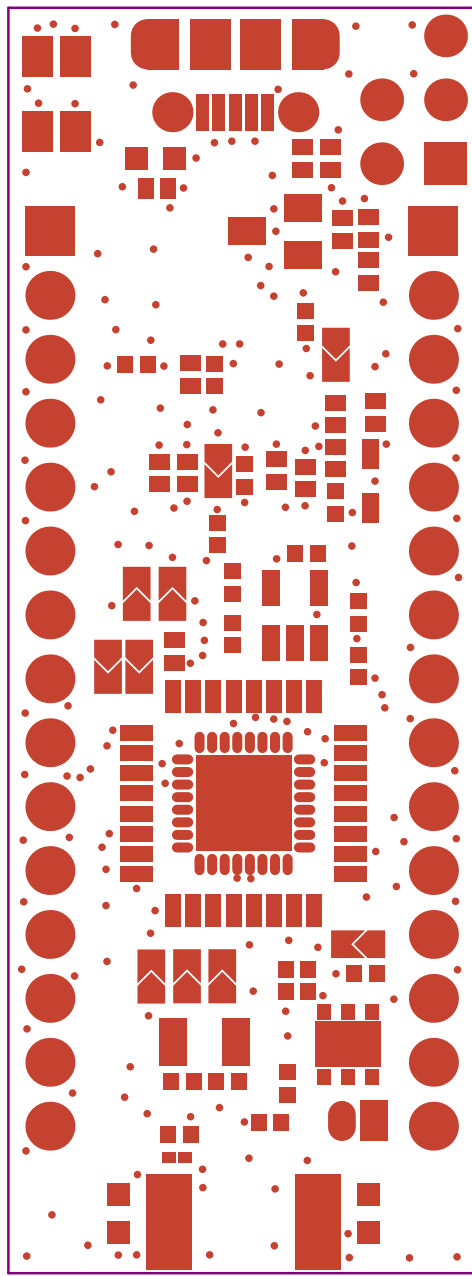
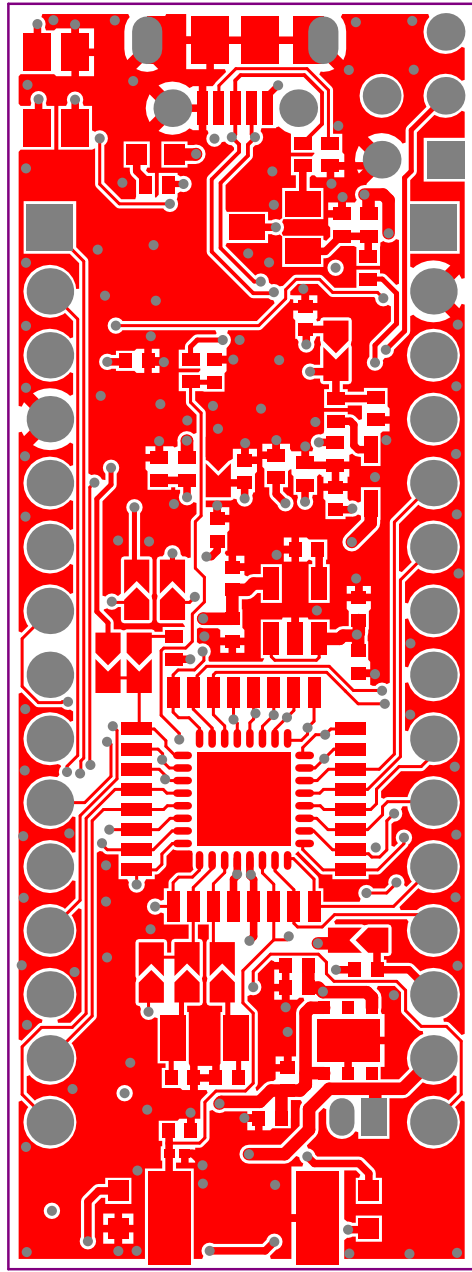


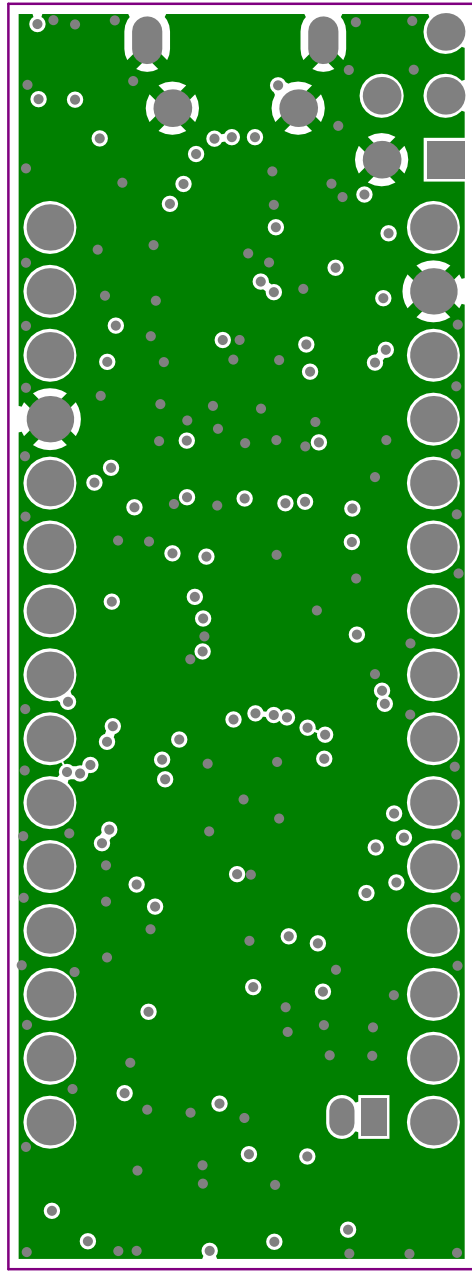
.GTO

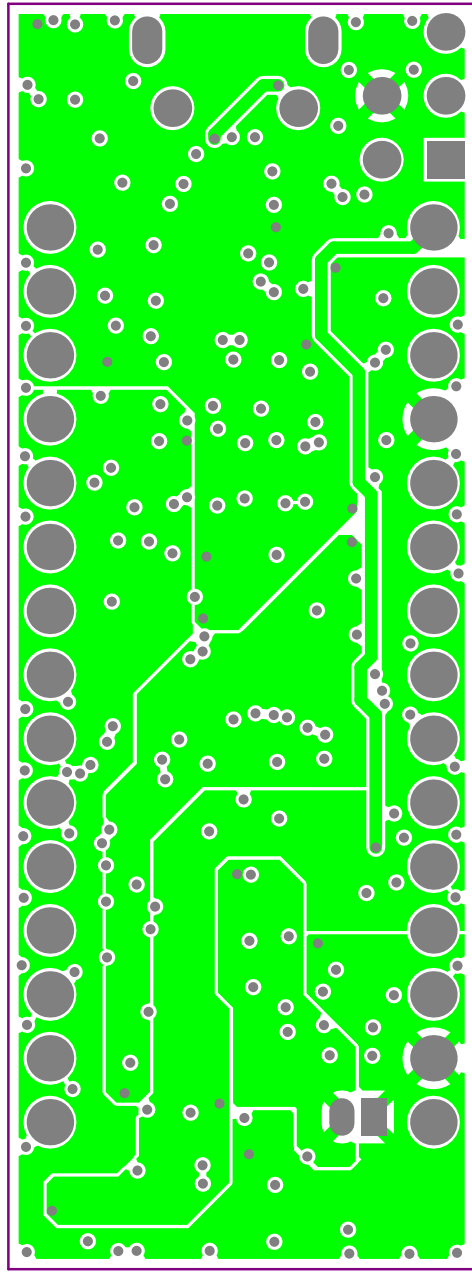




Top Layer

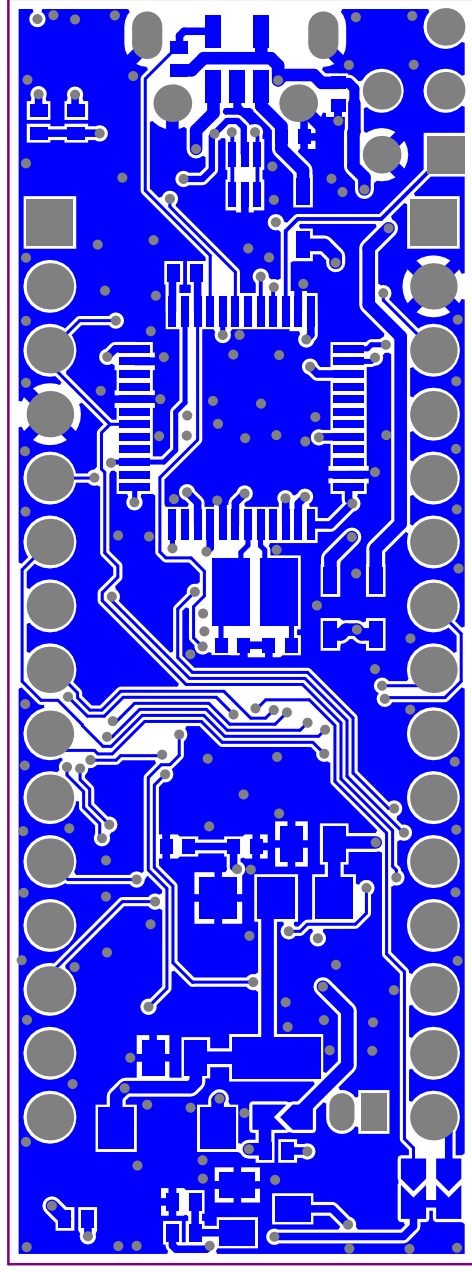
.GTL





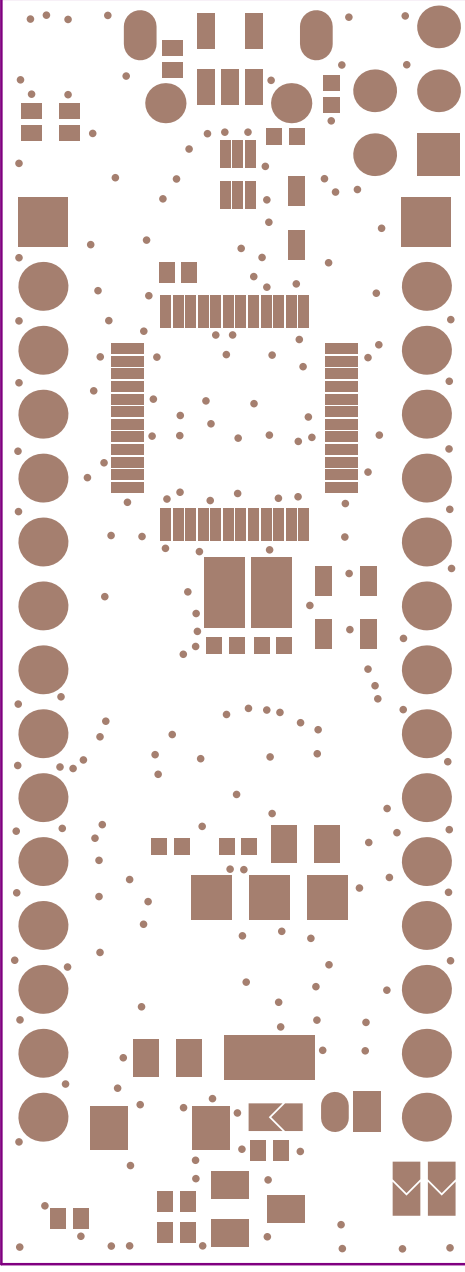
Bottom Layer

.GBL



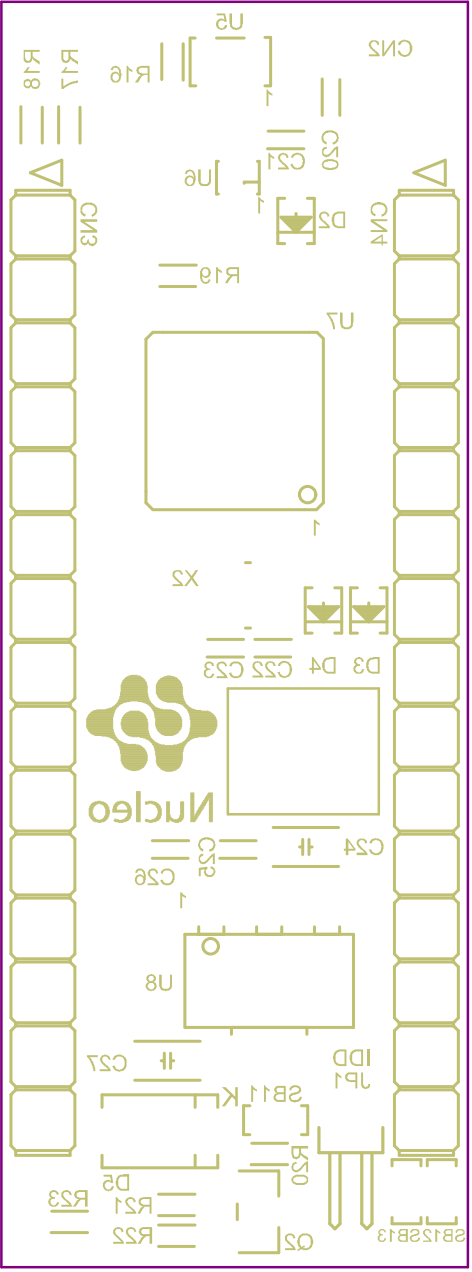
.GBS

Bottom Solder



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.

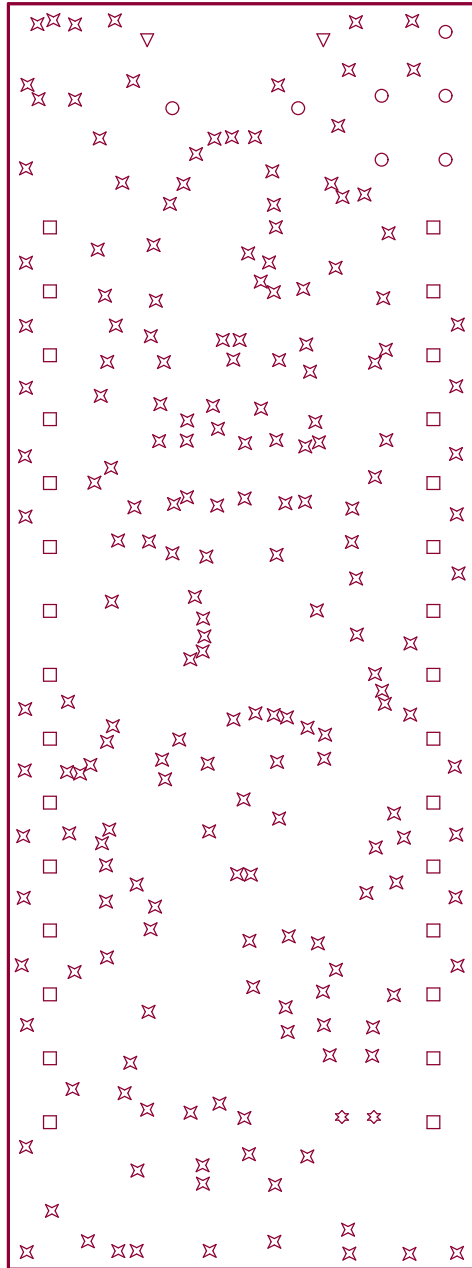
PCB : TYPE 3

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	0.254mm	4.2	
5	Inner 1	Copper	0.036mm		
6	Dielectric 3		0.927mm	4.2	
7	Inner 2	Copper	0.036mm		
8	Dielectric 2		0.254mm	4.2	
9	Bottom Layer	Copper	0.035mm		
10	Bottom Solder	Solder Resist	0.015mm	3.5	
11	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	0.80mm (31.50mil)	PTH	Round	Top Layer - Bottom Layer	Pad	(Mixed)	(Mixed)				-	-
○	7	0.90mm (35.43mil)	PTH	Round	Top Layer - Bottom Layer	Pad	(Mixed)	(Mixed)				-	-
□	30	1.10mm (43.31mil)	PTH	Round	Top Layer - Bottom Layer	Pad	Rounded	(Mixed)				-	-
✕	195	0.20mm (7.87mil)	PTH	Round	Top Layer - Bottom Layer	Via	Rounded	v40h20				-	-
	236 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 FS STLINK					
LAYER	TRACE (mm)	SPACING (mm)	IMPEDANCE (Single ended)	IMPEDANCE (Differential)	TOL.
TOP	0.155	0.226	n/a	90 ohm	+/- 15%
LAYER 1	0.130	0.251	n/a	90 ohm	+/- 15%