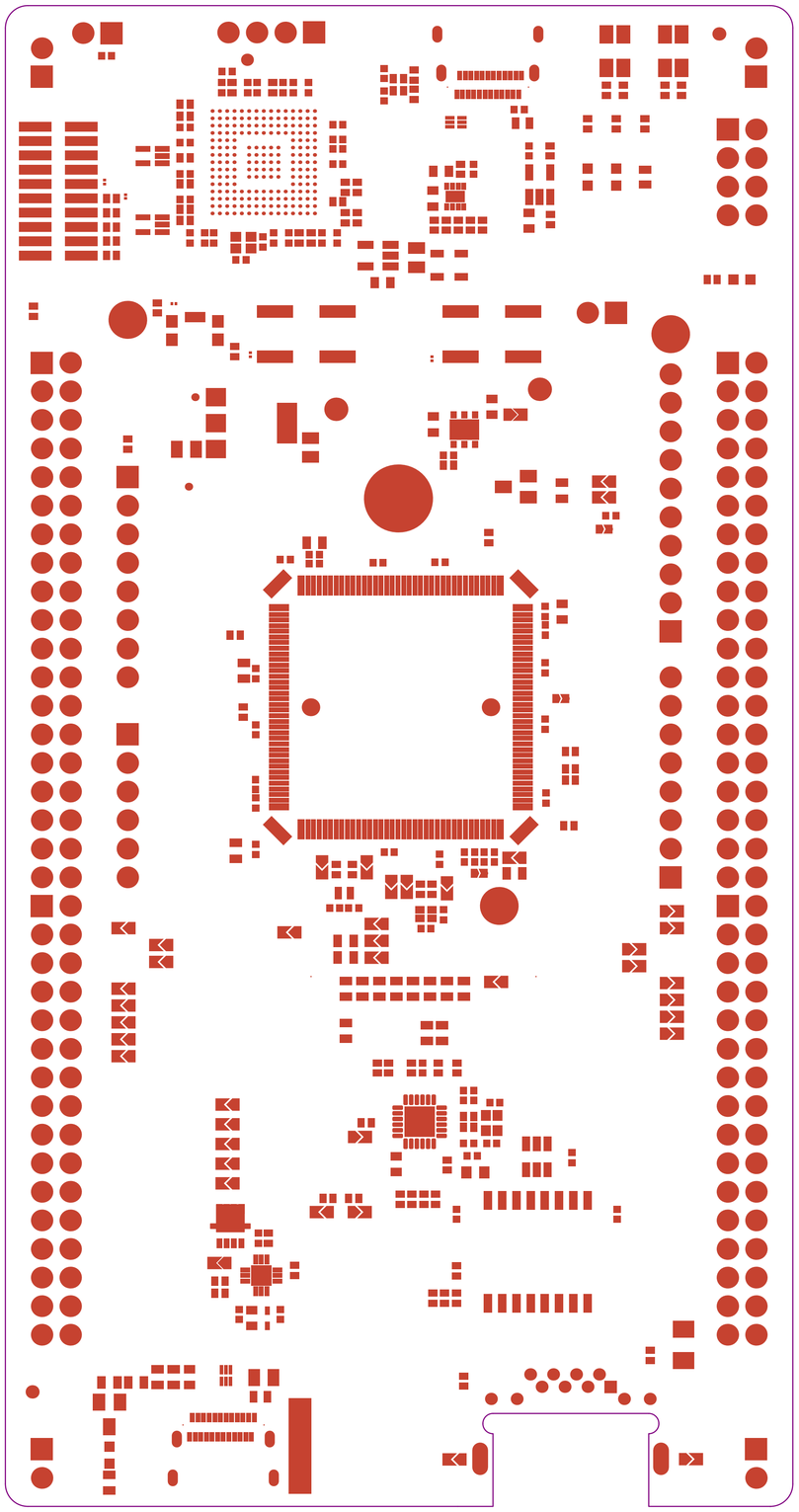
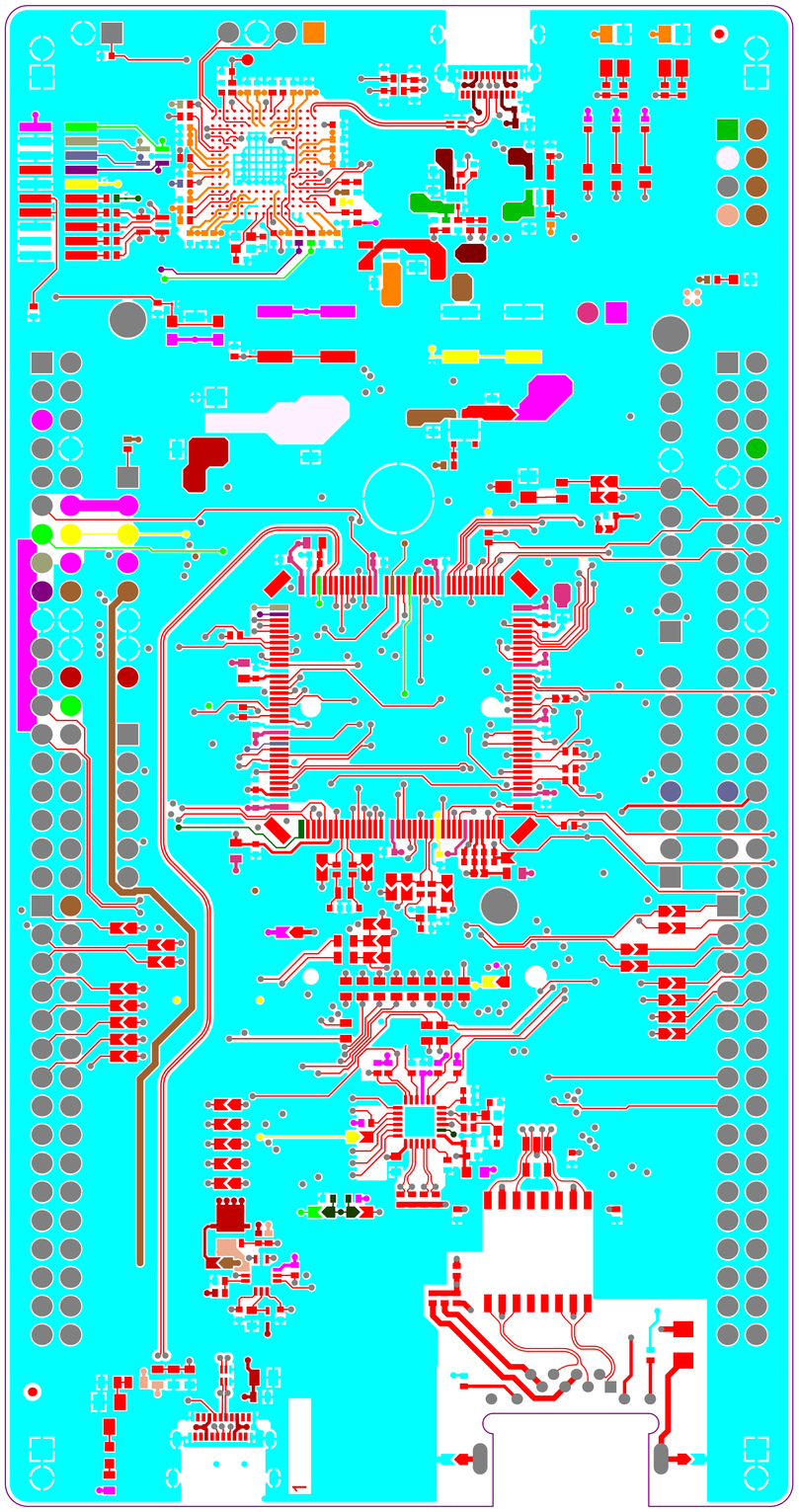


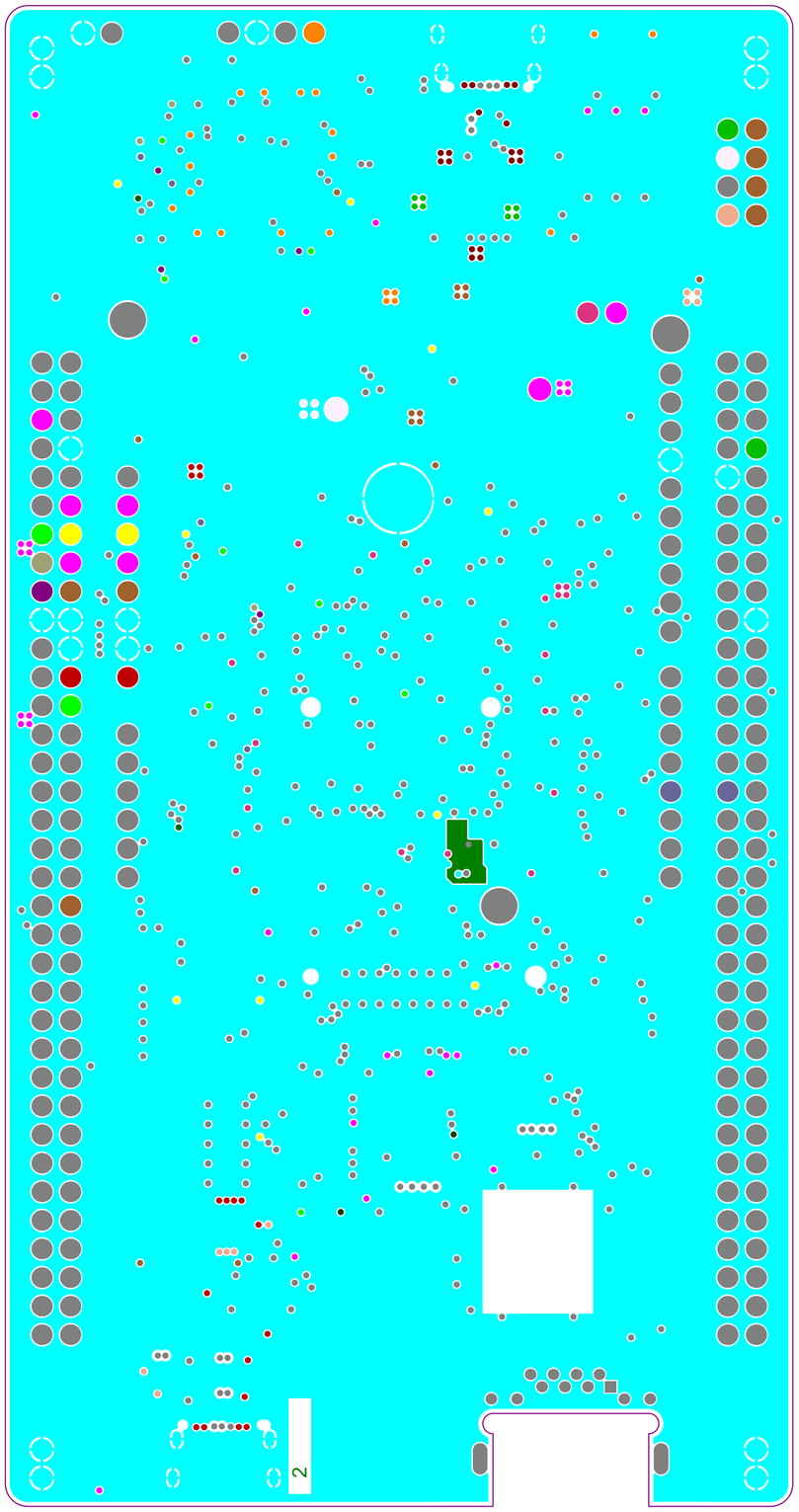
Project: NUCLEO-H553ZG	
Layer: Top Overlay	Gerber: .GTO
Variant: [No Variations]	MB2321
Date: 27-NOV-2025	Rev: B



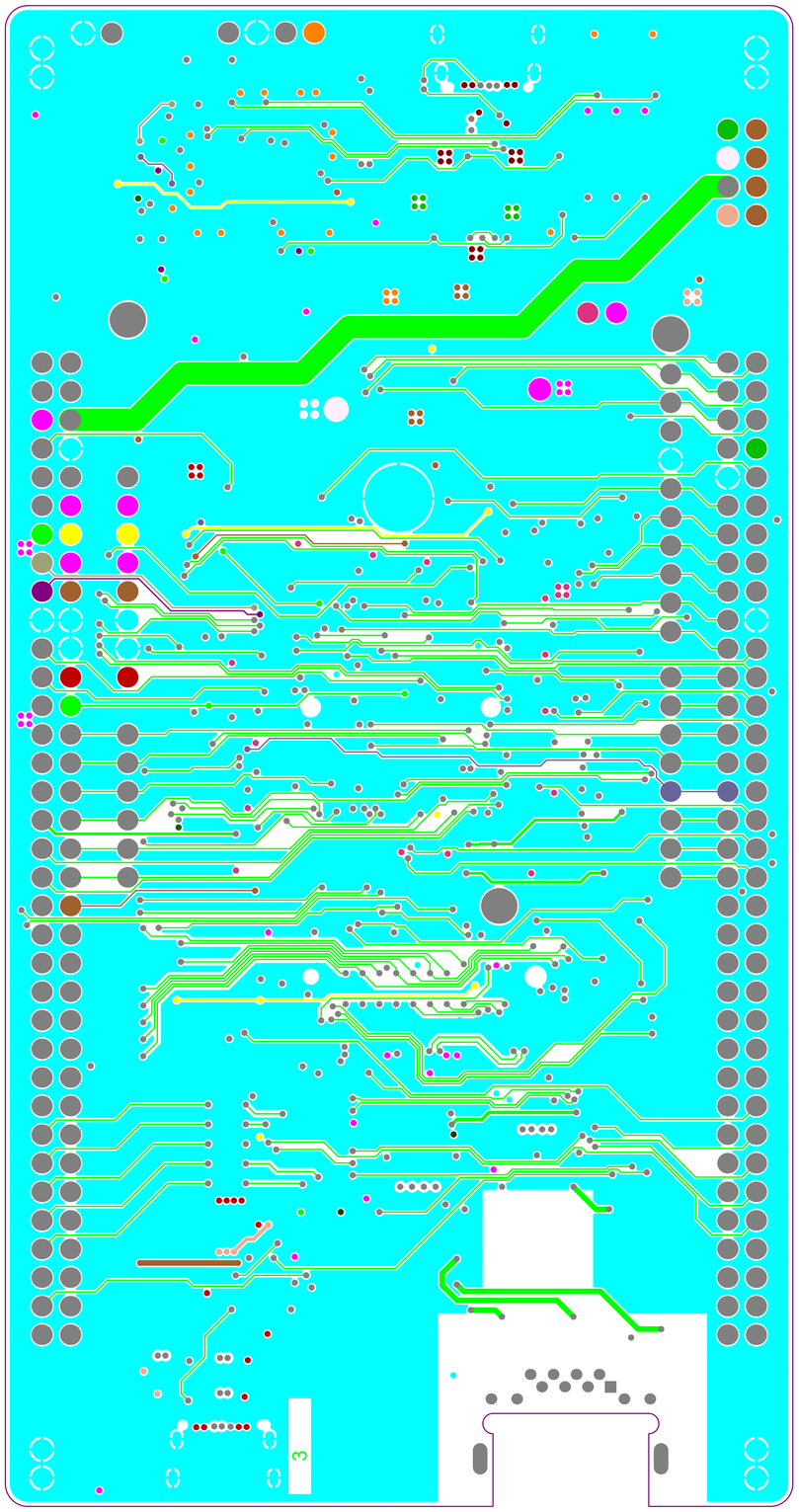
Project: NUCLEO-H553ZG	
Layer: Top Solder	Gerber: .GTS
Variant: [No Variations]	MB2321
Date: 27-NOV-2025	Rev: B



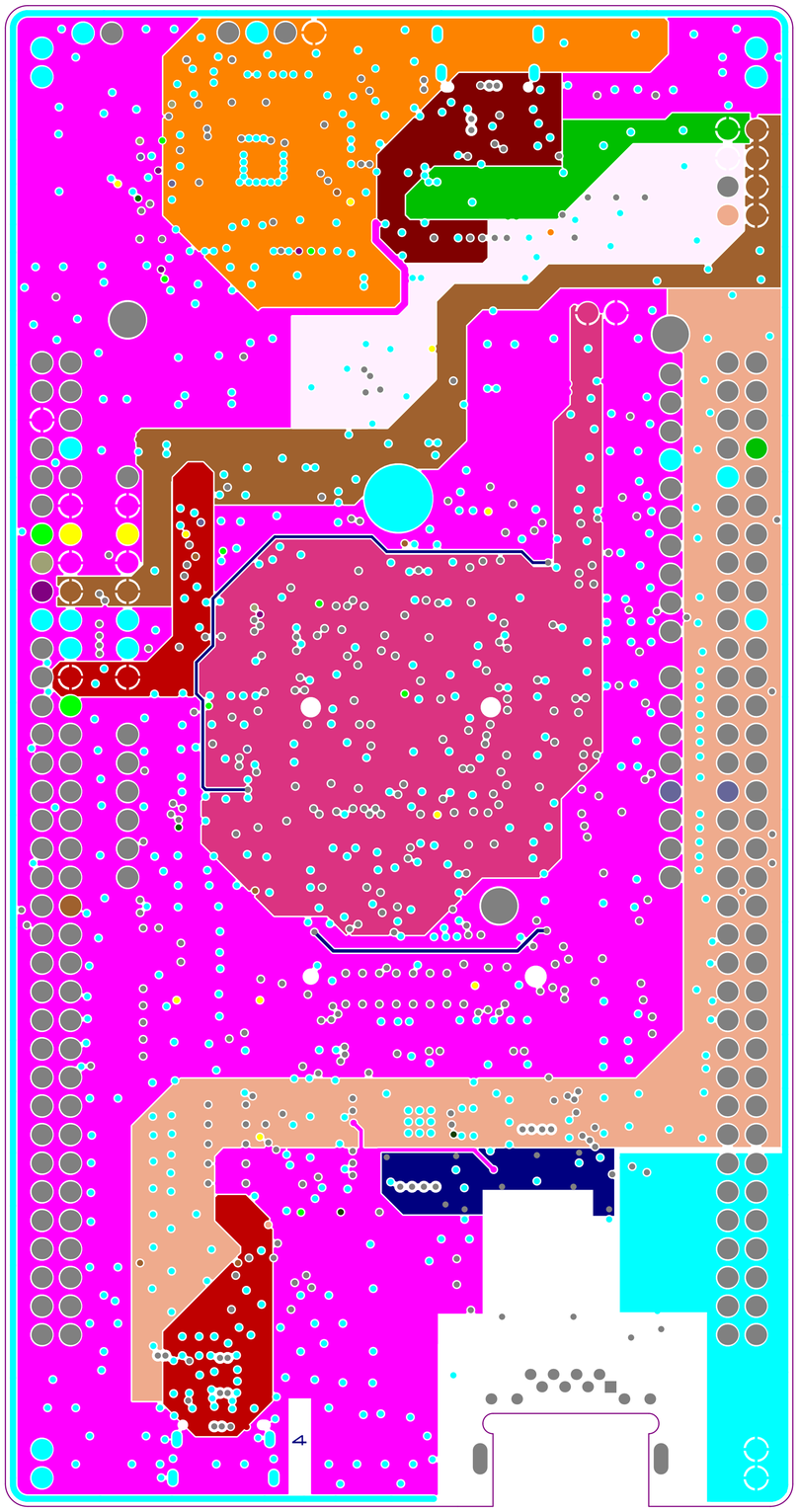
Project: NUCLEO-H553ZG	
Layer: Top Layer	Gerber: .GTL
Variant: [No Variations]	MB2321
Date: 27-NOV-2025	Rev: B



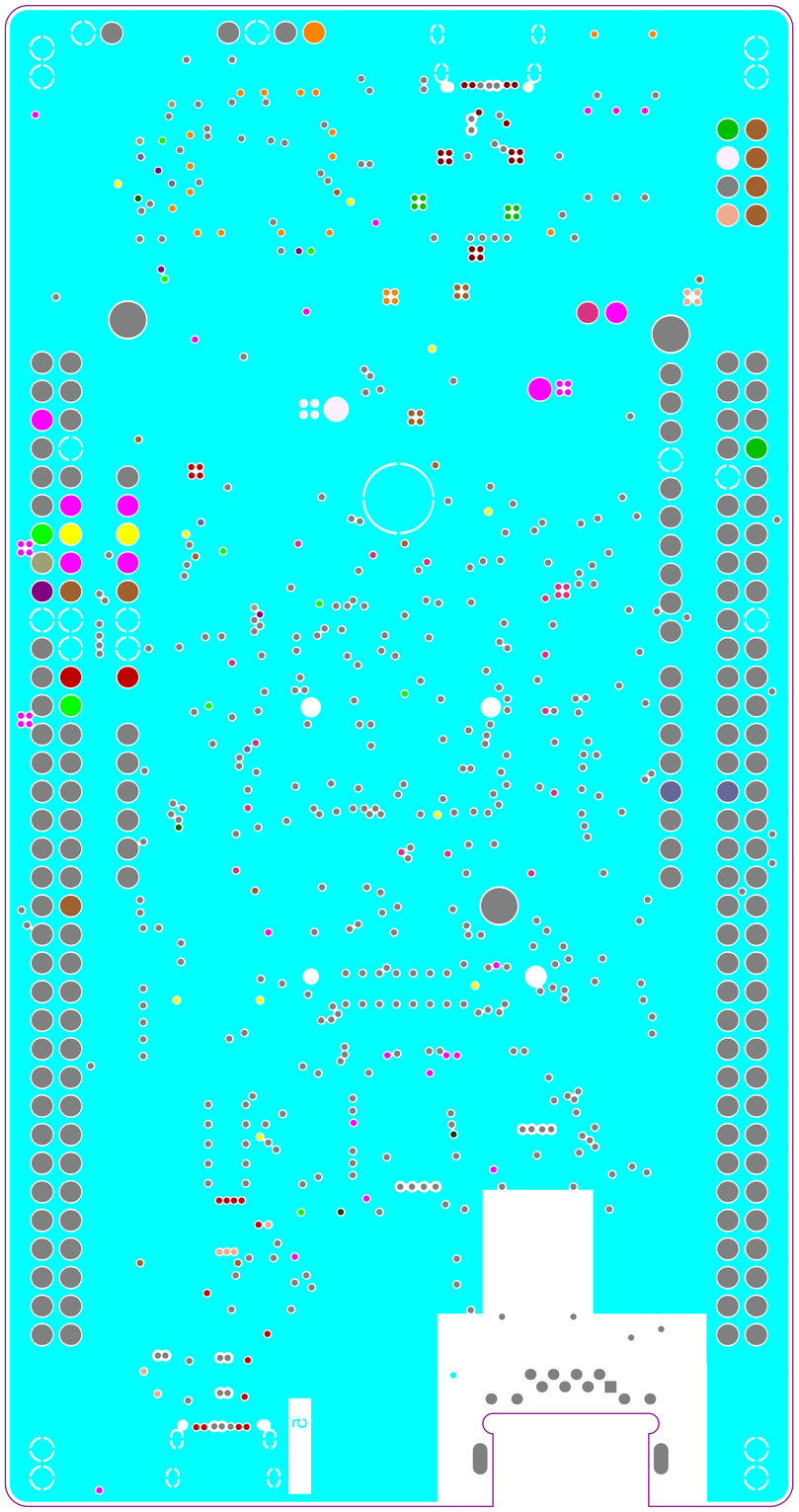
Project: NUCLEO-H553ZG	
Layer: Signal Layer 1	Gerber: .G1
Variant: [No Variations]	MB2321
Date: 27-NOV-2025	Rev: B



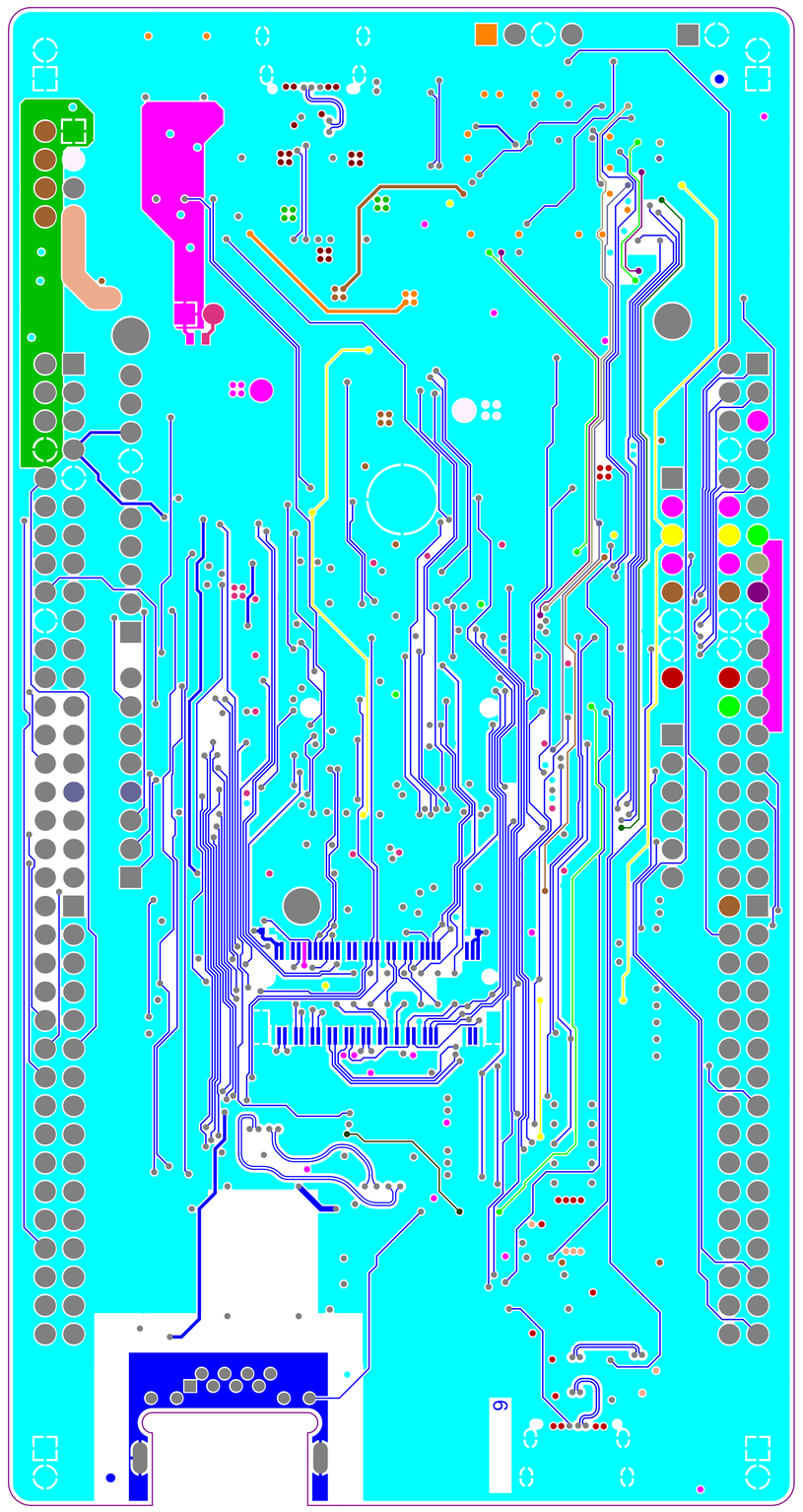
Project: NUCLEO-H553ZG	
Layer: Signal Layer 2	Gerber: .G2
Variant: [No Variations]	MB2321
Date: 27-NOV-2025	Rev: B



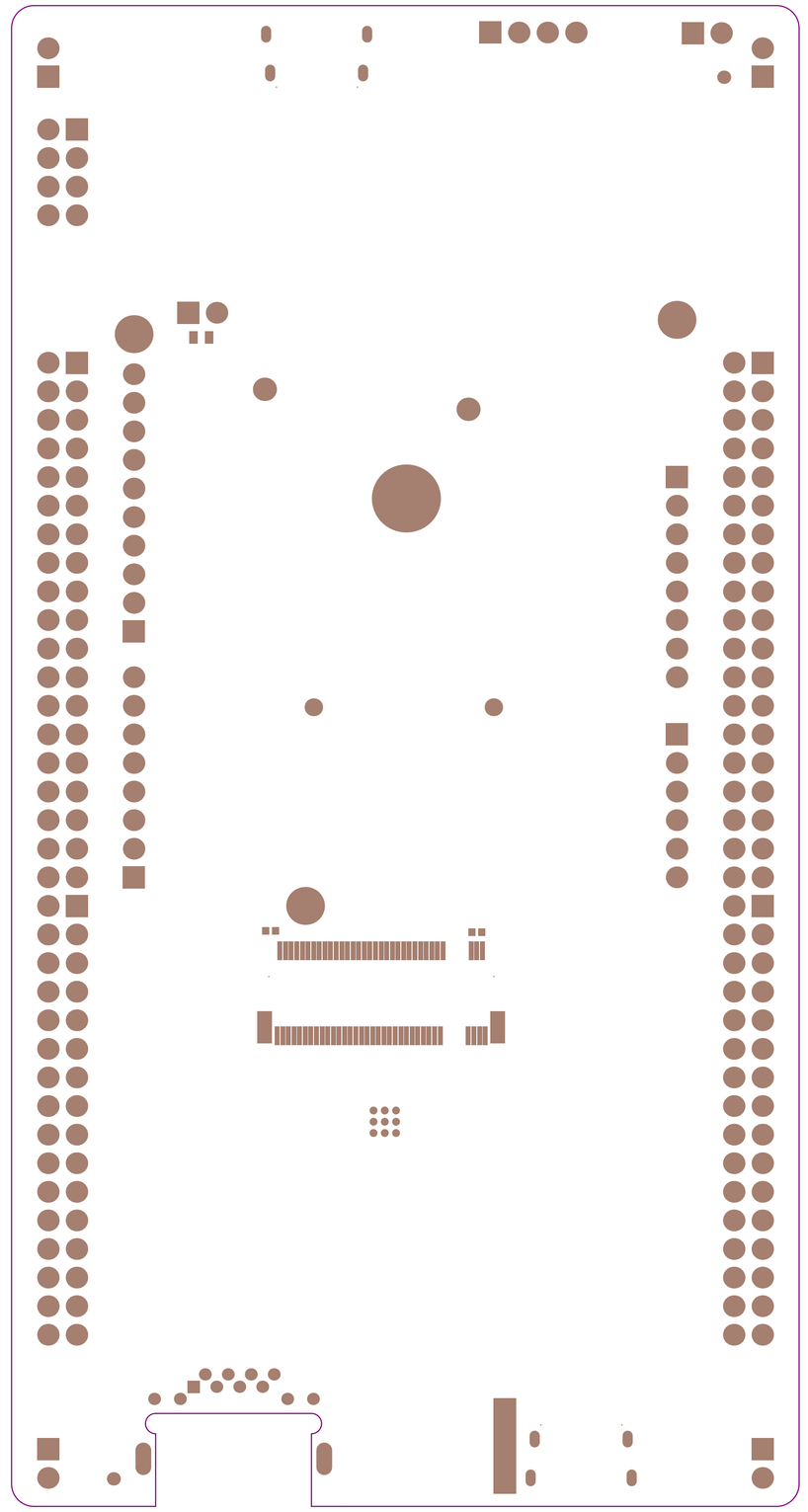
Project: NUCLEO-H553ZG	
Layer: Signal Layer 3	Gerber: .G3
Variant: [No Variations]	MB2321
Date: 27-NOV-2025	Rev: B



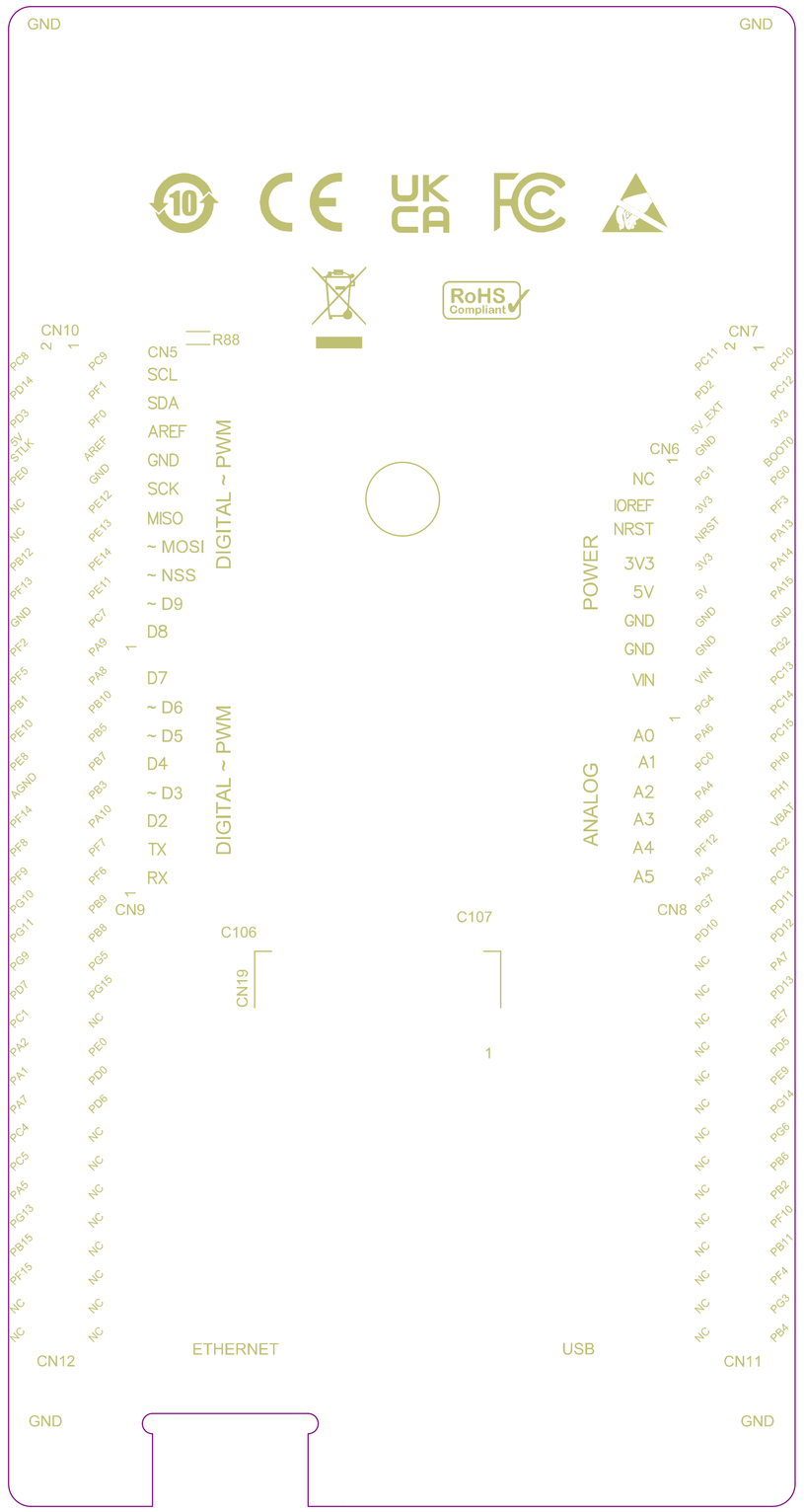
Project: NUCLEO-H553ZG	
Layer: Signal Layer 4	Gerber: .G4
Variant: [No Variations]	MB2321
Date: 27-NOV-2025	Rev: B



Project: NUCLEO-H553ZG	
Layer: Bottom Layer	Gerber:.GBL
Variant: [No Variations]	MB2321
Date: 27-NOV-2025	Rev: B



Project: NUCLEO-H553ZG	
Layer: Bottom Solder	Gerber: .GBS
Variant: [No Variations]	MB2321
Date: 27-NOV-2025	Rev: B



Project: NUCLEO-H553ZG	
Layer: Bottom Overlay	Gerber:.GBO
Variant: [No Variations]	MB2321
Date: 27-NOV-2025	Rev: B

THE COMPONENTS WITH PLATED THROUGH HOLE (PTH) MAY BE WELDED (CABLED) IN "PIN-IN-PASTE" MODE (IF NECESSARY)

PCB SPECIFICATIONS :

A.	MATERIAL :	FR-4	☐ TG-170	☒ TG-150	☐ TG-140
B.	MATERIAL FAMILY :	N/A			
C.	SOLDERMASK COLOR :	☐ GREEN	☒ WHITE	☐ RED	☐ BLACK
D.	SILKSCREEN COLOR :	☐ WHITE	☐ YELLOW	☐ BLACK	☒ Blue ink PANTONE 2955
E.	SURFACE FINISH :	☒ ENIG	☐ IMMERSION SILVER		☐ IMMERSION TIN
		☐ HASL	☐ HASL (PB-FREE)		☐ GOLDEN FINGER
F.	IMPEDANCE CONTROL :	☐ NO	☒ YES (SEE IMPEDANCE TABLE FOR DETAIL INFORMATION)		
G.	THROUGH VIA :	PLUG THE VIAS WHICH ARE COVERED WITH SOLDERMASK ONE OR TWO SIDE.			
		PLUG MATERIAL : ☒ SOLDERMASK ☐ NON-CONDUCTIVE EPOXY.			
H.	STACK-UP :	SEE LAYER STACK-UP SEQUENCE FOR OVERALL THICKNESS.			

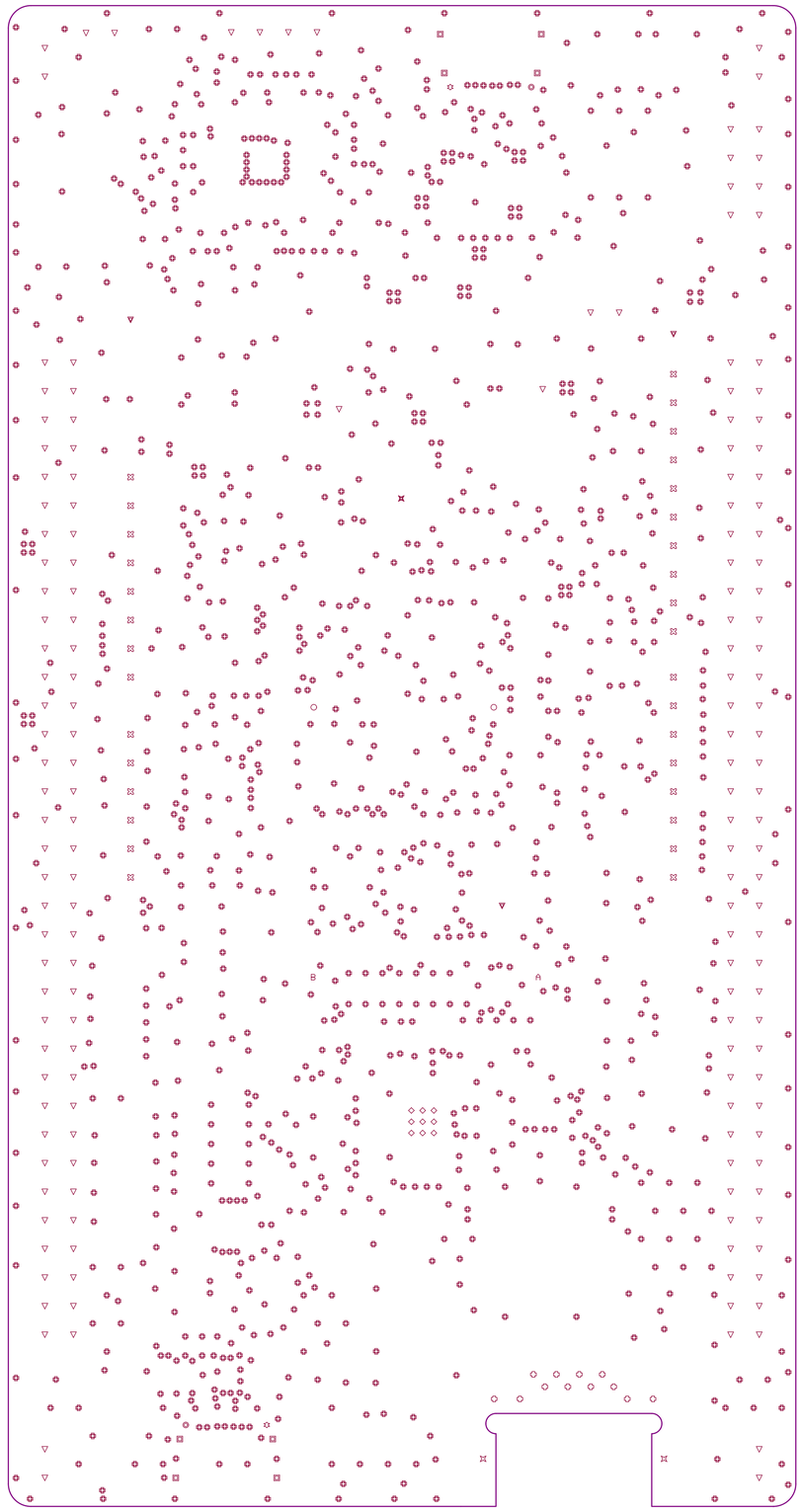
PCB : TYPE 3

ASPECT-RATIO, AXE Z :

6:1 to 8:1
LEVEL "B"

MINIMUM PARAMETERS

DEFAULT
TRACKS : 0.120mm
GAPS : 0.120mm



Layer	Name	Material	Thickness	Constant	Board Layer Stack	Board Layer Stack
	Top Overlay					
	Top Solder	Solder Resist	0,015mm	3.5		
1	Top Layer		0,042mm			
	Dielectric 1	FR-4	0,090mm	4.2		
2	Signal Layer 1		0,035mm			
	Dielectric 2	FR-4	0,100mm	4.2		
3	Signal Layer 2		0,035mm			
	Dielectric 3	FR4	0,966mm	4.2		
4	Signal Layer 3		0,035mm			
	Dielectric4	FR-4	0,100mm	4.2		
5	Signal Layer 4		0,035mm			
	Dielectric5	FR-4	0,090mm	4.2		
6	Bottom Layer		0,042mm			
	Bottom Solder	Solder Resist	0,015mm	3.5		
	Bottom Overlay					

Symbol	Count	Hole Size	Plated	Hole Type	Drill Layer Pair	Via/Pad	Pad Shape	Template	Hole Length	Routed Path Length
	8	0,500mm (19,69mil)	PTH	Slot	Top Layer - Bottom Layer	Pad	Rounded	r140_80h50_110r40m150_90	1,100mm (43,31mil)	0,600mm (23,62mil)
	2	0,650mm (25,59mil)	NPTH	Round	Top Layer - Bottom Layer	Pad	Rounded	c0hn65m10	-	-
	2	0,650mm (25,59mil)	NPTH	Slot	Top Layer - Bottom Layer	Pad	Rounded	c0hn65_95m10	0,950mm (37,40mil)	0,300mm (11,81mil)
	12	0,700mm (27,56mil)	PTH	Round	Top Layer - Bottom Layer	Pad	(Mixed)	(Mixed)	-	-
	2	0,700mm (27,56mil)	PTH	Slot	Top Layer - Bottom Layer	Pad	Rounded	r280_130h70_220r65m290_140	2,200mm (86,61mil)	1,500mm (59,06mil)
	166	1,000mm (39,37mil)	PTH	Round	Top Layer - Bottom Layer	Pad	Rounded	(Mixed)	-	-
	32	1,100mm (43,31mil)	PTH	Round	Top Layer - Bottom Layer	Pad	Rounded	(Mixed)	-	-
B	1	1,150mm (45,28mil)	NPTH	Round	Top Layer - Bottom Layer	Pad	Rounded	c0hn115m10	-	-
	2	1,500mm (59,06mil)	NPTH	Round	Top Layer - Bottom Layer	Pad	Rounded	c0hn150m160(Tol3-3)	-	-
A	1	1,650mm (64,96mil)	NPTH	Round	Top Layer - Bottom Layer	Pad	Rounded	c0hn165m10	-	-
	3	3,200mm (125,98mil)	NPTH	Round	Top Layer - Bottom Layer	Pad	Rounded	c320hn320	-	-
	1	4,150mm (163,39mil)	PTH	Round	Top Layer - Bottom Layer	Pad	Rounded	c600h415m610	-	-
	9	0,300mm (11,81mil)	PTH	Round	Top Layer - Bottom Layer	Via	Rounded	v60h30m70	-	-
	1290	0,350mm (13,78mil)	PTH	Round	Top Layer - Bottom Layer	Via	Rounded	v55h35m0mx0	-	-
	1531 Total									

Slot definitions : Routed Path Length = Calculated from tool start centre position to tool end centre position.
Hole Length = Routed Path Length + Tool Size = Slot length as defined in the PCB layout

Project: NUCLEO-H553ZG	
Layer: Drill Drawing	Gerber: .DRL
Variant: [No Variations]	MB2321
Date: 27-NOV-2025	Rev: B