

Heartrate-DevKit-HW Fabrication Document

Layer Stack Legend

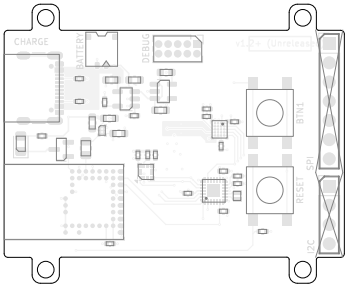
	Material	Layer	Thickness	Dielectric	Type	Gerber
		F,Paste			Paste Mask	
		F,Silkscreen			Legend	GBR
		F,Mask	0,01mm		Solder Mask	GBR
	Copper	F,Cu	0,035mm (1oz)		Signal	GBR
	Core		0,196mm	FR4	Dielectric	
	Copper	Inner1	0,035mm (1oz)		Plane	GBR
	Prepreg		0,43mm	FR4	Dielectric	
	Copper	Inner2	0,035mm (1oz)		Plane	GBR
	Core		0,196mm	FR4	Dielectric	
	Copper	B,Cu	0,035mm (1oz)		Signal	GBR
		B,Mask	0,01mm		Solder Mask	GBR
		B,Silkscreen			Legend	GBR
		B,Paste			Paste Mask	

Total thickness: 0,982mm
Note: external layer thicknesses are specified after plating

Impedance Table

Transmission Line	Impedance [ohms]	Tolerance [%]	Layer	Trace Width [mm]	Gap [mm]	Ref. Layers
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Top Fabrication (Scale 1:1)



FABRICATION NOTES (UNLESS OTHERWISE SPECIFIED)

- 1) FABRICATE PER IPC-6012A CLASS 2.
- 2) OUTLINE DEFINED IN SEPARATE GERBER FILE WITH "Edge_Cuts.GBR" SUFFIX.

DIMENSIONS OF CIRCUMSIZED RECTANGLE SHOWN ON THIS DRAWING FOR REFERENCE ONLY.
- 3) SEE SEPARATE DRILL FILES WITH ".DRL" SUFFIX FOR HOLE LOCATIONS.

SELECTED HOLE LOCATIONS SHOWN ON THIS DRAWING FOR REFERENCE ONLY.
- 4) SURFACE FINISH: HAL SNPB
- 5) SOLDERMASK ON BOTH SIDES OF THE BOARD SHALL BE LPI, COLOR GREEN.
- 6) SILK SCREEN LEGEND TO BE APPLIED PER LAYER STACKUP USING BLACK NON-CONDUCTIVE EPOXY INK.
- 7) ALL VIAS ARE TENTED ON BOTH SIDES UNLESS SOLDERMASK OPENED IN GERBER.
- 8) VENDOR SHOULD FOLLOW ROHS COMPLIANT PROCESS AND Pb FREE FOR MANUFACTURING
- 9) PCB MATERIAL REQUIREMENTS:

A. FLAMMABILITY RATING MUST MEET OR EXCEED UL94V-0 REQUIREMENTS.

B. Tg 150 C OR EQUIVALENT.

C. EQUIVALENT MATERIAL SHALL BE RoHS COMPLIANT, HALOGEN FREE AND APPROVED BY ZSWATCH.
- 10) DESIGN GEOMETRY MINIMUM FEATURE SIZES:

BOARD SIZE

BOARD THICKNESS

TRACE WIDTH

TRACE TO TRACE

MIN. HOLE (PTH)

MIN. HOLE (NPTH)

ANNULAR RING

COPPER TO HOLE

COPPER TO EDGE

HOLE TO HOLE

45.000 x 36.900 mm

0.982 mm

0.150 mm

0.100 mm

0.150 mm

0.650 mm

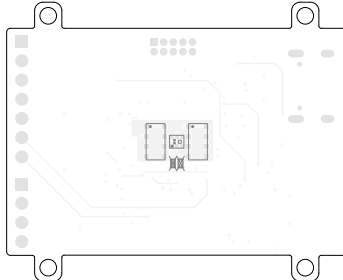
0.100 mm

0.100 mm

0.100 mm

0.100 mm

	<div>Comments:</div> <div>ZSWatch</div>	<div>Company:</div> <div>ZSWatch</div>		<div>Variant:</div> <div>CHECKED</div>	<div>Git Hash:</div> <div>945e849</div>
		<div>Board Name:</div> <div>Heartrate-DevKit-HW</div>		<div>Project Name:</div> <div>ZSWatch Heartrate-DevKit</div>	
	<div>Sheet Title:</div> <div>Top Fabrication (Scale 1:1)</div>	<div>File Name:</div> <div>ZSWatch-HeartRate.kicad_pcb</div>	<div>Designer:</div> <div>Daniel Kampert</div>	<div>Date:</div> <div>2025-07-13</div>	<div>Revision:</div> <div>v1.2+ (Unreleased)</div>
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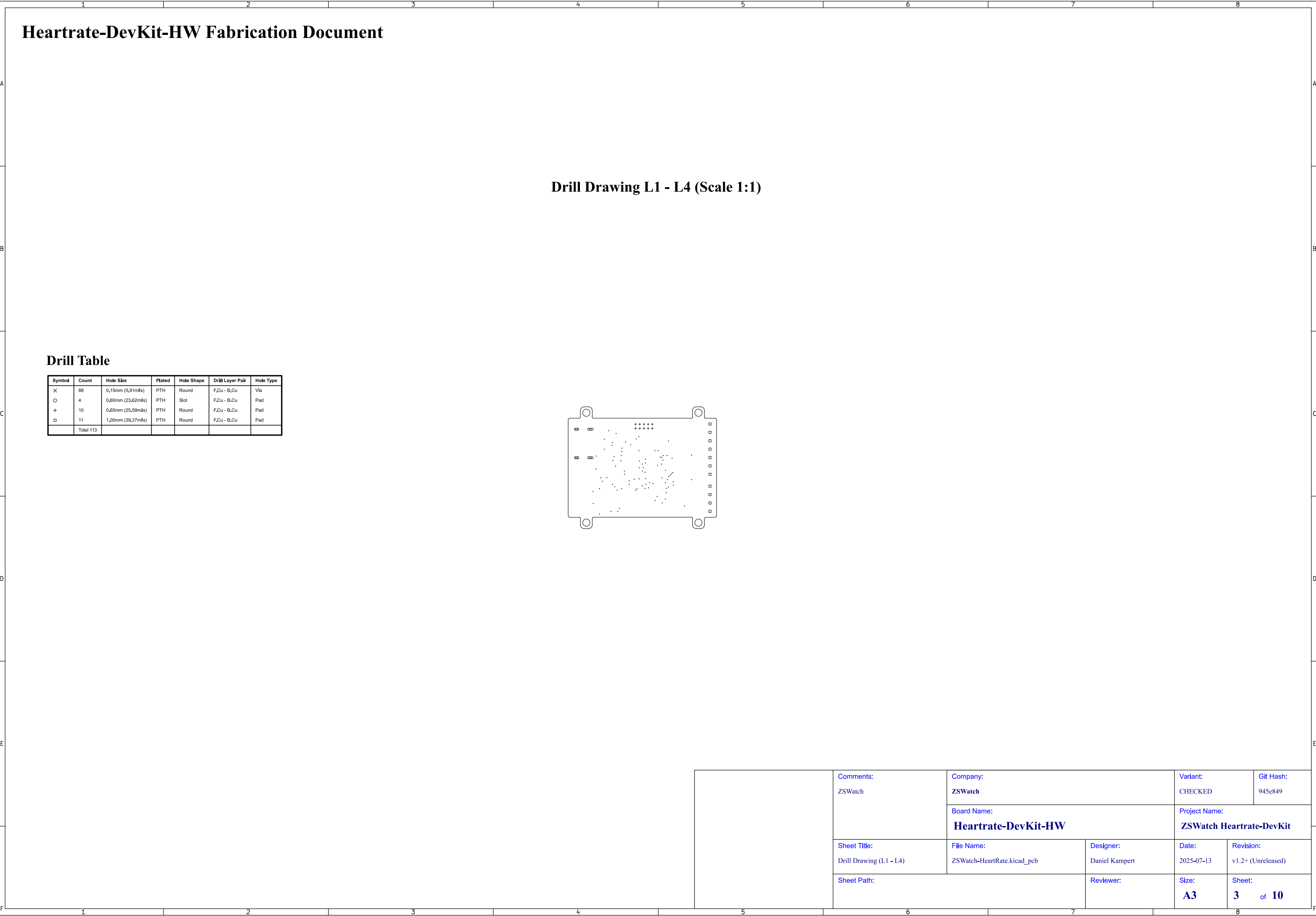
Heartrate-DevKit-HW Fabrication Document							
Bottom Fabrication (Scale 1:1)							
							
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		Board Name: Heartrate-DevKit-HW		Project Name: ZSWatch Heartrate-DevKit			
	Sheet Title: Bottom Fabrication (Scale 1:1)	File Name: ZSWatch-HeartRate.kicad_pcb	Designer: Daniel Kampert	Date: 2025-07-13	Revision: v1.2+ (Unreleased)		
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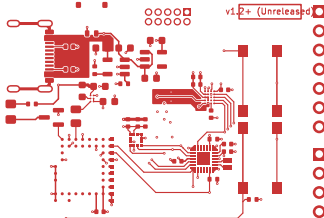
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Heartrate-DevKit-HW Fabrication Document							
Bottom Test Points (Scale 1:1)							
							
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Heartrate-DevKit-HW Fabrication Document												
F.Cu (Scale 1:1)												
												
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Sheet Title:
F.Cu (Scale 1:1)

File Name:
ZSWatch-HeartRate.kicad_pcb

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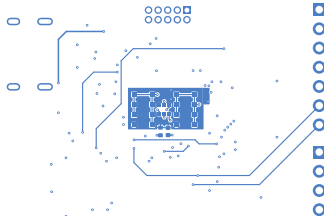
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7 of 10

1	2	3	4	5	6	7	8	
A	<h1>Heartrate-DevKit-HW Fabrication Document</h1>							A
B	<h2>Inner1 (Scale 1:1)</h2>							B
C								C
D								D
E								E
F	1	2	3	4	5	6	7	8

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