











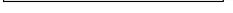


Watch-DevKit-HW Fabrication Document

Layer Stack Legend

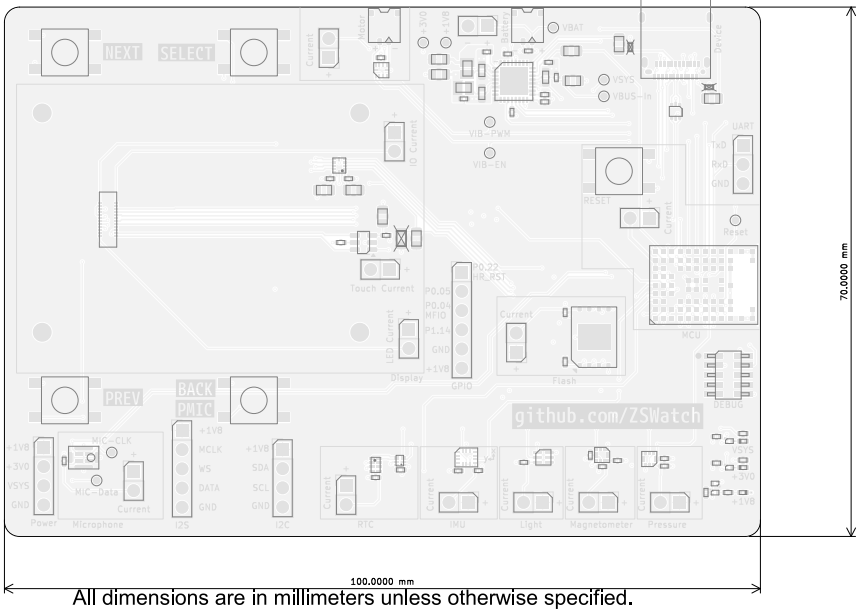
	Material	Layer	Thickness	Dielectric	Type	Gerber
	F,Paste				Paste Mask	
	F,Silkscreen				Legend	GBR
	F,Mask		0,01mm		Solder Mask	GBR
	Copper F,Cu		0.035mm (1oz)		Signal	GBR
	Core		0,1855mm	FR4	Dielectric	
	Copper Inner1 (GND)		0.035mm (1oz)		Plane	GBR
	Prepreg		1,03mm	FR4	Dielectric	
	Copper Inner2		0.035mm (1oz)		Plane	GBR
	Core		0,1855mm	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: 1.561mm
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)

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

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

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

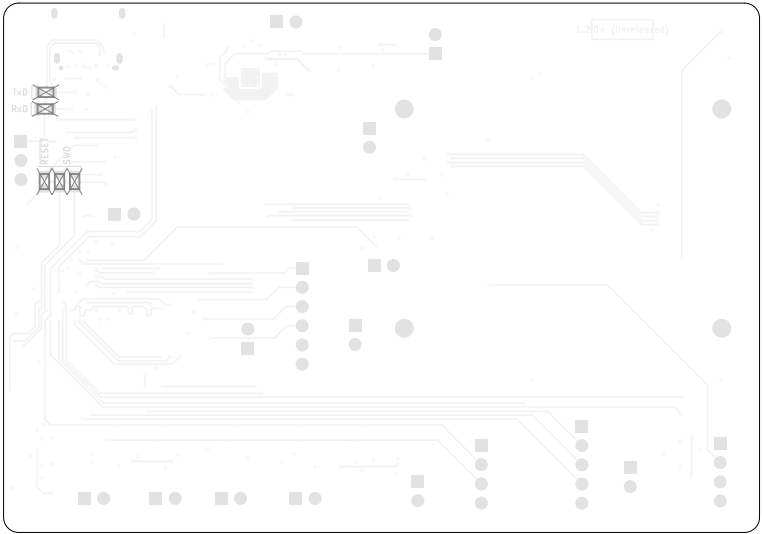
A. FLAMMABILITY RATING MUST MEET OR EXCEED UL94V-0 REQUIREMENTS.
B. Tg 150 C OR EQUIVALENT.
C. EQUIVALENT MATERIAL SHALL BE RoHS COMPLIANT, HALOGEN FREE AND APPROVED BY ZSWATCH.
- DESIGN GEOMETRY MINIMUM FEATURE SIZES:

BOARD SIZE 100.000 × 70.000 mm
BOARD THICKNESS 1.561 mm
TRACE WIDTH 0.127 mm
TRACE TO TRACE 0.125 mm
MIN. HOLE (PTH) 0.250 mm
MIN. HOLE (NPTH) 0.650 mm
ANNULAR RING 0.100 mm
COPPER TO HOLE 0.125 mm
COPPER TO EDGE 0.125 mm
HOLE TO HOLE 0.250 mm

	Comments: ZSWatch	Company: ZSWatch	Variant: CHECKED	Git Hash: b9ae5f7
	Board Name: Watch-DevKit-HW		Project Name: ZSWatch Watch-DevKit	
	Sheet Title: Top Fabrication (Scale 1:1)	File Name: ZSWatch-Watch-DevKit.kicad_pcb	Designer: Daniel Kampert	Date: 2025-07-13
	Sheet Path:		Reviewer:	Size: A3
				Revision: 1.2.0+ (Unreleased)
				Sheet: 1 of 10

Watch-DevKit-HW Fabrication Document

Bottom Fabrication (Scale 1:1)



All dimensions are in millimeters unless otherwise specified.

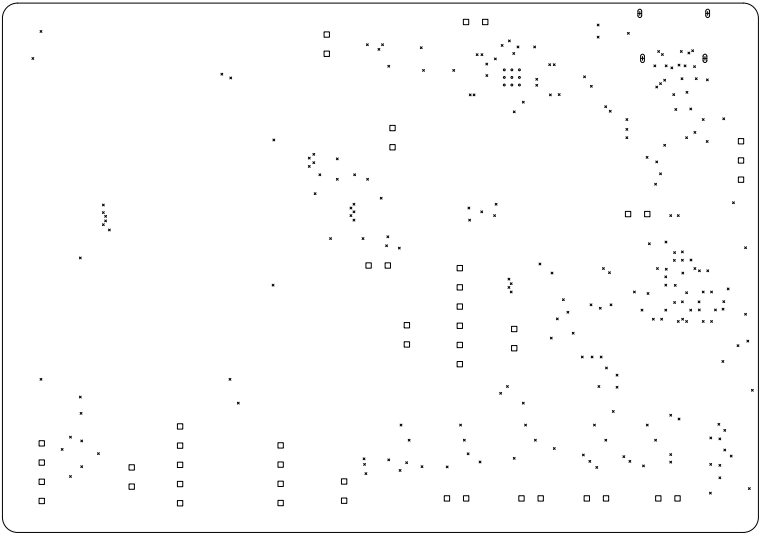
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	Sheet Title: Bottom Fabrication (Scale 1:1)	File Name: ZSWatch-Watch-DevKit.kicad_pcb	Designer: Daniel Kampert	Date: 2025-07-13	Revision: 1.2.0+ (Unreleased)
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Watch-DevKit-HW Fabrication Document

Drill Drawing L1 - L4 (Scale 1:1)

Drill Table

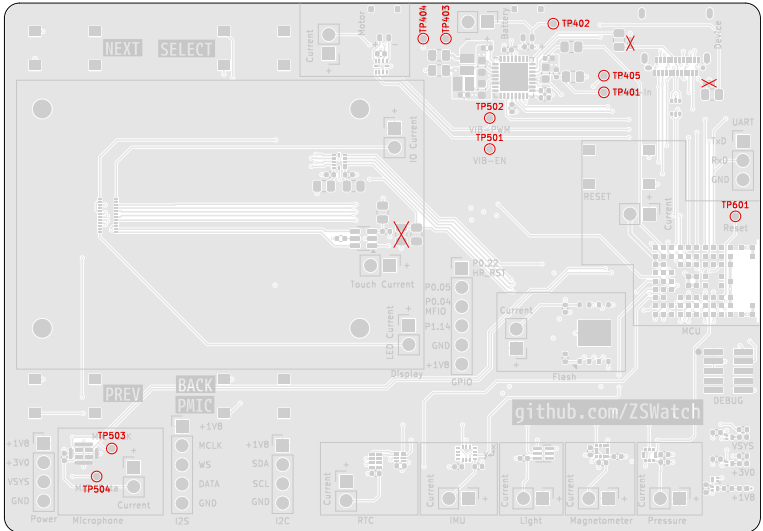
Symbol	Count	Hole Size	Plated	Hole Shape	Drill Layer Pair	Hole Type
X	236	0,25mm (9,84mils)	PTH	Round	F,Cu - B,Cu	Via
O	9	0,25mm (9,84mils)	PTH	Round	F,Cu - B,Cu	Pad
+	4	0,50mm (19,69mils)	PTH	Slot	F,Cu - B,Cu	Pad
□	48	1,00mm (39,37mils)	PTH	Round	F,Cu - B,Cu	Pad
Total 297						



	Comments: ZSWatch	Company: ZSWatch		Variant: CHECKED	Git Hash: b9ae5f7
		Board Name: Watch-DevKit-HW		Project Name: ZSWatch Watch-DevKit	
	Sheet Title: Drill Drawing (L1 - L4)	File Name: ZSWatch-Watch-DevKit.kicad_pcb	Designer: Daniel Kampert	Date: 2025-07-13	Revision: 1.2.0+ (Unreleased)
	Sheet Path:		Reviewer:	Size: A3	Sheet: 3 of 10

Watch-DevKit-HW Fabrication Document

Top Test Points (Scale 1:1)



Ref.	Net	X [mm]	Y [mm]
TP401	VBUS-In	237.30	-125.80
TP402	VBAT	230.60	-116.72
TP403	+1V8	216.40	-118.70
TP404	+3V0	213.40	-118.70
TP405	VSYS	237.30	-123.60
TP501	VIB-EN	222.20	-133.30
TP502	VIB-PWM	222.20	-129.20
TP503	MIC-CLK	172.20	-172.90
TP504	MIC-DATA	170.20	-176.60
TP601	RESETn	254.70	-142.20

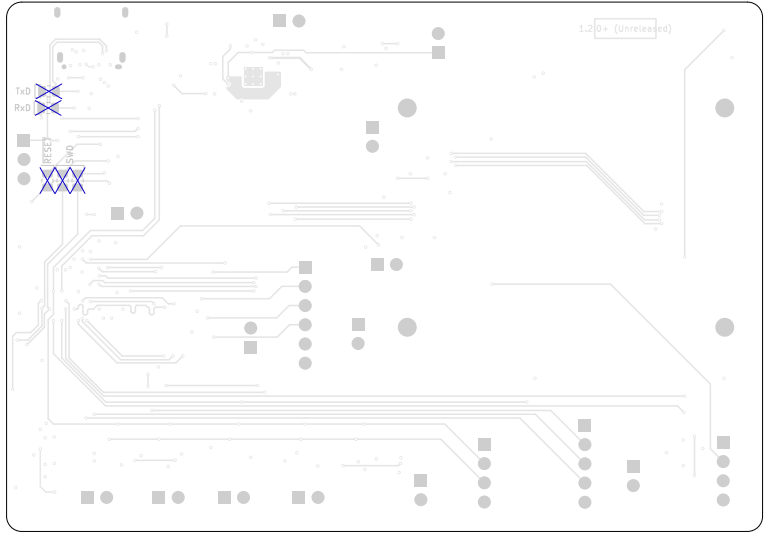
Ref.	Net	X [mm]	Y [mm]
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	Board Name: Watch-DevKit-HW		Project Name: ZSWatch Watch-DevKit	
	Sheet Title: Top Test Points (Scale 1:1)	File Name: ZSWatch-Watch-DevKit.kicad_pcb	Designer: Daniel Kampert	Date: 2025-07-13
Sheet Path:			Reviewer:	Size: A3
				Revision: 1.2.0+ (Unreleased)
				Sheet: 5 of 10

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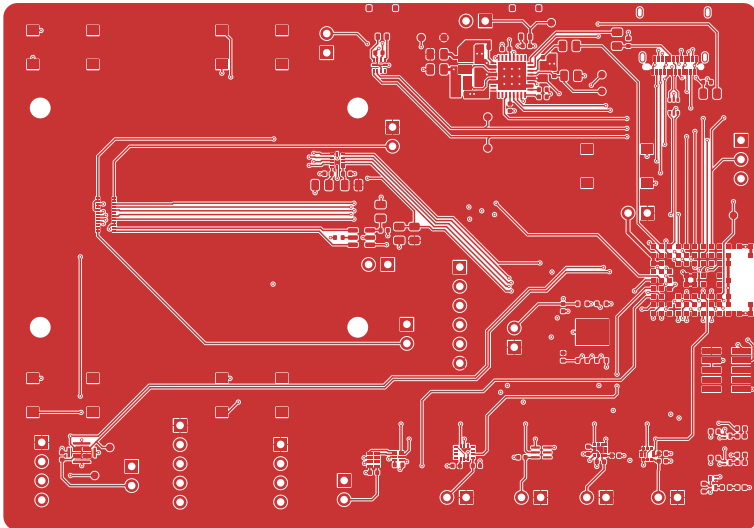

A

Bottom Test Points (Scale 1:1)



	Comments:	Company:		Variant:	Git Hash:
	ZSWatch	ZSWatch		CHECKED	b9ae5f7
		Board Name:		Project Name:	
		Watch-DevKit-HW		ZSWatch Watch-DevKit	
Sheet Title:	File Name:	Designer:	Date:	Revision:	
Bottom Test Points (Scale 1:1)	ZSWatch-Watch-DevKit.kicad_pcb	Daniel Kampert	2025-07-13	1.2.0+ (Unreleased)	
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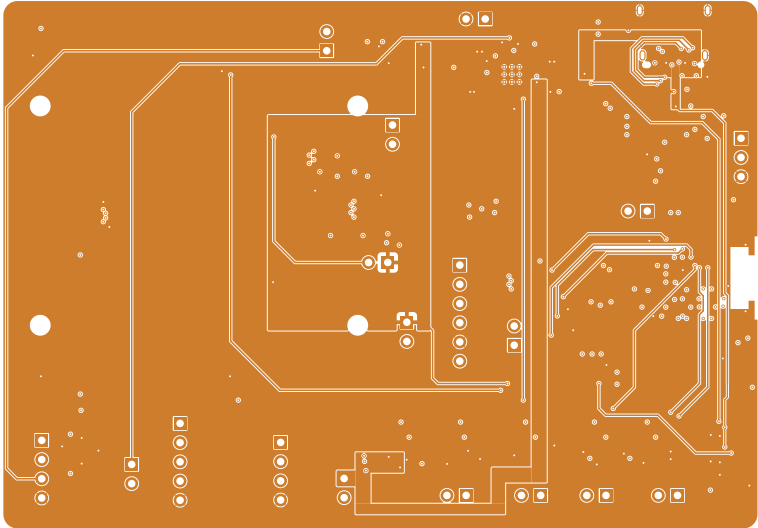
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1	2	3	4	5	6	7	8
Watch-DevKit-HW Fabrication Document							
A							
B	F.Cu (Scale 1:1)						
C							
D							
E							
F		Comments:	Company:		Variant:	Git Hash:	
		ZSWatch	ZSWatch		CHECKED	b9ae5f7	
			Board Name:		Project Name:		
			Watch-DevKit-HW		ZSWatch Watch-DevKit		
		Sheet Title:	File Name:	Designer:	Date:	Revision:	
		F.Cu (Scale 1:1)	ZSWatch-Watch-DevKit.kicad_pcb	Daniel Kampert	2025-07-13	1.2.0+ (Unreleased)	
		Sheet Path:		Reviewer:	Size:	Sheet:	
					A3	7 of 10	
1	2	3	4	5	6	7	8

Watch-DevKit-HW Fabrication Document									
Inner1 (GND) (Scale 1:1)									
									
			Comments: ZSWatch		Company: ZSWatch		Variant: CHECKED	Git Hash: b9ae5f7	
					Board Name: Watch-DevKit-HW		Project Name: ZSWatch Watch-DevKit		
			Sheet Title: Inner1 (GND) (Scale 1:1)		File Name: ZSWatch-Watch-DevKit.kicad_pcb		Designer: Daniel Kampert	Date: 2025-07-13	Revision: 1.2.0+ (Unreleased)
			Sheet Path:			Reviewer:		Size: A3	Sheet: 8 of 10

Watch-DevKit-HW Fabrication Document

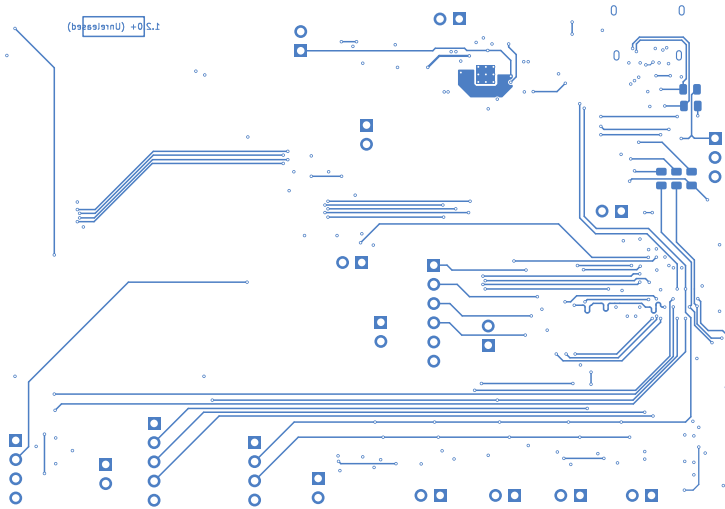
Inner2 (Scale 1:1)



	Comments: ZSWatch		Company: ZSWatch		Variant: CHECKED	Git Hash: b9ae5f7
			Board Name: Watch-DevKit-HW		Project Name: ZSWatch Watch-DevKit	
	Sheet Title: Inner2 (Scale 1:1)		File Name: ZSWatch-Watch-DevKit.kicad_pcb	Designer: Daniel Kampert	Date: 2025-07-13	Revision: 1.2.0+ (Unreleased)
	Sheet Path:			Reviewer:	Size: A3	Sheet: 9 of 10

Watch-DevKit-HW Fabrication Document

B.Cu (Scale 1:1)



	Comments:	Company:		Variant:	Git Hash:
	ZSWatch	ZSWatch		CHECKED	b9ae5f7
		Board Name:		Project Name:	
		Watch-DevKit-HW		ZSWatch Watch-DevKit	
	Sheet Title:	File Name:	Designer:	Date:	Revision:
	B.Cu (Scale 1:1)	ZSWatch-Watch-DevKit.kicad_pcb	Daniel Kampert	2025-07-13	1.2.0+ (Unreleased)
	Sheet Path:		Reviewer:	Size:	Sheet:
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