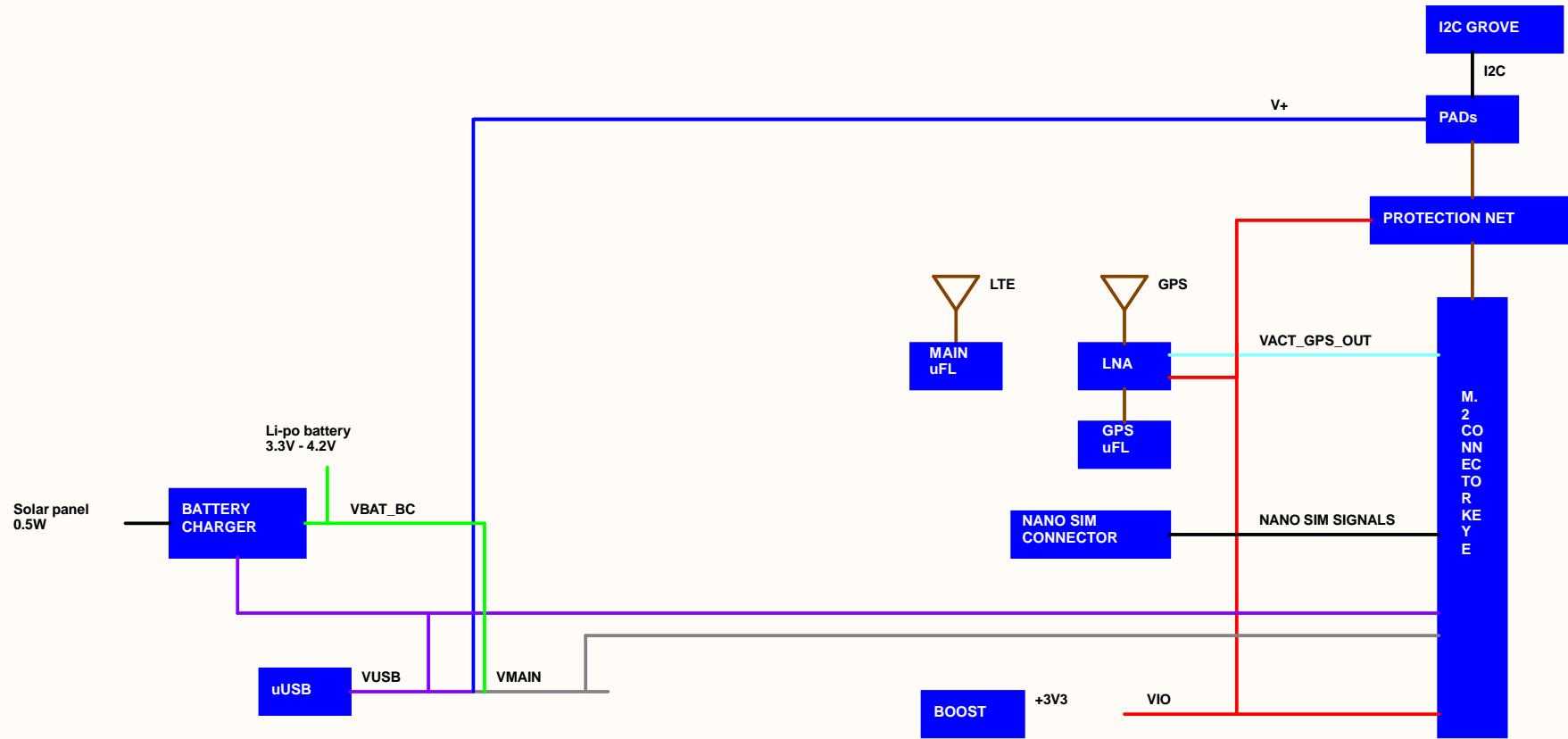


FID1 FID2

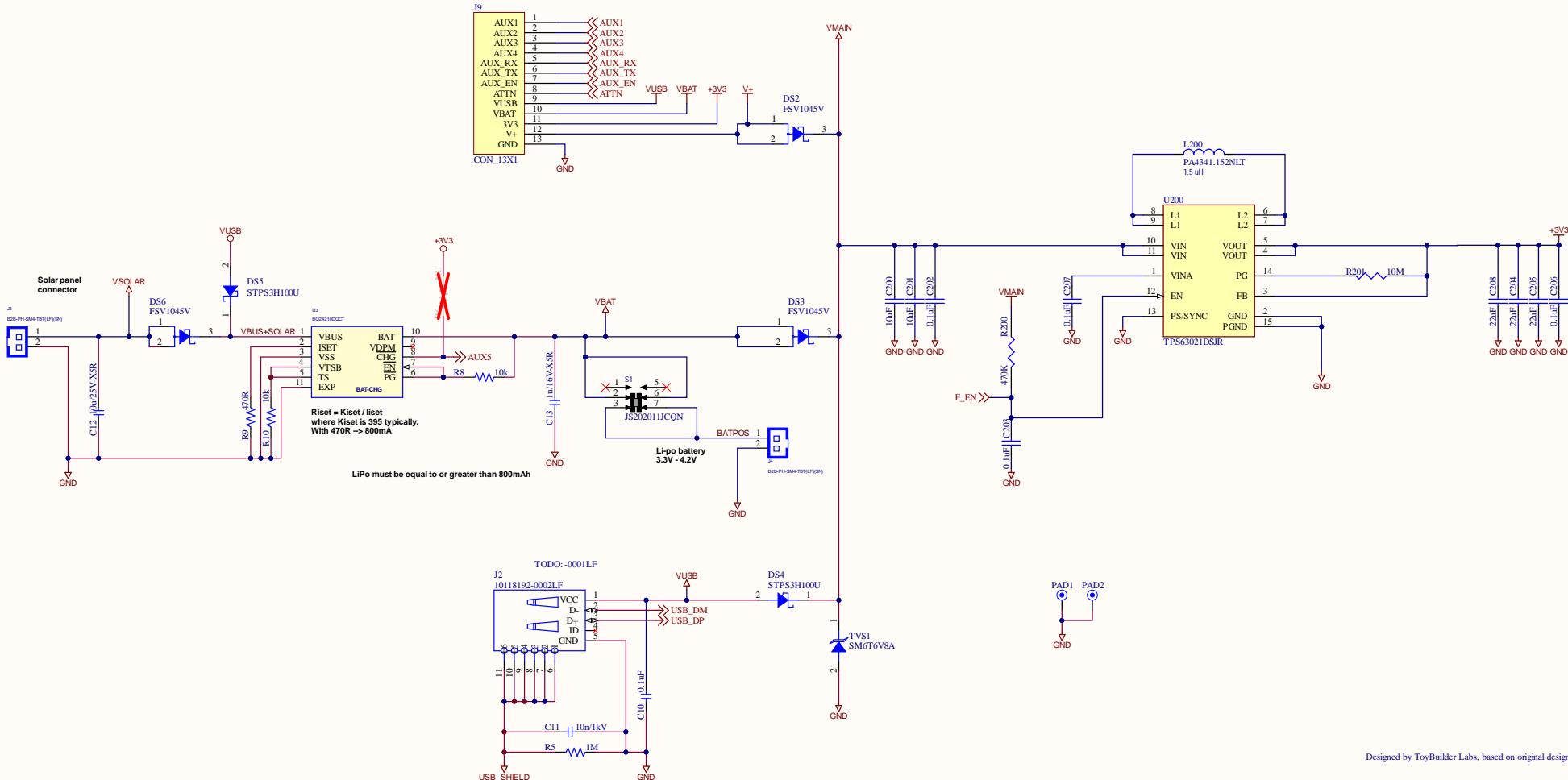
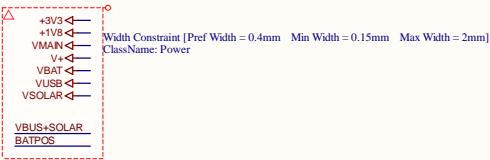
Designed by ToyBuilder Labs, based on original design by FAE

Blues Inc Address: Mail: Phone:	Project	Notecard #	Designed by
	Board		Aka C. Battisti, 136 24026 Gazzaniga (Bg), Italy Mail: info@fiae.technology Phone: +39030398190
	Project Code	2017-3847	Page name
	Internal Code	-	Code
Data	Rev	Rev changes	Sheet
*	13	See Revision Page	1 / 4
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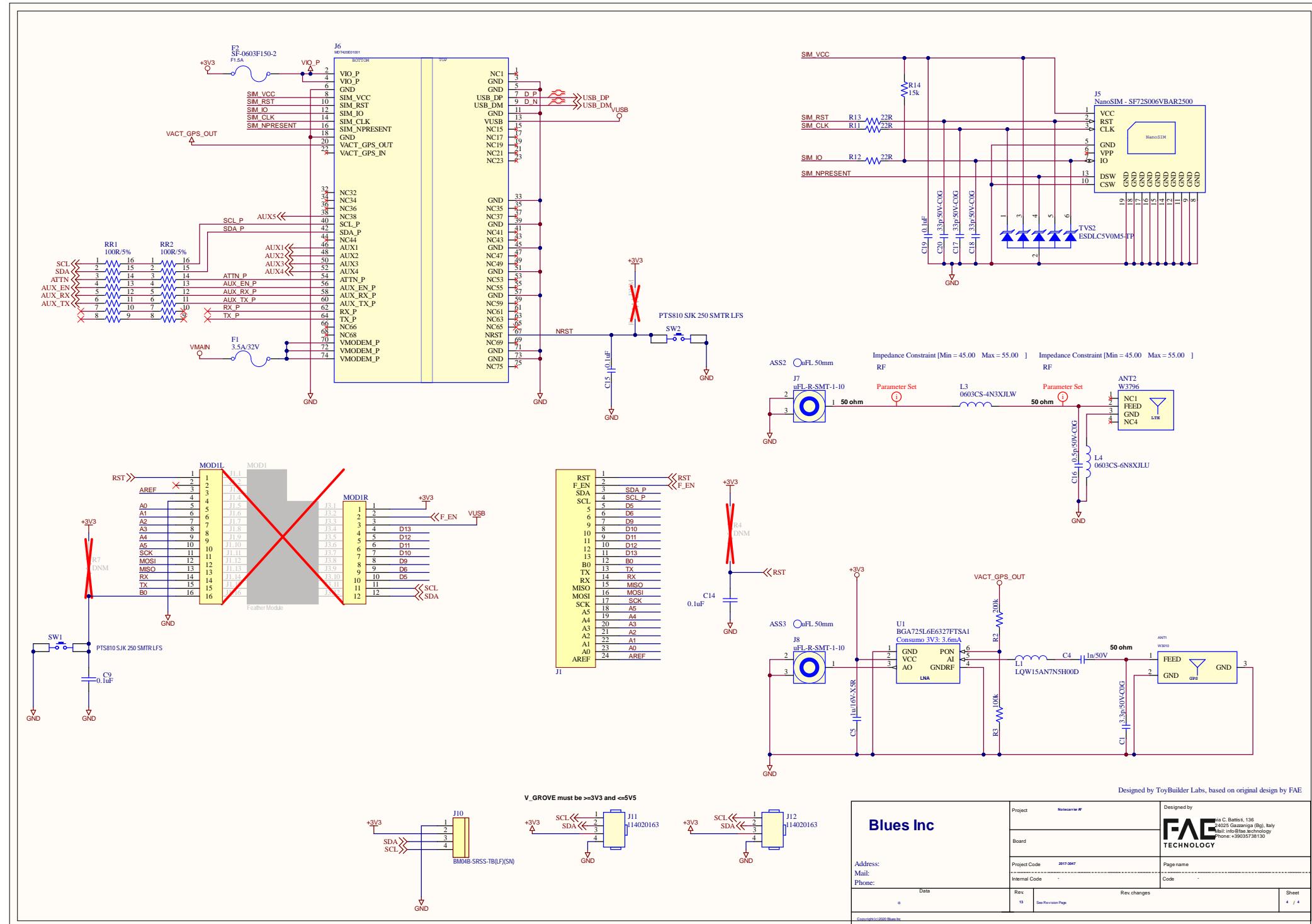
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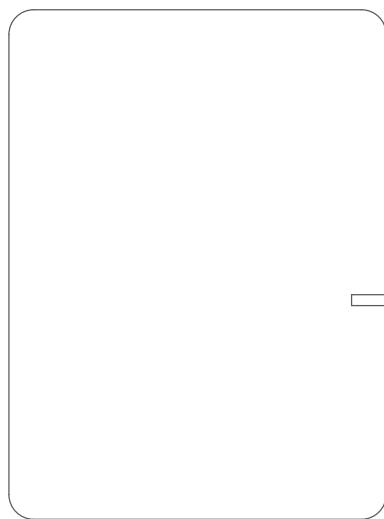
Blues Inc	Project	Noncarrier #	Designed by via C. Battisti, 136 24025 Gazzana (Bg), Italy Mail: info@BluesTechnology.com Phone: +39035738130
	Board		
	Project Code	2017-3047	
	Internal Code		
	Data	Rev	Rev changes
	*	13	See Revision Page
			Sheet 2 / 4

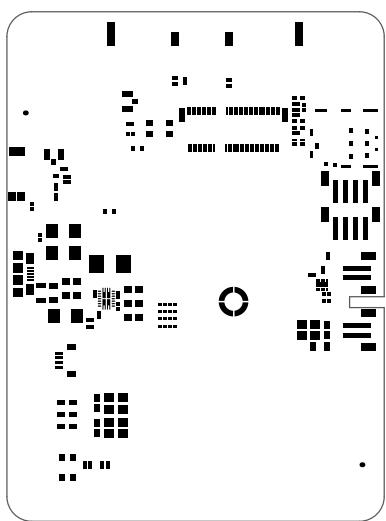


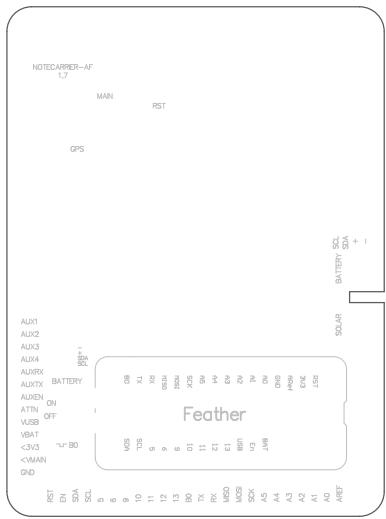
Designed by ToyBuilder Labs, based on original design by FAE

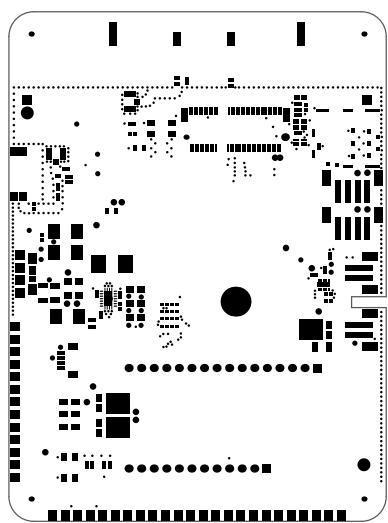
Blues Inc	Project	Noncarrier #	Designed by FAE TECHNOLOGY via C. Battisti, 136 24025 Gazzaniga (Bg), Italy Mail: info@blues.technology Phone: +39035738130
	Board		
	Project Code	2017-3047	
Address:	Data	Rev changes	Code
Phone:	*	13 See Revision Page	Sheet 3 / 4

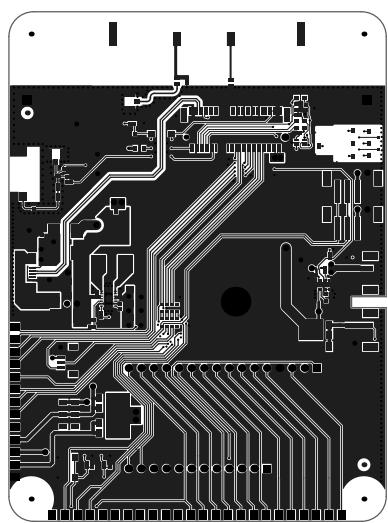




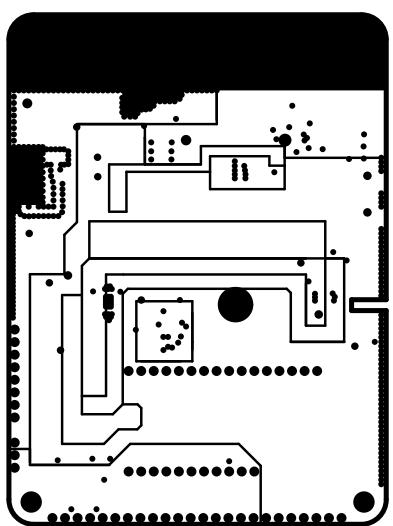


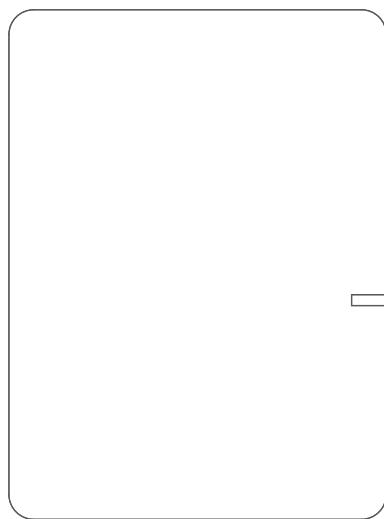


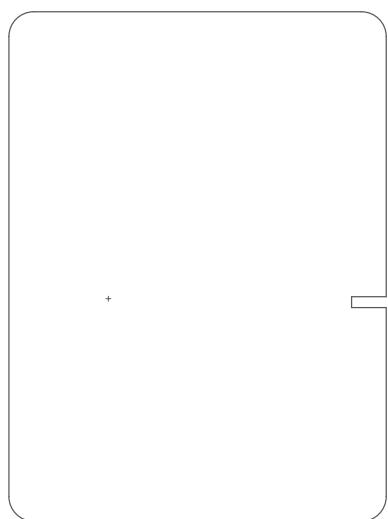


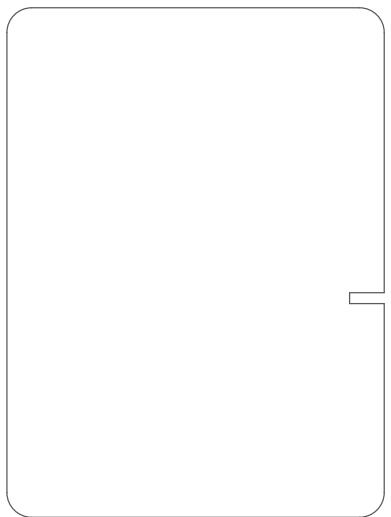




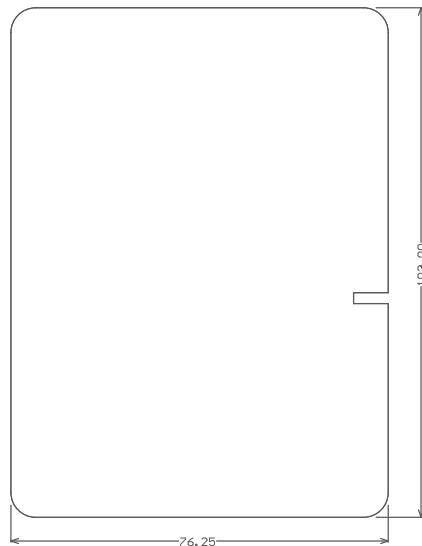








Printout Set for Class All Layers'
Printout Set for Class All Layers'



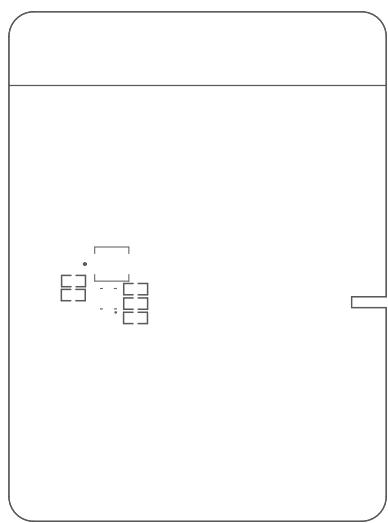
TOP and BOTTOM thickness layer shown in the image above contains +20um (from IPC-A-600 Class 2) of plating

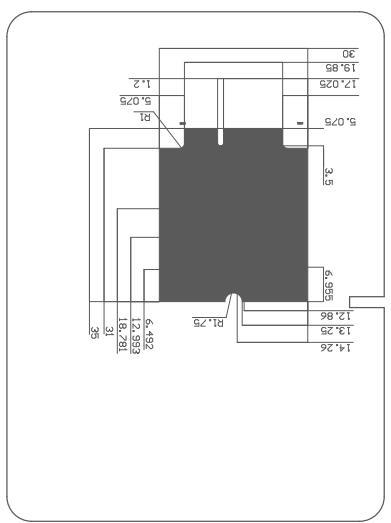
IMPEDANCE CONTROL TABLE					
LAYER	TRACE (MM)	SPACING (MM)	IMPEDANCE SINGLE-ENDED	IMPEDANCE DIFFERENTIAL	TOLLERANCE
TOP	0.31	0.45	50 ohm	NA	+/- 10%
TOP	0.26	0.2	NA	90 ohm	+/- 10%

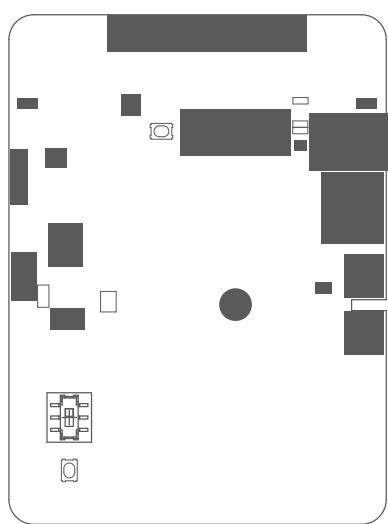
MANUFACTURING SPECIFICATIONS			
BOARD SIZE (XxYxZ)	76.25x103.00x1.6mm	IPC-6012 - IPC-A-600	CLASS 2
BOARD TOLERANCE (XMTZ)	+/-0.2 1 +/-0.2 1 +/--10%	E-TESTING	YES
NO OF LAYERS	4	UL-MARKING	NO
BASE COPPER OUTSIDE	17um	MICROVIA (hole < 100um)	NO
BASE COPPER INSIDE	35um	BURD VIA	NO
FINISH	ENIG	BURD VIA	NO
SOLDER COLOR	GREEN	VIA FILL/VIA IN PAD	NO
SILKSCREEN COLOR	WHITE	MIN. VIA SIZE	0.2mm
DEIECTRIC MATERIAL	FR4-TG150	MIN TRACE SPACING	0.15mm
IMPEDANCE CONTROL	YES	OUTER LAYER MIN TRACE WIDTH	0.2mm
CTI	175V	INNER LAYER MIN TRACE WIDTH	0.2mm

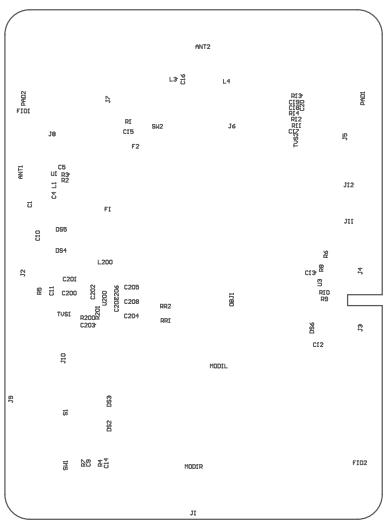
Project name	Board name
Notecarrier	1.7-v6
Designed by FAE Technology SpA - Gazzaniga (BG) - Italy - Modified by ToyBuilder Labs	
Project Code	
Internal Code	-
Rev.	Size Page
A3	Scale
	1:1
	Data

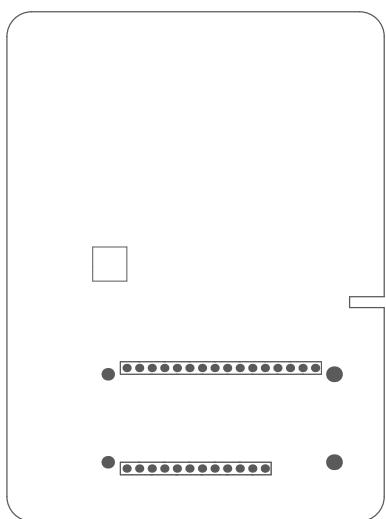
Blues Inc

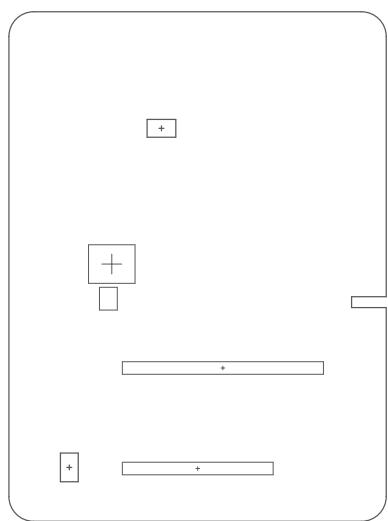




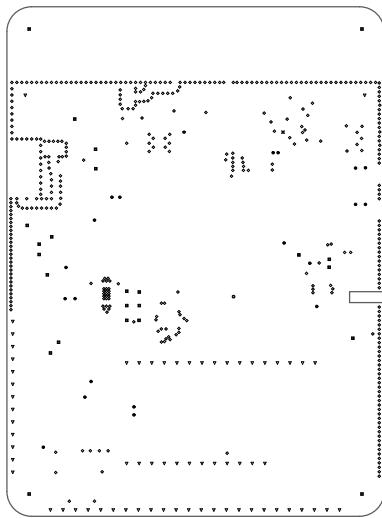


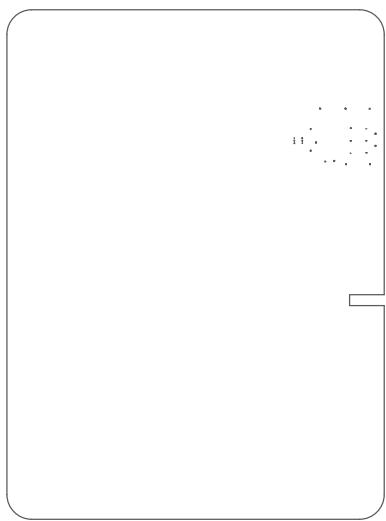


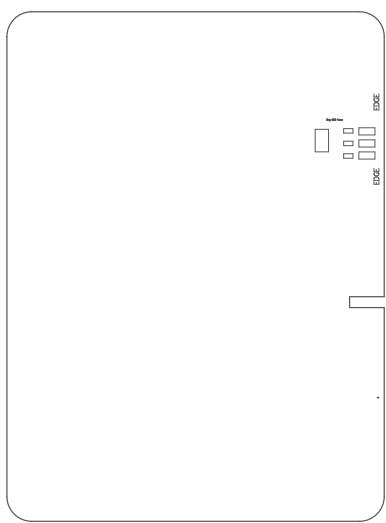


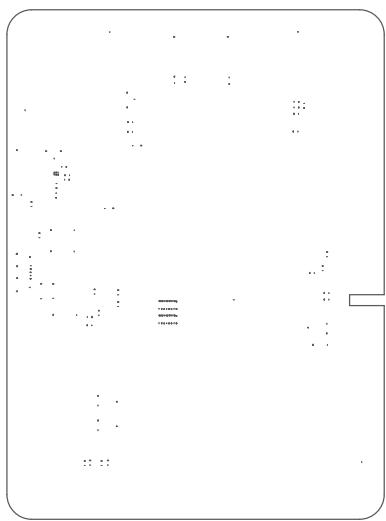


Symbol	Count	Hole Size	Plated	Hole Type	Drill Layer Pair	Via/Pad	Pad Shape	Template	Description	Hole Tolerance (+)	Hole Tolerance (-)	Hole Length	Routed Path Length
✖	1	43.31mil <1.100mm>	NPTH	Round	Top Layer - Bottom Layer	Pad	Rounded	c100hn10				-	-
✖	1	62.99mil <1.600mm>	NPTH	Round	Top Layer - Bottom Layer	Pad	Rounded	c152hn160				-	-
✖	1	145.67mil <3.700mm>	PTH	Round	Top Layer - Bottom Layer	Pad	Rounded	c600h370z152				-	-
✖	4	129.92mil <3.300mm>	NPTH	Round	Top Layer - Bottom Layer	Pad	Rounded	c100hn330(Tol0-D)		0.00mil <0.000mm>	0.00mil <0.000mm>	-	-
■	20	19.69mil <0.500mm>	PTH	Round	Top Layer - Bottom Layer	Via	Rounded	v100h50				-	-
●	20	28.00mil <0.711mm>	PTH	Round	Top Layer - Bottom Layer	Via	Rounded	v127h71				-	-
▽	67	39.37mil <1.000mm>	PTH	Round	Top Layer - Bottom Layer	Pad	(Mixed)	(Mixed)				-	-
◇	396	7.87mil <0.200mm>	PTH	Round	Top Layer - Bottom Layer	Via	Rounded	(Mixed)				-	-
510 Total													









For PCBWay Prototype:

Layer	Name	Material	Thickness	Constant	Board Layer Stack
	Top Overlay				
	Top Solder	Solder Resist	0.010mm	3.5	
1	Top Layer	Copper	0.035mm		
	Dielectric 1	FR-4	0.220mm	4.29	
2	Ground Plane	Copper	0.053mm		
	Dielectric 3	FR-4	0.894mm	3.96	
3	Power Plane	Copper	0.053mm		
	Dielectric 4	FR-4	0.220mm	4.29	
4	Bottom Layer	Copper	0.035mm		
	Bottom Solder	Solder Resist	0.010mm	3.5	
	Bottom Overlay				

Note: other 4-layer stackup for prototype is acceptable if L1-L2 and L3-L4 thickness is between 0.175mm and 0.225mm

FAE Stackup (For production):

