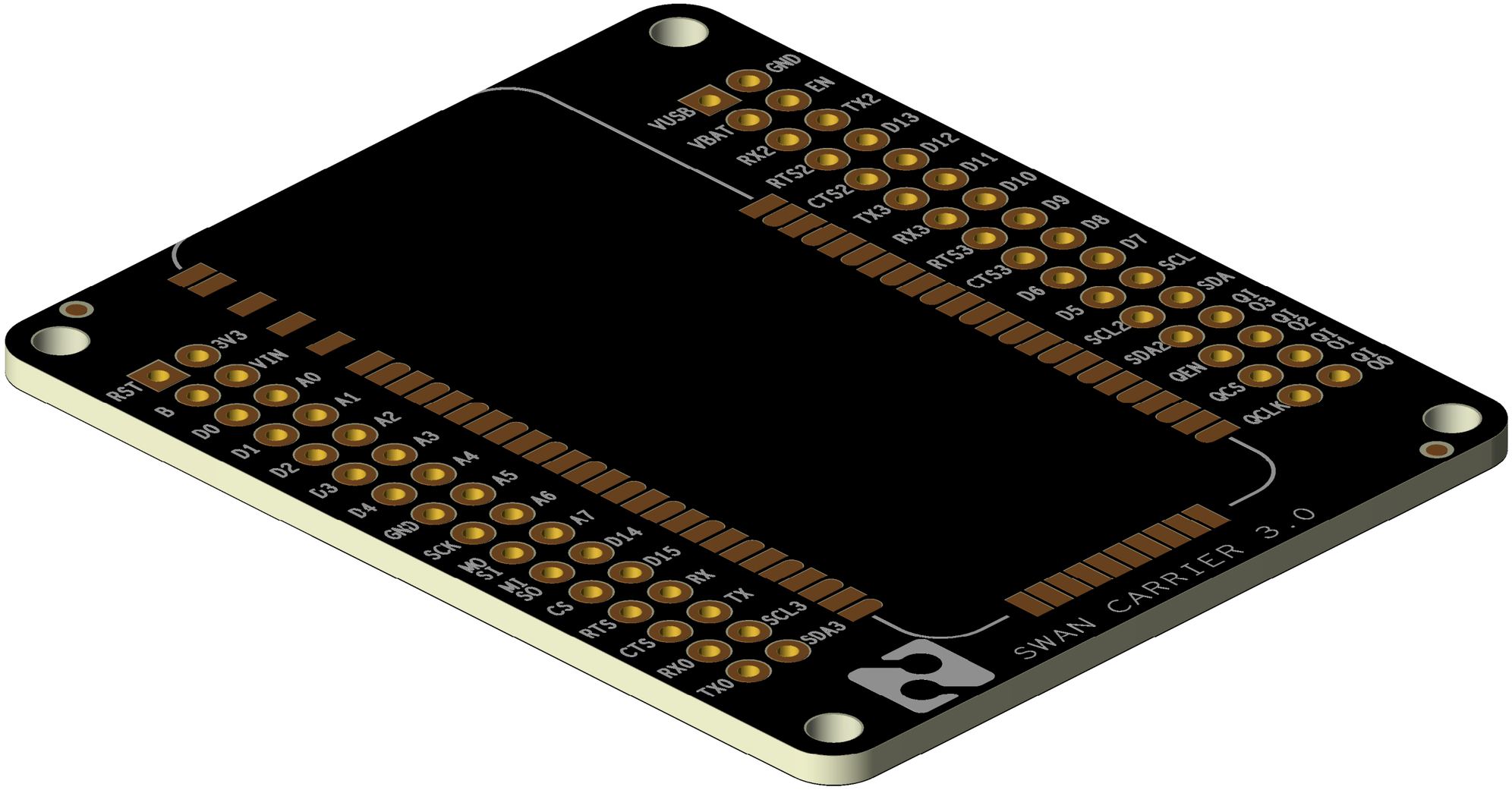
PCB DOCUMENTATION

CUSTOMER: BLUES

PROJECT: SWAN-C_V5

FAE CODE: 2021-0248

DATE: 21/04/2022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D8
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D7
D6
SCL
D5
SDA
SCL2
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SDA2
Q3
QEN
Q2
QCS
Q1
QCLK
Q0
A0
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A2
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A3
D2
A4
D3
A5
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GND
A7
SCK
D14
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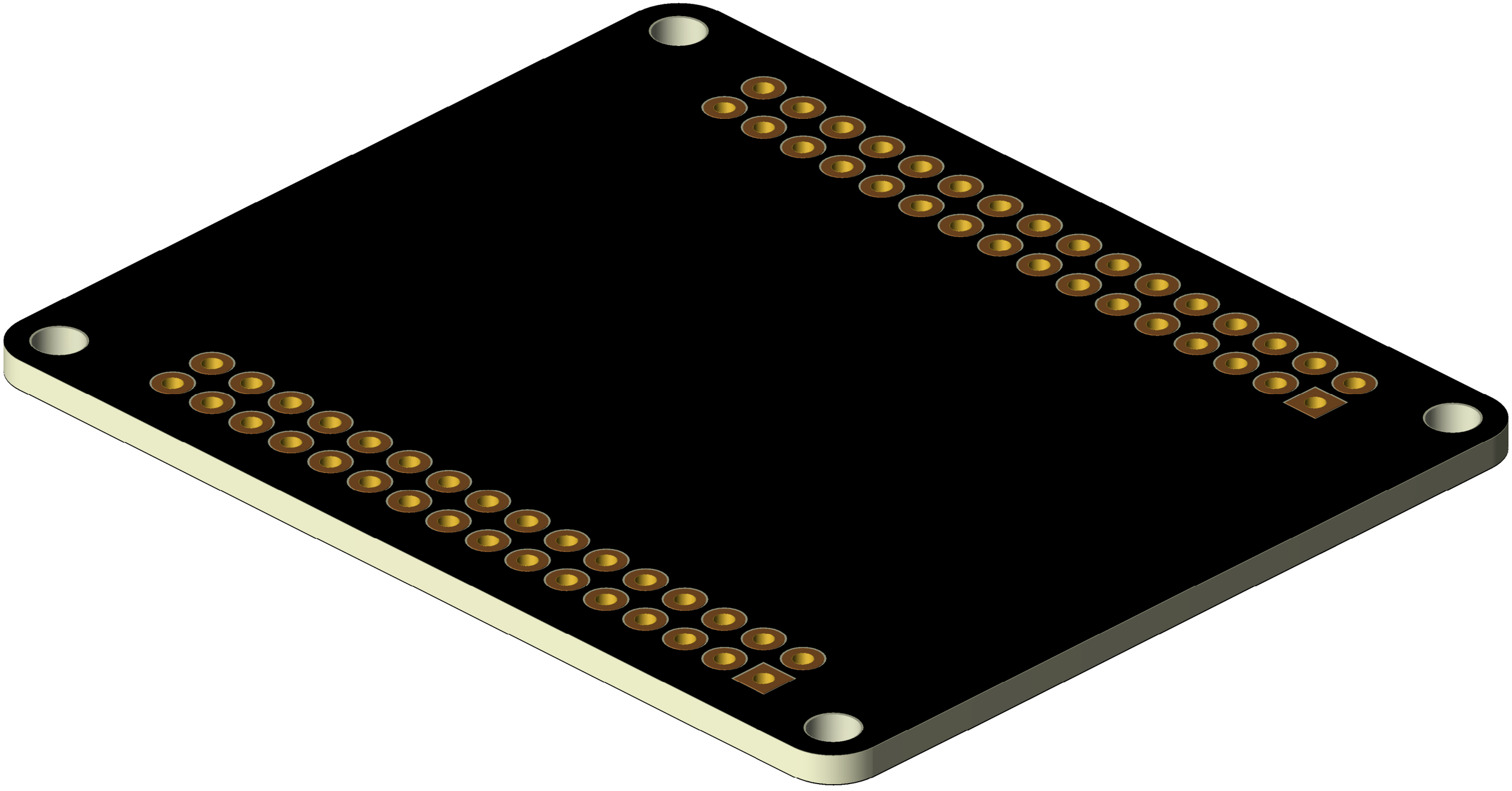
SWAN CARRIER 3.0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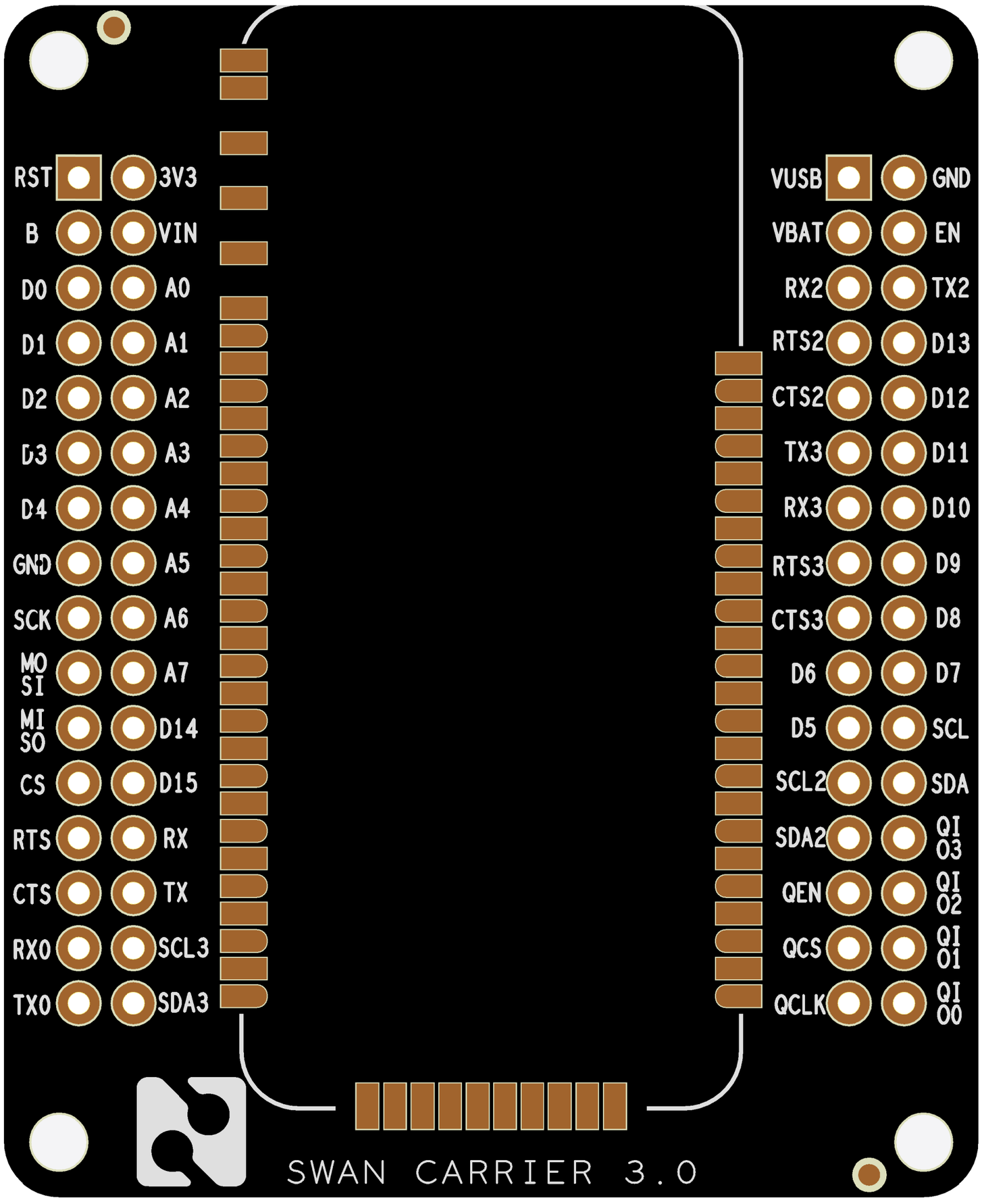
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MO SI
A7
MI SO
D14
CS
D15
RTS
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CTS
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RX0
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TX0
SDA3
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GND
VBAT
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D5
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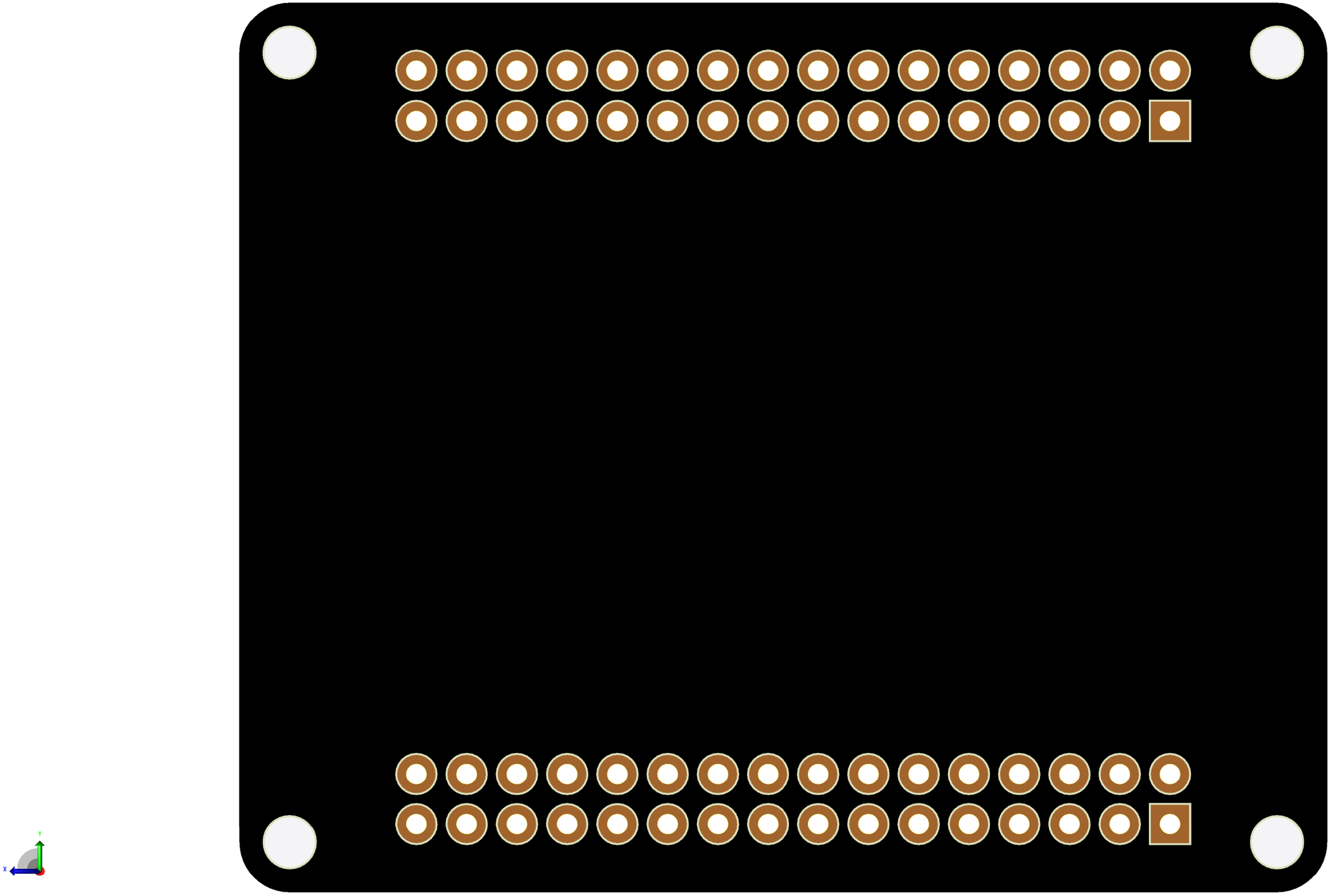
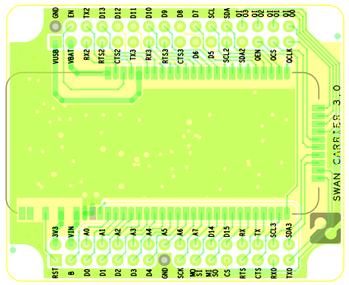
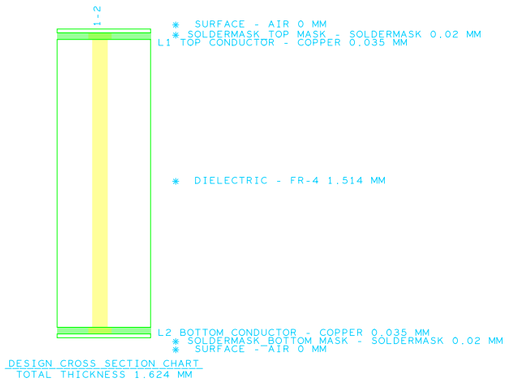






DESIGN CROSS SECTION CHART
TOTAL THICKNESS 1.624 MM

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

MANUFACTURING SPECIFICATIONS

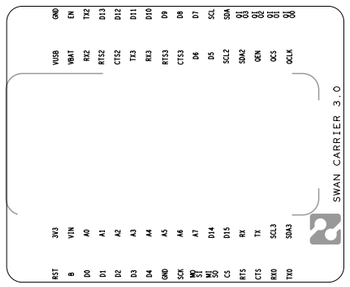
BOARD SIZE (XxYxZ)	55x45x1.6mm	IPC-6012 - IPC-A-600	CLASS 2
BOARD TOLLERANCE (X|Y|Z)	+-/0.2 | +/-0.2 | +/-10%	E-TESTING	YES
NO.OF LAYERS	2	UL-MARKING	YES
BASE COPPER OUTSIDE	18um	MICROVIA (hole < 100um)	NO
BASE COPPER INSIDE	-	BLIND VIA	NO
FINISH	HAL	BURIED VIA	NO
SOLDER COLOR	MATTE BLACK	VIA FILL/VIA IN PAD	NO
SILKSCREEN COLOR	WHITE	MIN. VIA SIZE	0.254mm
DIELECTRIC MATERIAL	FR4-TG150	MIN.TRACE SPACING	0.2mm
IMPEDANCE CONTROL	NO	OUTER LAYER MIN.TRACE WIDTH	0.2mm
CTI	175V	INNER LAYER MIN.TRACE WIDTH	-

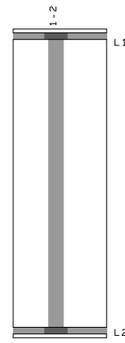
FAE TECHNOLOGY

Project name	SWAN
Board name	SWAN CARRIER
Designer	G. Boschini/M.Gregis
Approved	M.Gregis
Project Code	2021-0248
Customer	BLUES
Internal Code	-
Code	-

Via C. Battisti 136, 24025, Gazzaniga (Bg), Italy
Mail: info@fae.technology Tel: +39 035738130

Rev.	Size Page	Scale	Data
5	A3	1:1	18/02/2022





* SURFACE - AIR 0 MM
* SOLDERMASK TOP MASK - SOLDERMASK 0.02 MM
L1 TOP CONDUCTOR - COPPER 0.035 MM

* DIELECTRIC - FR-4 1.514 MM

L2 BOTTOM CONDUCTOR - COPPER 0.035 MM
* SOLDERMASK BOTTOM MASK - SOLDERMASK 0.02 MM
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Rev.: 5	Size Page: A3	Scale: 1:1	Data: 18/02/2022

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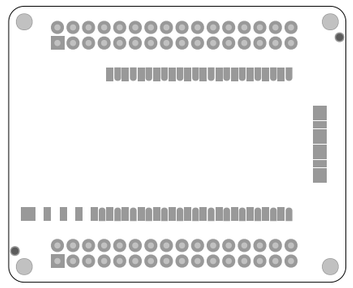

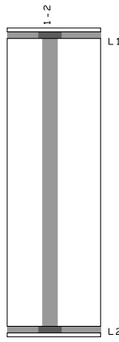

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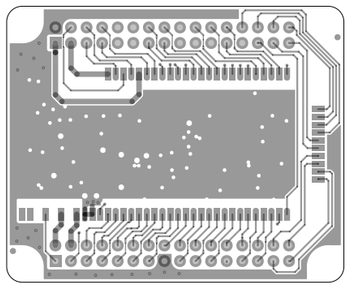

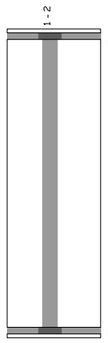

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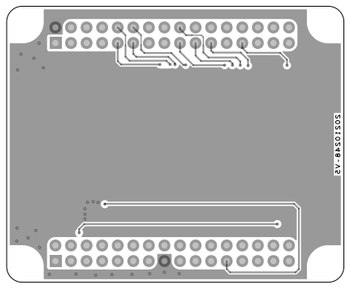

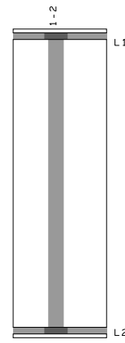

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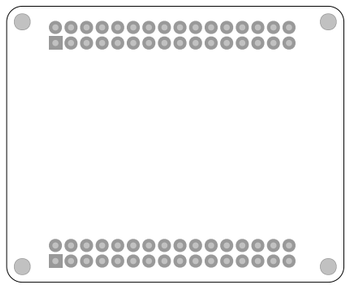

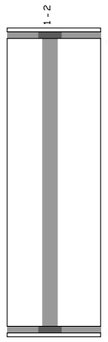

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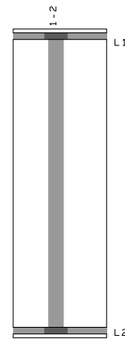

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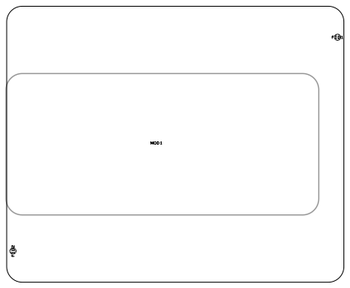

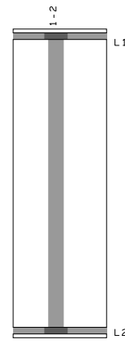

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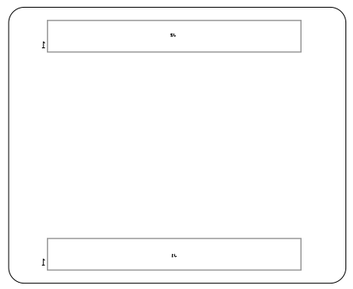

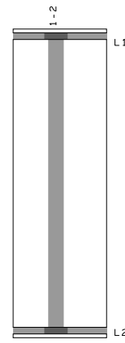

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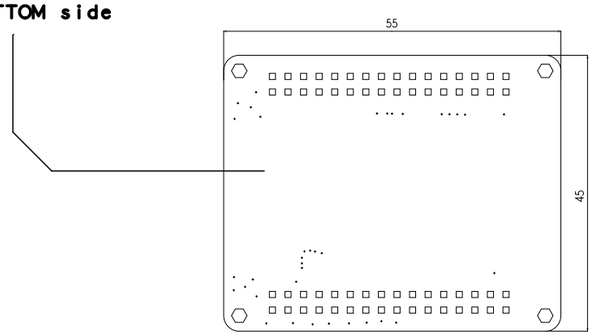
Put PCB data code and/or manufacturer logo

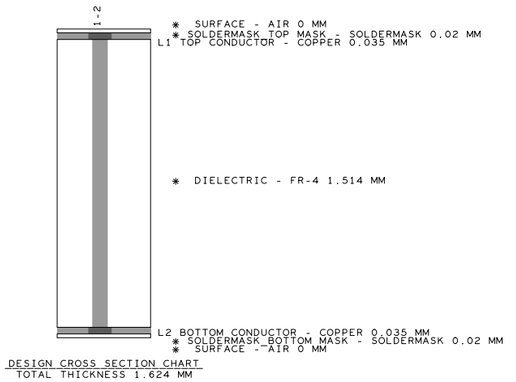
on BOTTOM side



DRILL CHART: TOP to BOTTOM

ALL UNITS ARE IN MILLIMETERS

FIGURE	FINISHED SIZE	TOLERANCE	TYPE	QTY
·	0.254	+0.075/-0.075	PLATED	36
□	1.0	+0.075/-0.075	PLATED	64
⬡	2.54	+0.075/-0.075	NON-PLATED	4



DESIGN CROSS SECTION CHART
TOTAL THICKNESS 1.624 MM

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

MANUFACTURING SPECIFICATIONS

BOARD SIZE (XxYxZ)	55x45x1.6mm	IPC-6012 - IPC-A-600	CLASS 2
BOARD TOLLERANCE (X|Y|Z)	+-/0.2 | +/-0.2 | +/-10%	E-TESTING	YES
NO.OF LAYERS	2	UL-MARKING	YES
BASE COPPER OUTSIDE	18um	MICROVIA (hole < 100um)	NO
BASE COPPER INSIDE	-	BLIND VIA	NO
FINISH	HAL	BURIED VIA	NO
SOLDER COLOR	MATTE BLACK	VIA FILL/VIA IN PAD	NO
SILKSCREEN COLOR	WHITE	MIN. VIA SIZE	0.254mm
DIELECTRIC MATERIAL	FR4-TG150	MIN.TRACE SPACING	0.2mm
IMPEDANCE CONTROL	NO	OUTER LAYER MIN.TRACE WIDTH	0.2mm
CTI	175V	INNER LAYER MIN.TRACE WIDTH	-

FAE TECHNOLOGY

Project name: SWAN			Board name: SWAN CARRIER
Designer: G. Boschini/M.Gregis			Approved: M.Gregis
Project Code: 2021-0248			Customer: BLUES
Internal Code: -			Code: -
Via C. Battisti 136, 24025, Gazzaniga (Bg), Italy Mail: info@fae.technology Tel: +39 035738130	Rev.: 5	Size Page: A3	Scale: 1:1 / Data: 18/02/2022