

DRAWING MUST BE PRINTED IN COLOR ONLY

SOLDERING SIDE VIEW (BOTTOM VIEW)

- 49 ± 0.15 FIDUCIAL
- 48.65 ± 0.15 TYPx2 HOLES
- 47.76 ± 0.15 SOLDERING PAD
- 43.64 ± 0.15 SOLDERING PAD
- 39.07 ± 0.15 SOLDERING PAD
- 37.29 ± 0.10 ADJ HOLE SLOT
- 28.28 ± 0.10 SOLDERING PAD
- 24.50  $\phi$  TYPx2 HOLES
- 5.50 ± 0.10 ADJ HOLE
- 2.60 ± 0.10 SOLDERING PAD
- 0.60 ± 0.10 TYPx2 SOLDERING PADS
- 0.35 ± 0.10 TYPx2 HOLES
- 0 FIDUCIAL
- (-6.90)

DETAIL C  
SCALE 4 : 1

Stackup table

LAYER	STACK UP	MATERIAL TYPE	A	B	C	THKN MICRON (MIL)
		UL AF57	COPPER AREA THKN (MICRON/OZ)	SMT AREA THKN (MICRON)	HOLLOWNESS AREA (MICRON)	
ENIG	AU	IMMERSION GOLD		0.05-0.10 μm		0.05 μm (0.00196)
ENIG	NI	NI PLATED		2.5-5 μm		4 μm (0.157)
COVERLAY	POLYIMIDE	MICROCOSM PCKP1041 OR SIMILAR	25	25	25	25 μm (1)
COVERLAY	ADHESIVE		35	35	35	35 μm (1.378)
BASE POLYIMIDE	COPPER	MICROCOSM PCKP1111 OR SIMILAR	1.0 (OZ)	35		35 μm (1.378)
	ADHESIVE		18	18	18	18 μm (0.709)
	POLYIMIDE		25	25	25	25 μm (1)
TOTAL MATERIALS THICKNESS			138	82.1	103.0	138 μm (5.433)
TOTAL (TARGET) THICKNESS			140	NA	NA	140 μm (5.512)
TOLERANCE			±10%	±10%	±10%	NA

- NOTES:**
- \*TOTAL THICKNESS **0.140 MM±10%** AFTER LAMINATION AND ENIG PLATING. FOR BOARD THICKNESS DETAILS REFER STACKUP TABLE
  - MATERIALS:**
    - A) POLYIMIDE HI TG (TG 220°C AS A MINIMUM).
    - B) MATERIALS TO BE IN ACCORDANCE: COVERLAY WITH IPC-4204/1, BASE (COPPER-CLAD LAMINATE) WITH IPC-4204/11.
    - C) ALL MATERIALS SHALL BE ROSH3 COMPLIANT AND COMPLY TO LEAD-FREE SOLDERING PROCESS.
    - D) EQUIVALENT MATERIAL SHALL BE HALOGEN FREE AMD APPROVED BY MEDTRONIC COMPANY.
  - FINISHING:** IMMERSION GOLD OVER NICKEL:
    - A) IMMERSION GOLD OF **0.05-0.10  $\mu$ m**, OVER **2.5-5.0  $\mu$ m** OF NICKEL ON EXPOSED COPPER.
    - B) FINISH APPLIED (TYPICALLY ON 6 PLACES) - EXPOSED SOLDERING COPPER PADS AT THE FRONT SIDE ONLY.
  - MARKING LEGEND SPOT\*\*: MANUFACTURER'S IDENTIFICATION, PART NUMBER, REVISION, DATECODE, ROSH3 COMPLIANCE MARK AND UL-94V-0 REGISTERED MATERIAL ID NUMBER.
  - CLEANINESS REQUIREMENTS FOR FINISHED PARTS ARE:
    - CLEAN PART MEETS ALL REQUIREMENTS OF SPECIFICATION AND APPEARANCE.
    - CLEAN PART IS FREE OF ANY FOREIGN MATTER,; E.G. ANY TAPE, STICKERS, PAINT, OR STAIN OVERSPRAY, ADHESIVE, OIL, GREASE, BIOLOGICAL PARTICLES, FIBERS, WAXES, SALT, CHEMICALS RESIDUES, INORGANIC DUST PARTICLES. BIOBURDEN CLEANLINESS SUBJECT IS OUT OF SCOPE OF THIS DEFINITION.
    - CLEAN PART IS READY FOR USAGE IN SOLDERING PROCESS AS IT WAS EXTRACTED OUT OF ITS PACKAGE WITHOUT ANY ADDITIONAL PREPARATION OR TREATMENT.
  - FOR ITEM PACKAGING, HANDLING AND STORAGE REQUIREMENTS REFER A PACKAGING INSTRUCTION DOCUMENT.

ASSET # (If applicable)

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Item & its package must be RoHS compliance related to European directive EU 2015/863

MATERIAL: SEE NOTES

HEAT TREATMENT: N/A

FINISH: N/A

ALL DIM. ARE IN mm UNLESS OTHERWISE SPECIFIED

UNSPECIFIED TOLERANCE: Linear ±0.1 Centers distance ±0.1 Angles ±30'

UNSPECIFIED SURFACE FINISH: N/A

DRAWN: Vitaly F. XXXIAGILE 11-Sep-2022

DESIGN: Vitaly F. XXXIAGILE XXXIAGILE

APPR: Chen M. XXXIAGILE XXXIAGILE

DESCRIPTION: PCB Patch Flex Antenna

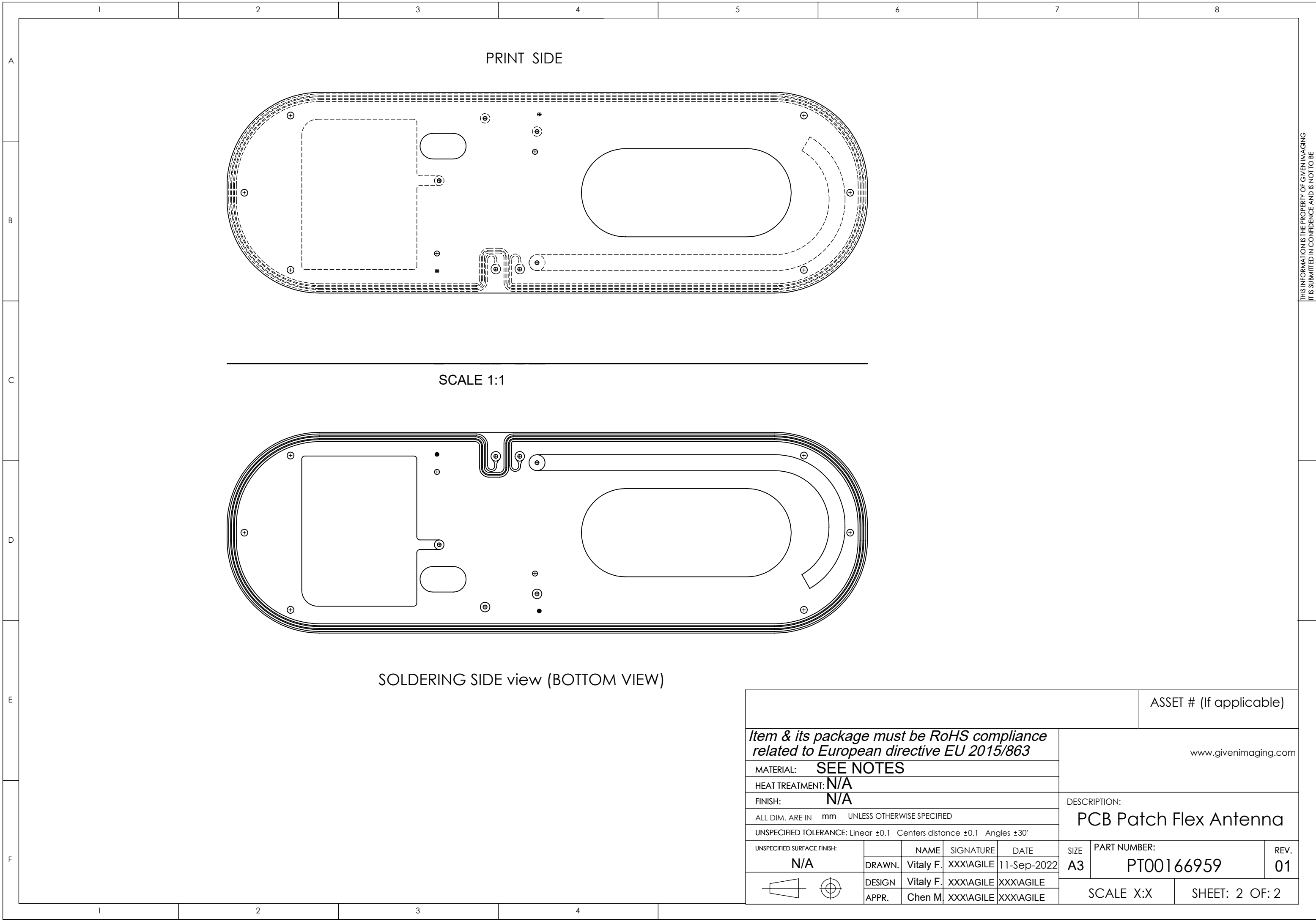
SIZE: A3

PART NUMBER: PT00166959

REV. 01

SCALE: X:X

SHEET: 1 OF: 2



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