



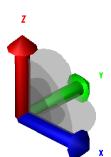
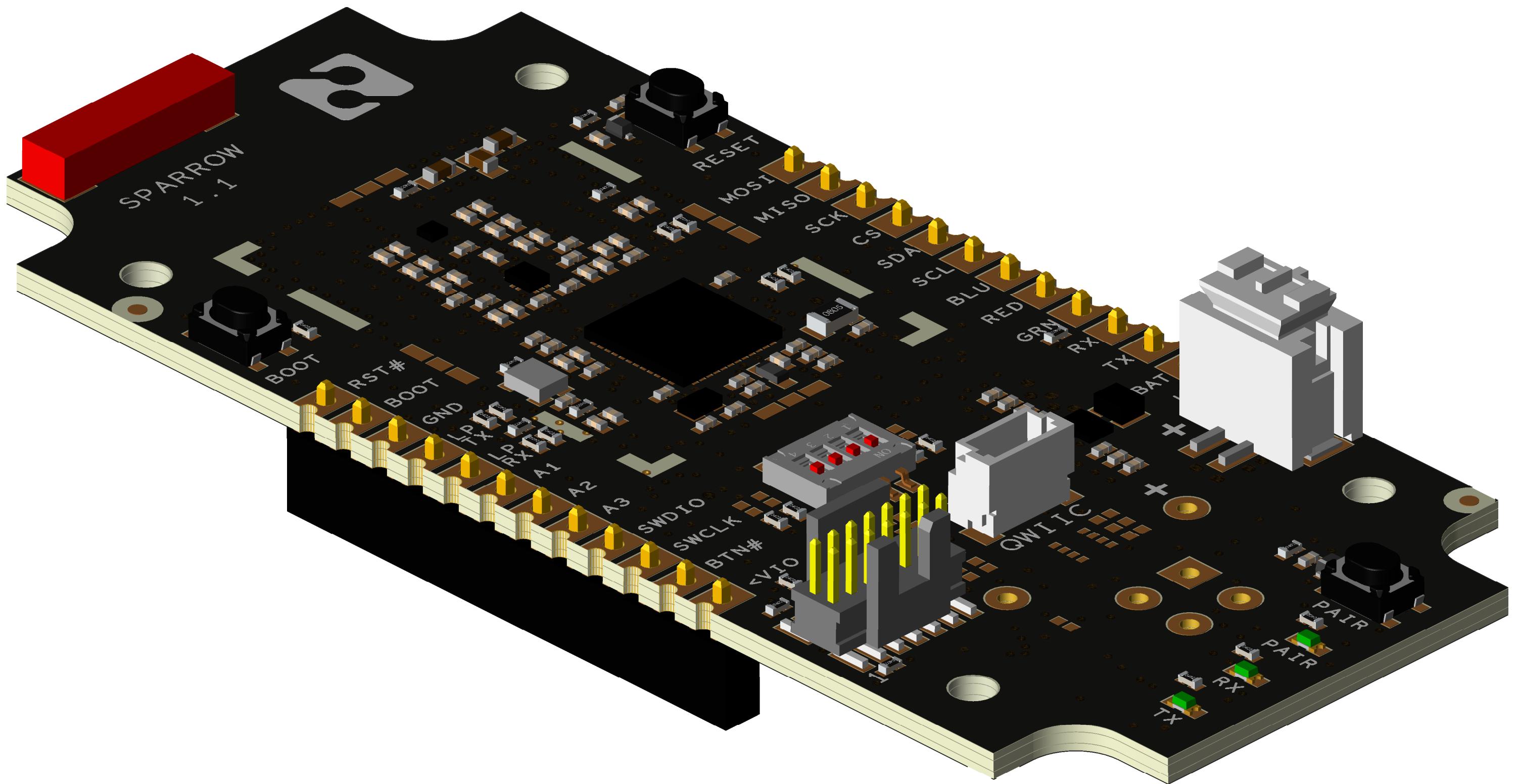
PCB DOCUMENTATION

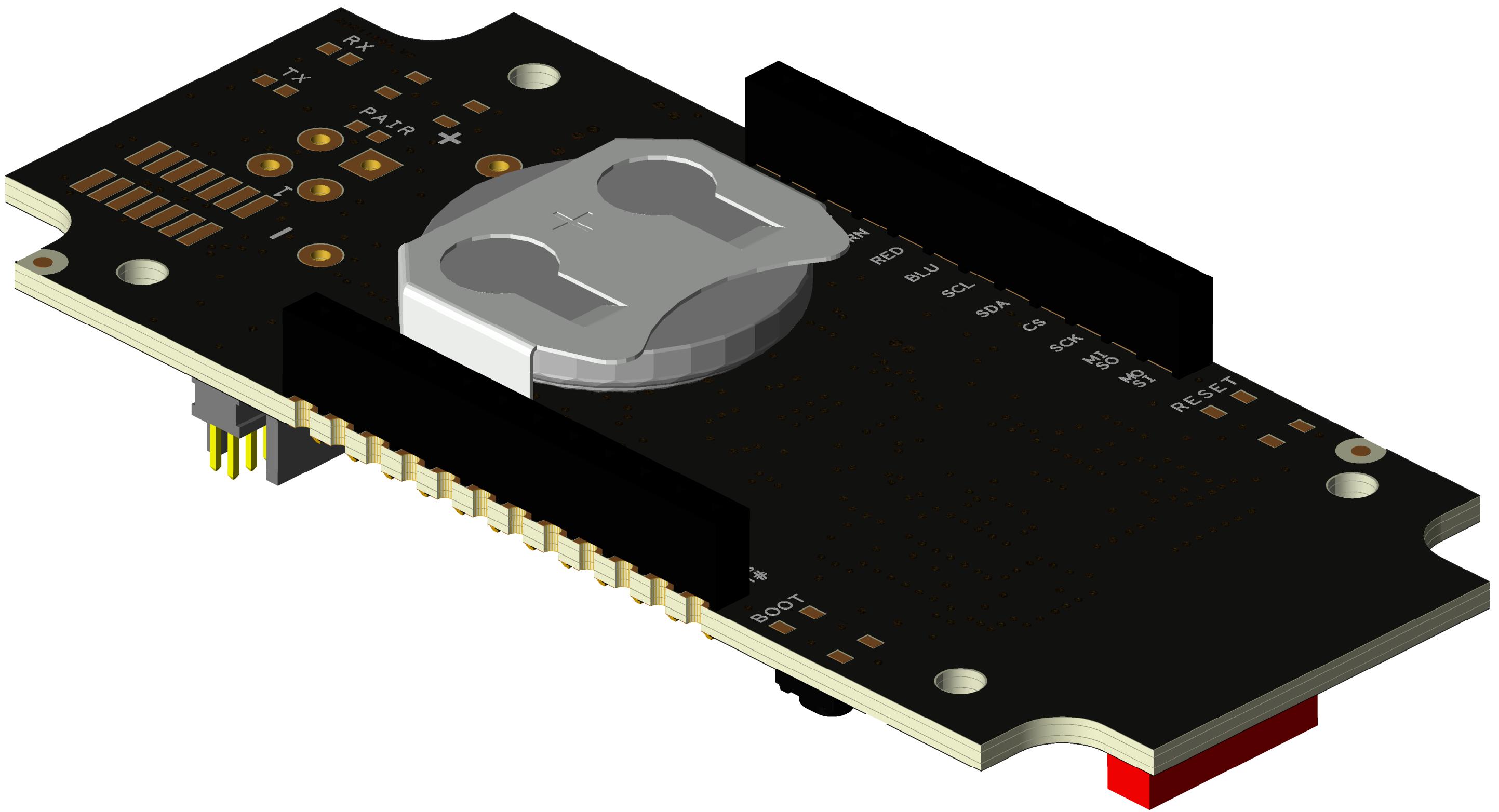
CUSTOMER: BLUES

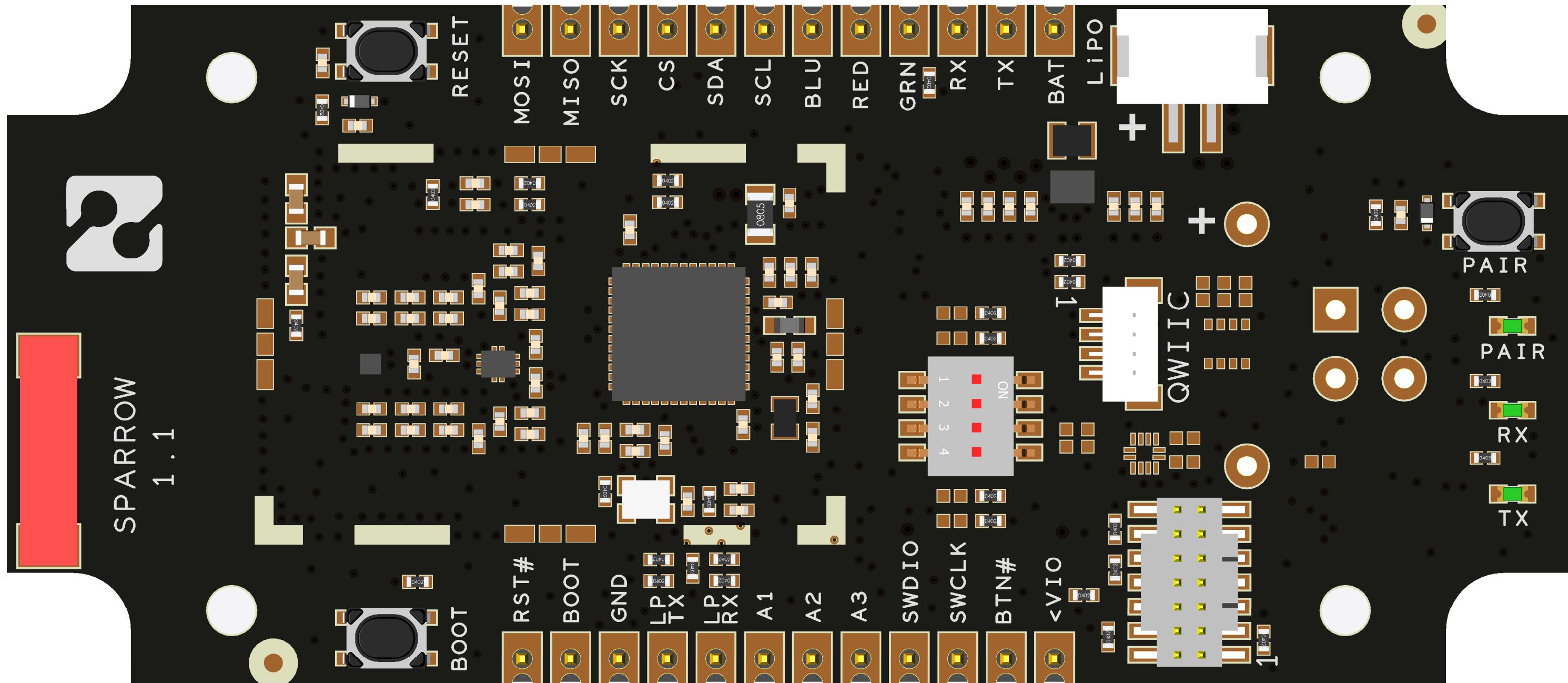
PROJECT: ESSENTIAL-BOARD_V2

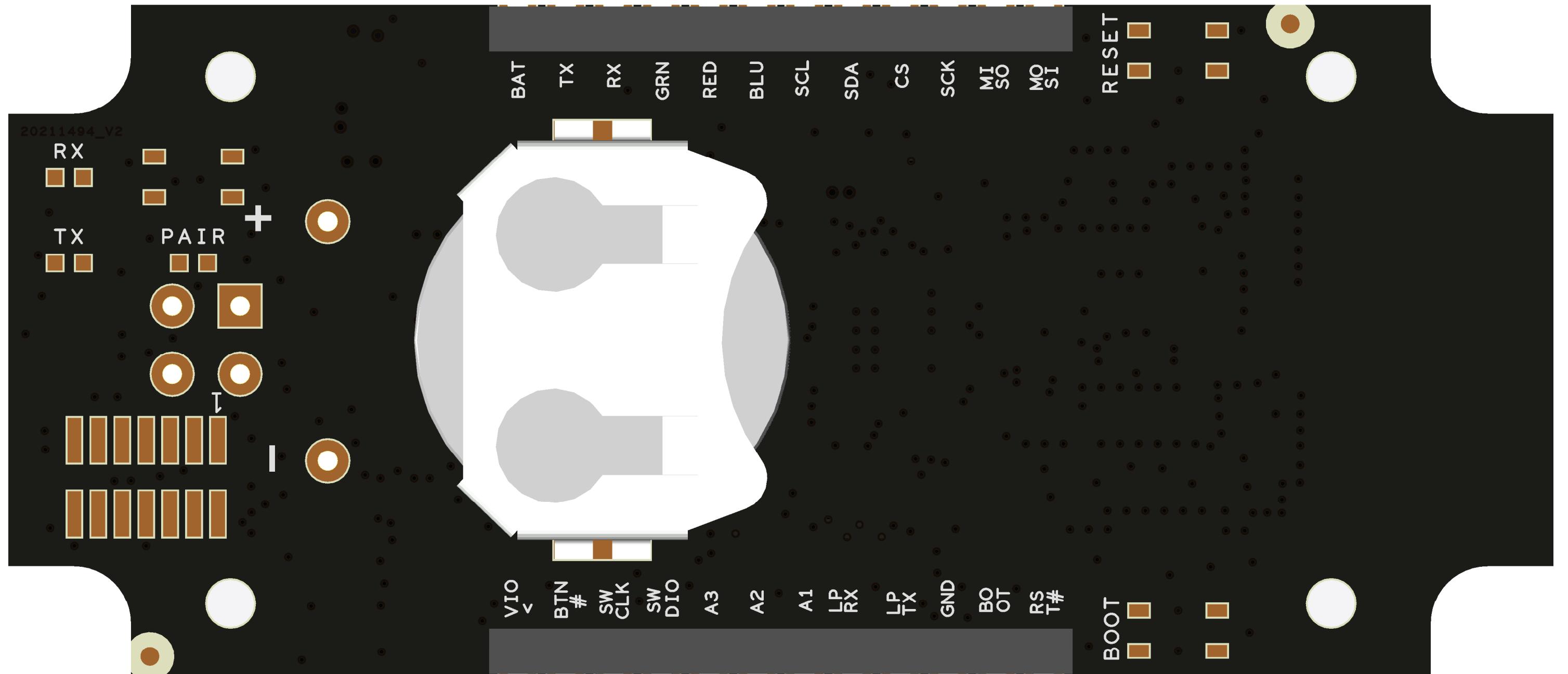
FAE CODE: 2021-1494

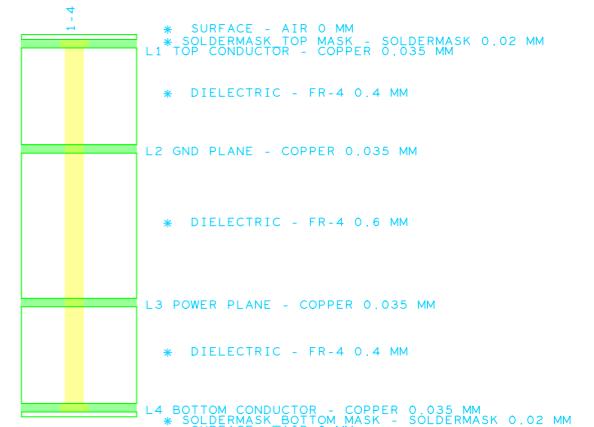
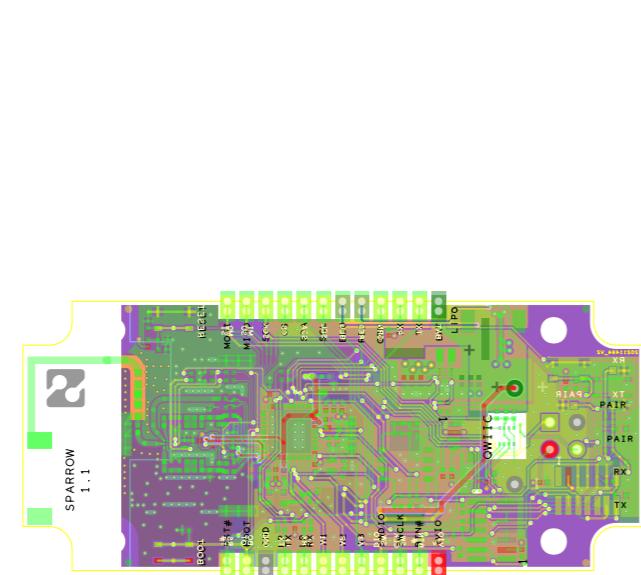
DATE: 25/01/2022











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

IMPEDANCE CONTROL TABLE

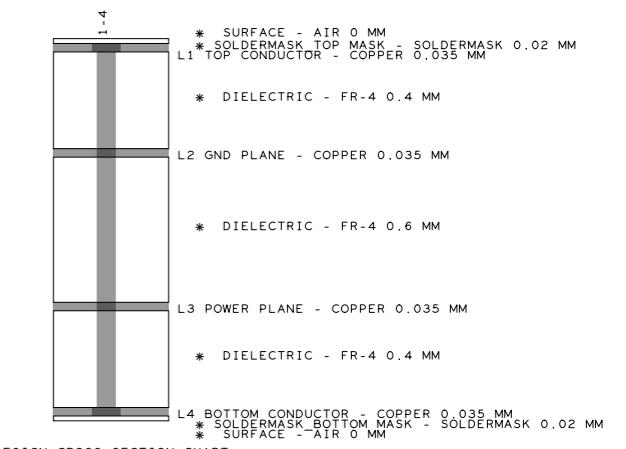
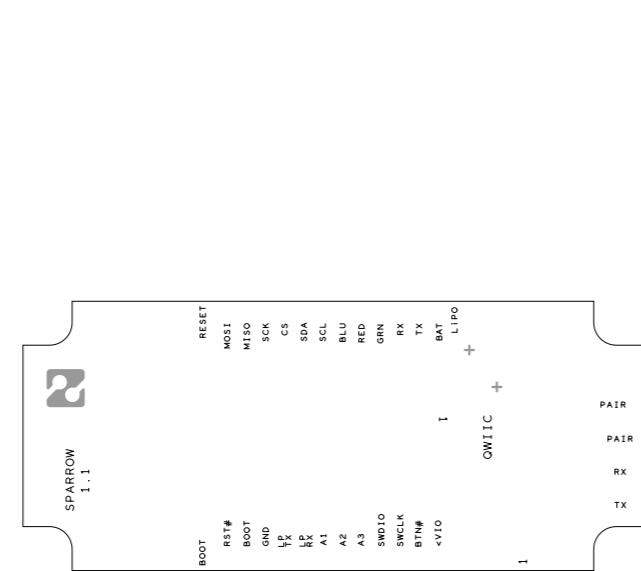
LAYER	TRACE [MM]	SPACING [MM]	IMPEDANCE SINGLE-ENDED	IMPEDANCE DIFFERENTIAL	TOLLERANCE
TOP	0.2	0.13	-	100 ohm	+/- 10%
TOP	0.7	-	50 ohm	-	+/- 10%
TOP	0.64	-	50 ohm	-	+/- 10%

MANUFACTURING SPECIFICATIONS

BOARD SIZE (XxYxZ)	82x35.62x1.6mm	IPC-6012 - IPC-A-600	CLASS 2
BOARD TOLLERANCE (X Y Z)	+/-0.2 +/-0.2 +/-10%	E-TESTING	YES
NO.OF LAYERS	4	UL-MARKING	YES
BASE COPPER OUTSIDE	18um	MICROVIA (hole < 100um)	NO
BASE COPPER INSIDE	35um	BLIND VIA	NO
FINISH	ENIG	BURIED VIA	NO
SOLDER COLOR	MATTE BLACK	VIA FILL/VIA IN PAD	NO
SILKSCREEN COLOR	WHITE	MIN. VIA SIZE	0.2mm
DIELECTRIC MATERIAL	FR4-TG130	MIN. TRACE SPACING	0.1mm
IMPEDANCE CONTROL	YES	OUTER LAYER MIN. TRACE WIDTH	0.1mm
CTI	175V	INNER LAYER MIN. TRACE WIDTH	0.2mm

	Project name		Board name
	SPARROW		SENSOR BOARD
	Designer		Approved Not approved
	G. Boschini		
	Project Code		Customer BLUES
	2021-1494		
Internal Code -		Code	-
Via C. Battisti 136, 24025, Gazzaniga (Bg), Italy		Rev.	Size Page
Mail: info@fae.technology Tel: +39 035738130		2	Scale
		A3	1:1
		Data	26/10/2021

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

IMPEDANCE CONTROL TABLE

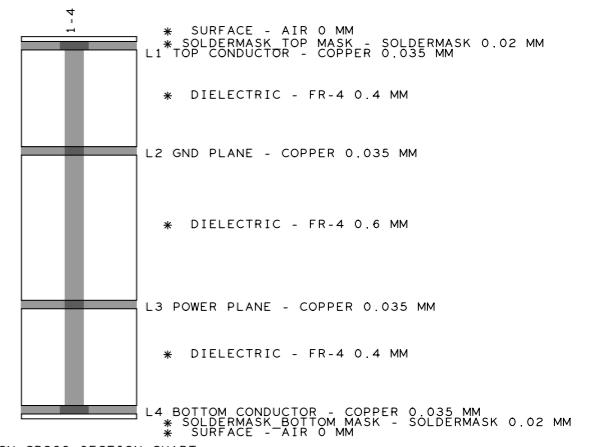
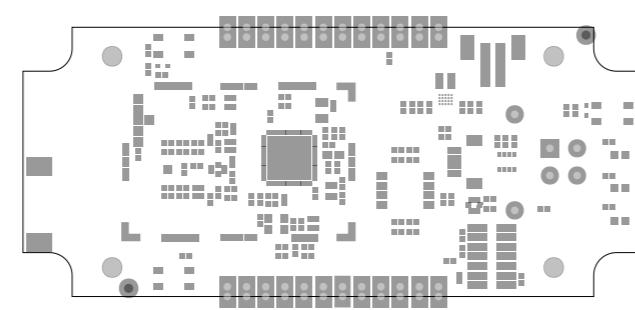
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TOP	0.7	-	50 ohm	-	+/- 10%
TOP	0.64	-	50 ohm	-	+/- 10%

MANUFACTURING SPECIFICATIONS

BOARD SIZE (XxYxZ)	82x35.62x1.6mm	IPC-6012 - IPC-A-600	CLASS 2
BOARD TOLERANCE (X Y Z)	+/-0.2 +/-0.2 +/-10%	E-TESTING	YES
NO. OF LAYERS	4	UL-MARKING	YES
BASE COPPER OUTSIDE	18um	MICROVIA (hole < 100um)	NO
BASE COPPER INSIDE	35um	BLIND VIA	NO
FINISH	ENIG	BURIED VIA	NO
SOLDER COLOR	MATTE BLACK	VIA FILL/VIA IN PAD	NO
SILKSCREEN COLOR	WHITE	MIN. VIA SIZE	0.2mm
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	G. Boschini		
	Project Code		Customer BLUES
Internal Code -		Code -	
Via C. Battisti 136, 24025, Gazzaniga (Bg), Italy Mail: info@fae.technology		Rev. 2	Size Page A3
		Scale 1:1	Data 26/10/2021

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IMPEDANCE CONTROL TABLE

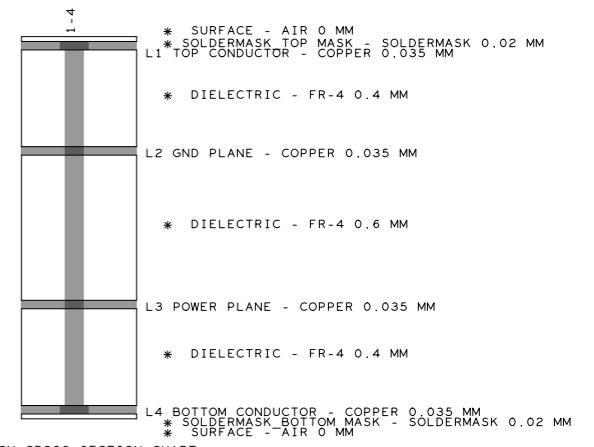
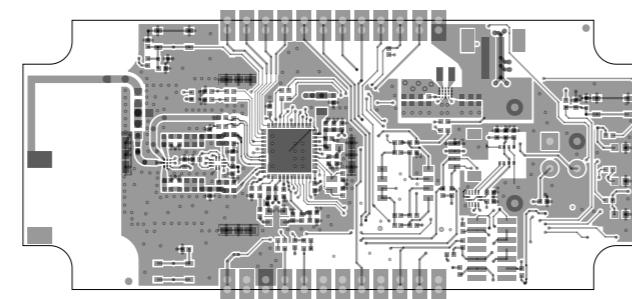
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TOP	0.64	-	50 ohm	-	+/- 10%

MANUFACTURING SPECIFICATIONS

BOARD SIZE (XxYxZ)	82x35.62x1.6mm	IPC-6012 - IPC-A-600	CLASS 2
BOARD TOLERANCE (X Y Z)	+/-0.2 +/-0.2 +/-10%	E-TESTING	YES
NO. OF LAYERS	4	UL-MARKING	YES
BASE COPPER OUTSIDE	18um	MICROVIA (hole < 100um)	NO
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SOLDER COLOR	MATTE BLACK	VIA FILL/VIA IN PAD	NO
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DIELECTRIC MATERIAL	FR4-TG130	MIN. TRACE SPACING	0.1mm
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FAE TECHNOLOGY	Project name		Board name
	SPARROW		SENSOR BOARD
	Designer G. Boschini		Approved Not approved
	Project Code 2021-1494		Customer BLUES
	Internal Code -		Code -
	Via C. Battisti 136, 24025, Gazzaniga (Bg), Italy Mail: info@fae.technology	Rev. 2 Size Page A3	Scale 1:1 Data 26/10/2021

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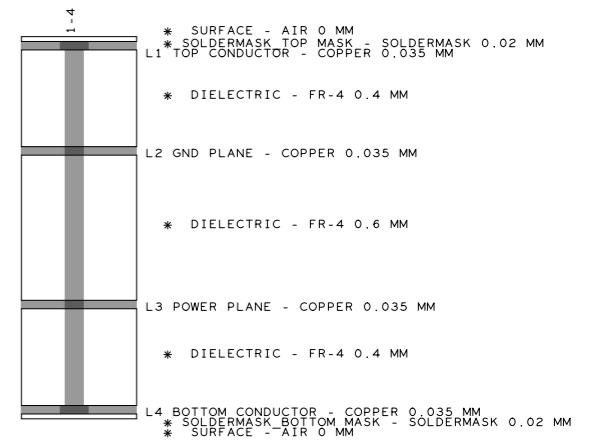
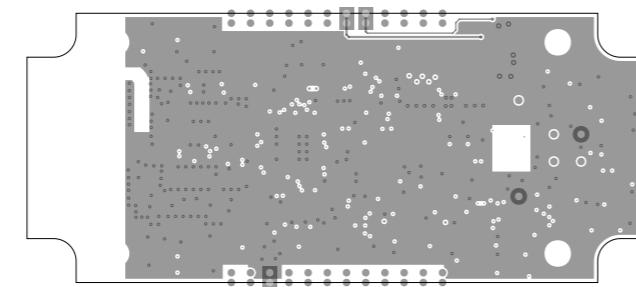
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MANUFACTURING SPECIFICATIONS

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	Project name		Board name	
	SPARROW		SENSOR BOARD	
	Designer	G. Boschini	Approved	Not approved
	Project Code	2021-1494	Customer	BLUES
	Internal Code	-	Code	-
	Via C. Battisti 136, 24025, Gazzaniga (Bg), Italy Mail: info@fae.technology	Rev. 2	Size Page A3	Scale 1:1 Data 26/10/2021

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IMPEDANCE CONTROL TABLE

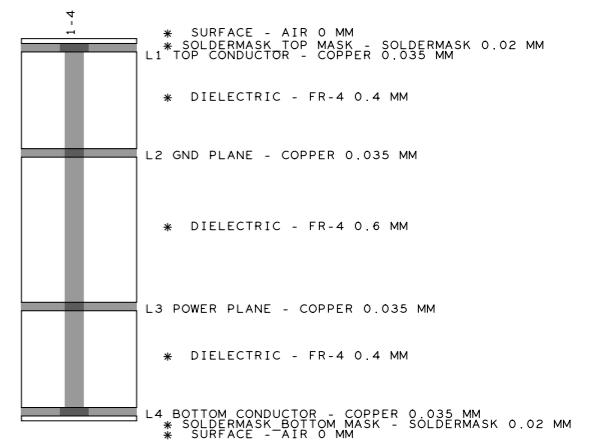
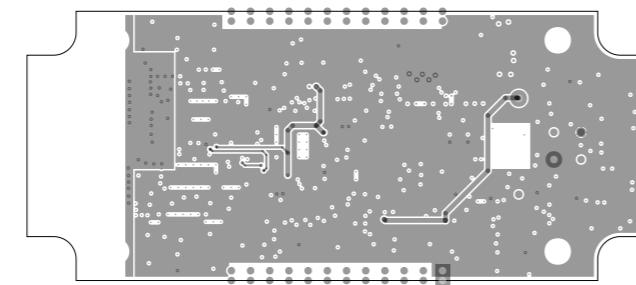
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BOARD SIZE (XxYxZ)	82x35.62x1.6mm	IPC-6012 - IPC-A-600	CLASS 2
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		Scale 1:1	Data 26/10/2021

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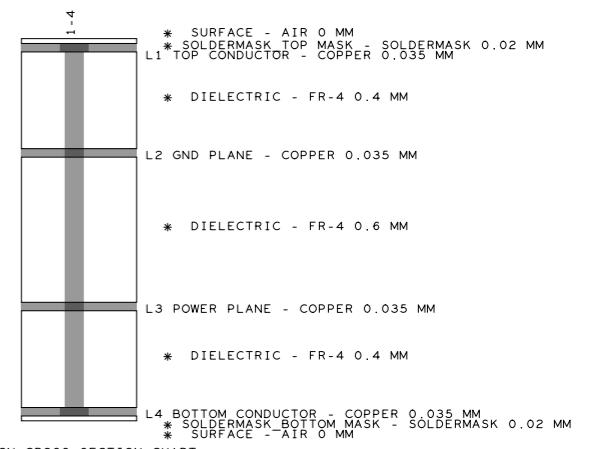
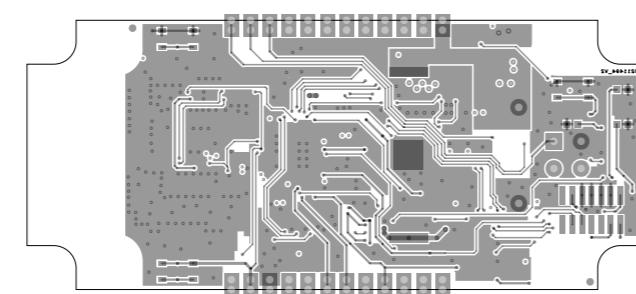
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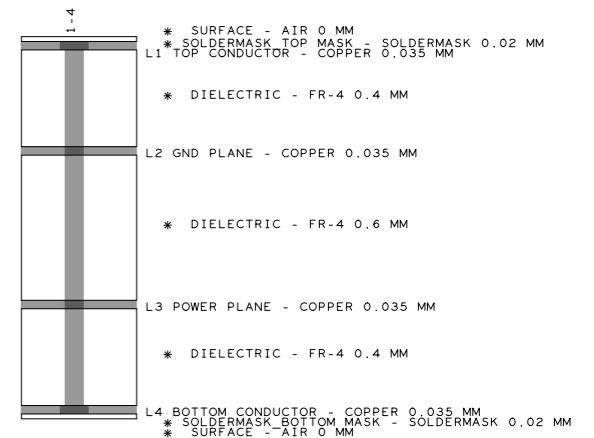
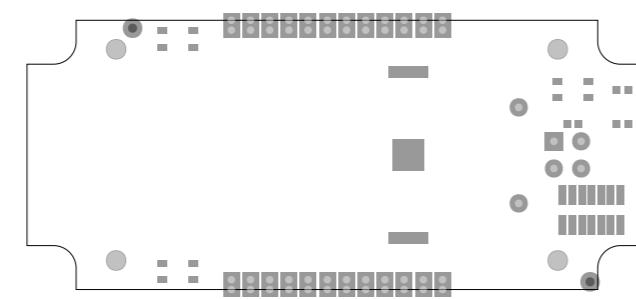
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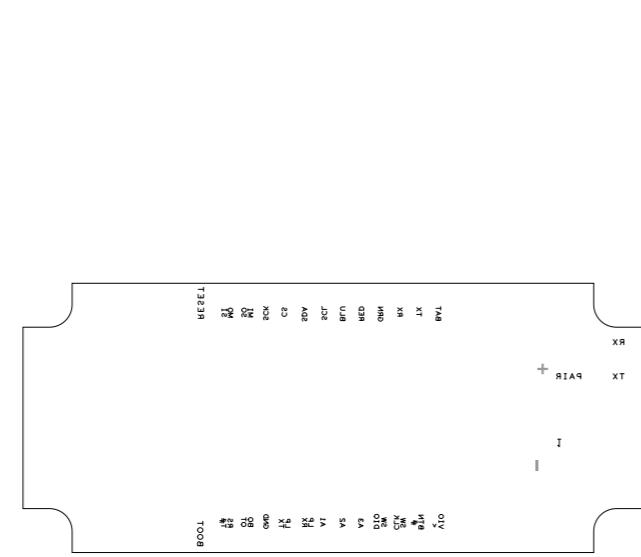
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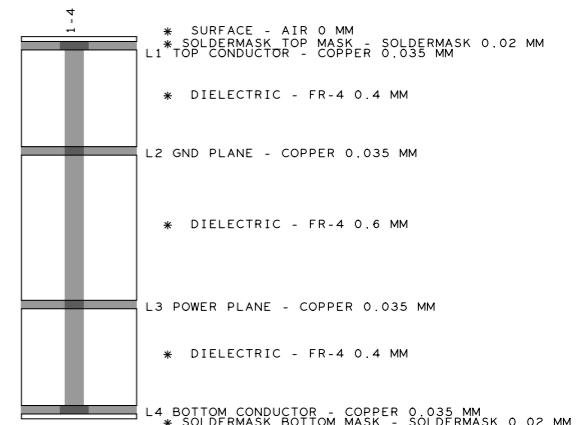
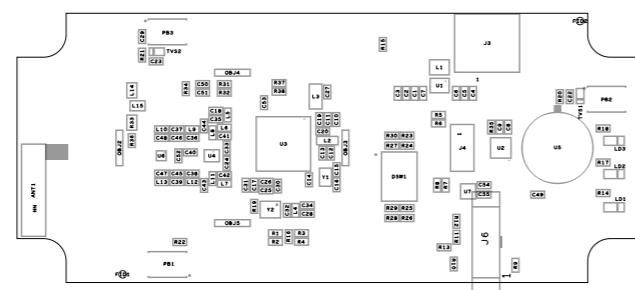
MANUFACTURING SPECIFICATIONS

BOARD SIZE (XxYxZ)	82x35.6x1.6mm	IPC-6012 - IPC-A-600	CLASS 2
BOARD TOLERANCE (X Y Z)	+-0.2 +/-0.2 +/-10%	E-TESTING	YES
NO. OF LAYERS	4	UL-MARKING	YES
BASE COPPER OUTSIDE	18um	MICROVIA (hole < 100um)	NO
BASE COPPER INSIDE	35um	BLIND VIA	NO
FINISH	ENIG	BURIED VIA	NO
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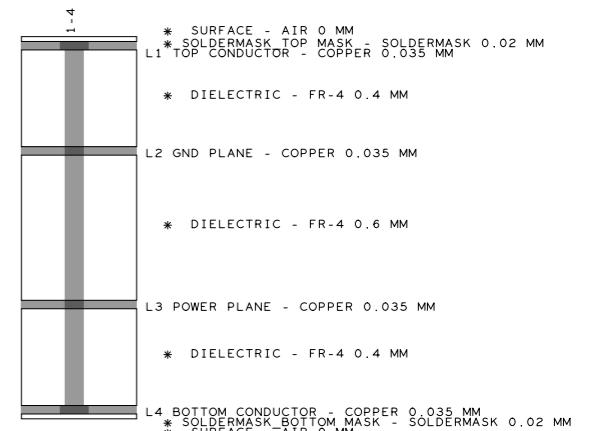
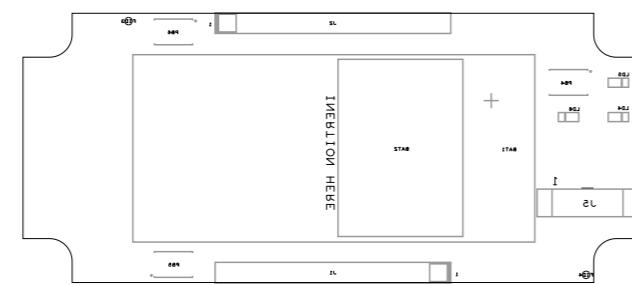
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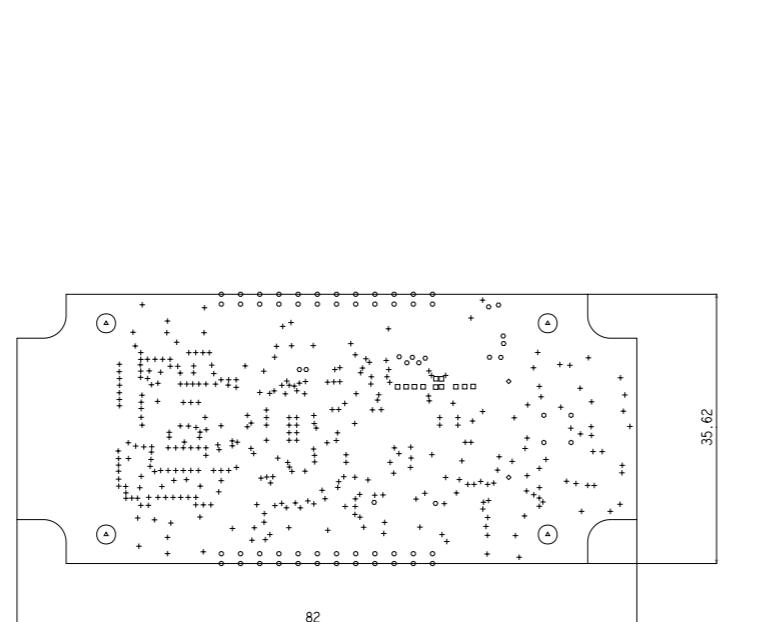
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DRILL CHART: TOP to BOTTOM

ALL UNITS ARE IN MILLIMETERS

FIGURE	FINISHED SIZE	TOLERANCE	TYPE	QTY
*	0.2	+0.075/-0.075	PLATED	354
□	0.254	+0.075/-0.075	PLATED	11
○	0.35	+0.075/-0.075	PLATED	15
◊	1.0	+0.075/-0.075	PLATED	48
◊	1.0	+0.075/-0.075	PLATED	4
◊	1.02	+0.075/-0.075	PLATED	2
▲	2.5	+0.075/-0.075	NON-PLATED	4



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IMPEDANCE CONTROL TABLE					
LAYER	TRACE [MM]	SPACING [MM]	IMPEDANCE SINGLE-ENDED	IMPEDANCE DIFFERENTIAL	TOLERANCE
TOP	0.2	0.13	-	100 ohm	+/- 10%
TOP	0.7	-	50 ohm	-	+/- 10%
TOP	0.64	-	50 ohm	-	+/- 10%

MANUFACTURING SPECIFICATIONS					
BOARD SIZE (XxYxZ)	82x35.62x1.6mm	IPC-6012 - IPC-A-600	CLASS 2		
BOARD TOLERANCE (X Y Z)	+/-.2 +/-0.2 +/-10%	E-TESTING	YES		
NO. OF LAYERS	4	UL-MARKING	YES		
BASE COPPER OUTSIDE	18um	MICROVIA (hole < 100um)	NO		
BASE COPPER INSIDE	35um	BLIND VIA	NO		
FINISH	ENIG	BURIED VIA	NO		
SOLDER COLOR	MATTE BLACK	VIA FILL/VIA IN PAD	NO		
SILKSCREEN COLOR	WHITE	MIN. VIA SIZE	0.2mm		
DIELECTRIC MATERIAL	FR4-TG130	MIN. TRACE SPACING	0.1mm		
IMPEDANCE CONTROL	YES	OUTER LAYER MIN. TRACE WIDTH	0.1mm		
CTI	175V	INNER LAYER MIN. TRACE WIDTH	0.2mm		

	Project name		Board name
	SPARROW		SENSOR BOARD
	Designer G. Boschin		Approved Not approved
	Project Code 2021-1494		Customer BLUES
	Internal Code -		Code -

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