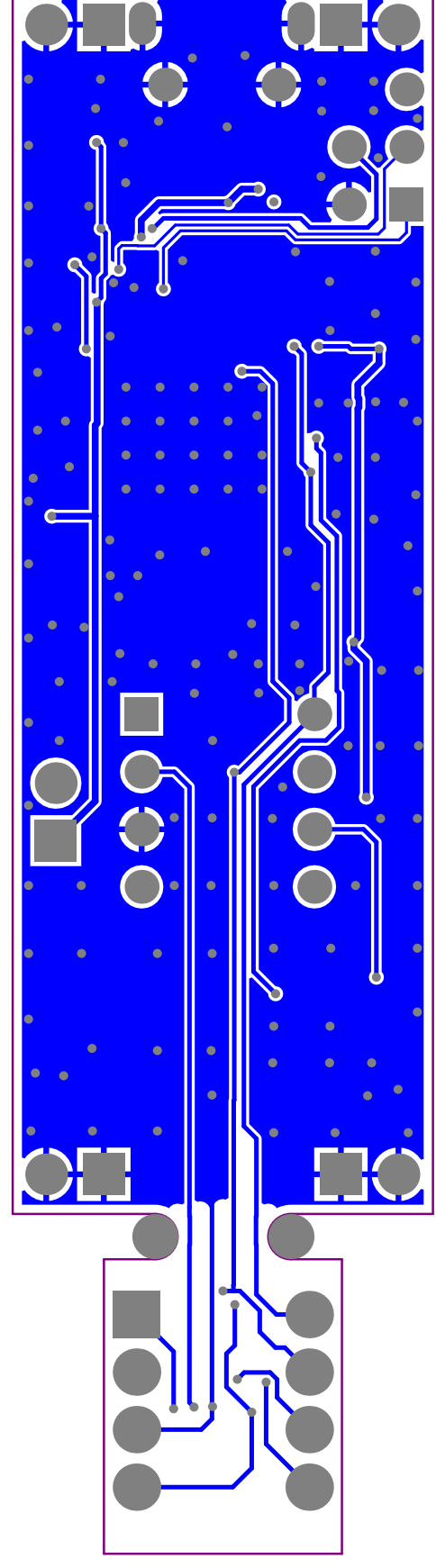


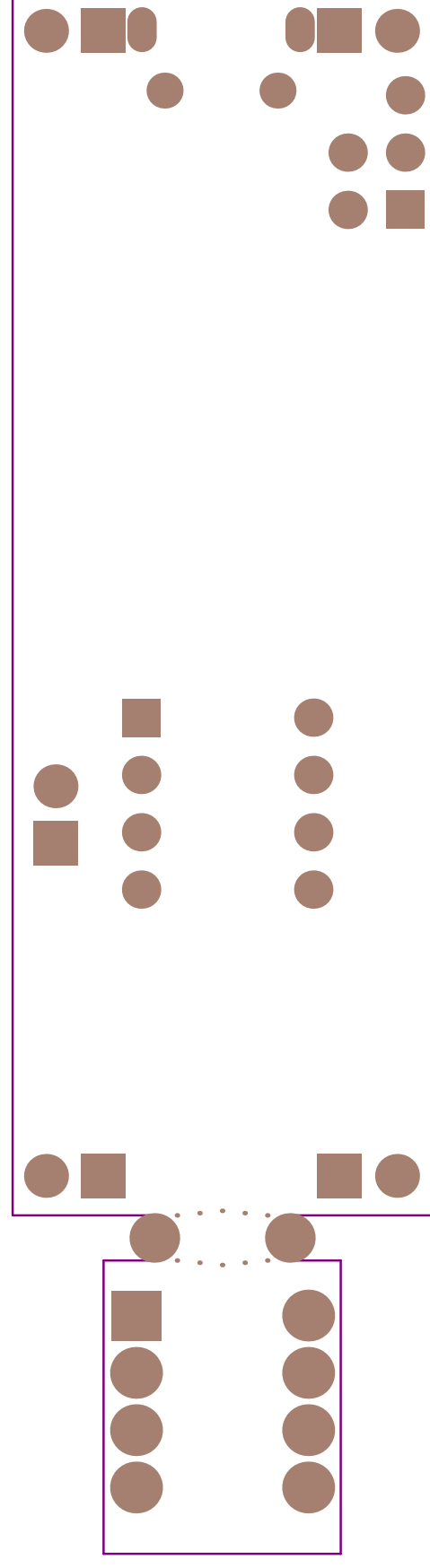
Bottom Layer



.GBL

Bottom Solder

.GB2



Bottom Overlay
.GBO



PCB SPECIFICATIONS :

- A. MATERIAL :

B. MATERIAL FAMILY :

C. SOLDERMASK COLOR :

D. SILKSCREEN COLOR :

E. SURFACE FINISH :

F. IMPEDANCE CONTROL :

G. THROUGH VIA :

H. STACK-UP :
- FR-4

N/A

☒ GREEN

☐ WHITE

☐ RED

☐ BLACK

☒ WHITE

☐ YELLOW

☐ BLACK

☐ Blue ink PANTONE 2955

☒ ENIG

☐ IMMERSION SILVER

☐ IMMERSION TIN

☐ HASL

☐ HASL (PB-FREE)

☐ GOLDEN FINGER

☐ NO

☒ YES (SEE IMPEDANCE TABLE FOR DETAIL INFORMATION)

PLUG THE VIAS WHICH ARE COVERED WITH SOLDERMASK ONE OR TWO SIDE.
PLUG MATERIAL :

☒ SOLDERMASK

☐ NON-CONDUCTIVE EPOXY.

SEE LAYER STACK-UP SEQUENCE FOR OVERALL THICKNESS.

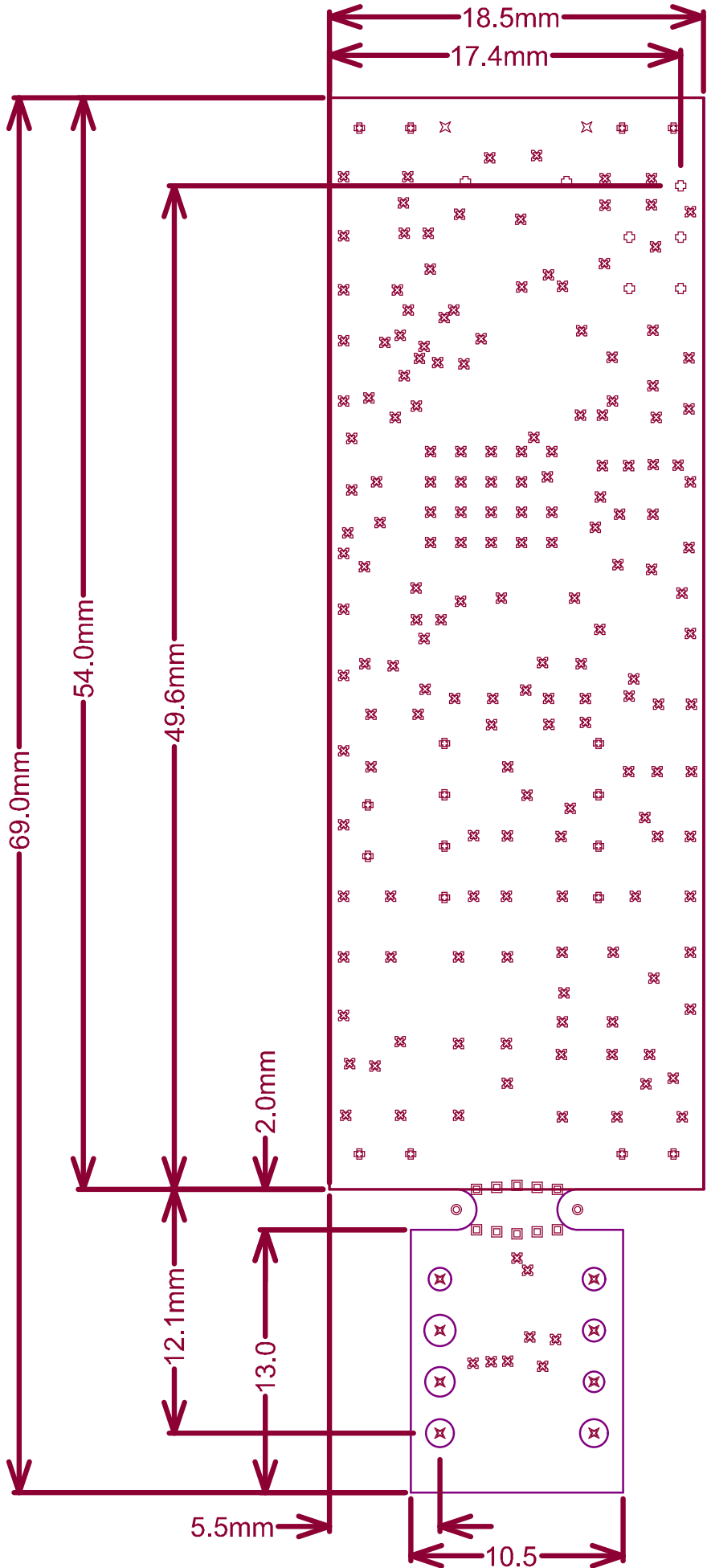
PCB : TYPE 3

ASPECT-RATIO, AXE Z :

6:1 to 8:1
LEVEL "B"

MINIMUM PARAMETERS

DEFAULT
TRACKS : 0.127mm
GAPS : 0.127mm



Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.015mm	3.5	
3	Top Layer	Copper	0.035mm		
4	Dielectric 1	FR-4	1.500mm	4.8	
5	Bottom Layer	Copper	0.035mm		
6	Bottom Solder	Solder Resist	0.015mm	3.5	
7	Bottom Overlay				

Symbol	Count	Hole Size	Plated	Hole Type	Drill Layer Pair	Via/Pad	Pad Shape	Template	Description	Hole Tolerance (+)	Hole Tolerance (-)	Hole Length	Routed Path Length
	2	0.60mm (23.62mil)	PTH	Slot	Top Layer - Bottom Layer	Pad	Rounded	r190_120h60_130r100m195_125				1.30mm (51.18mil)	0.70mm (27.56mil)
	2	2.00mm (78.74mil)	NPTH	Round	Top Layer - Bottom Layer	Pad	Rounded	c200hn200p200				-	-
	7	0.90mm (35.43mil)	PTH	Round	Top Layer - Bottom Layer	Pad	(Mixed)	(Mixed)				-	-
	8	1.55mm (61.02mil)	PTH	Round	Top Layer - Bottom Layer	Pad	(Mixed)	(Mixed)				-	-
	10	0.50mm (19.69mil)	NPTH	Round	Top Layer - Bottom Layer	Pad	Rounded	c0hn50				-	-
	18	1.00mm (39.37mil)	PTH	Round	Top Layer - Bottom Layer	Pad	(Mixed)	(Mixed)				-	-
	180	0.20mm (7.87mil)	PTH	Round	Top Layer - Bottom Layer	Via	Rounded	v40h20				-	-
	227 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

IMPEDANCE TABLE USB HS STLINK

LAYER	TRACE (mm)	SPACING (mm)	IMPEDANCE (Single ended)	IMPEDANCE (Differential)	TOL.
TOP	0.21	0.21	n/a	90 ohm	+/- 15%