

Watch-DevKit-HW Fabrication Document

Layer Stack Legend

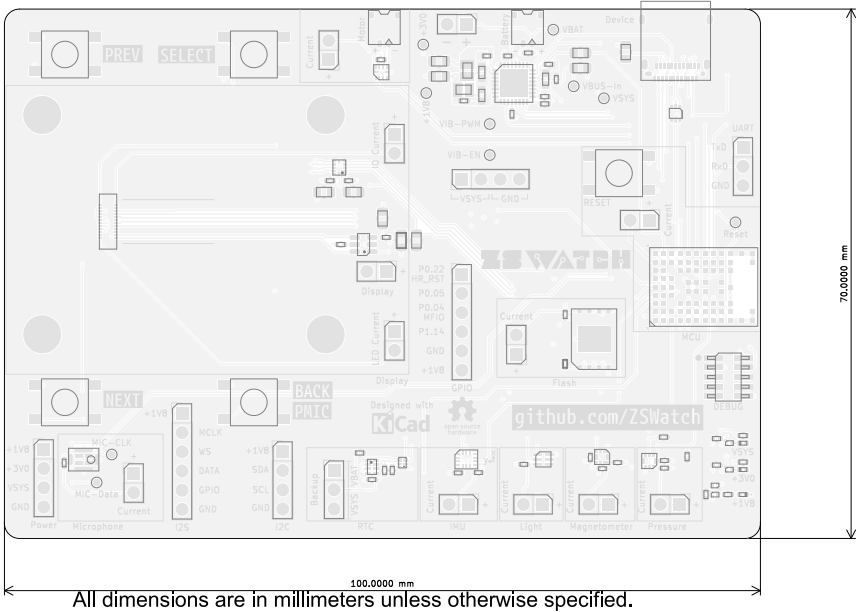
	Material	Layer	Thickness	Dielectric	Type	Gerber
	F,Paste				Paste Mask	
	F,Silkscreen				Legend	GBR
	F,Mask		0,01mm		Solder Mask	GBR
	Copper	F,Cu	0,035mm (1,00oz)		Signal	GBR
	Core		0,196mm	FR4	Dielectric	
	Copper	Inner1 (GND)	0,035mm (1,00oz)		Plane	GBR
	Prepreg		1,03mm	FR4	Dielectric	
	Copper	Inner2	0,035mm (1,00oz)		Plane	GBR
	Core		0,196mm	FR4	Dielectric	
	Copper	B,Cu	0,035mm (1,00oz)		Signal	GBR
	B,Mask		0,01mm		Solder Mask	GBR
	B,Silkscreen				Legend	GBR
	B,Paste				Paste Mask	

Total thickness: 1,582mm
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 LEAD-FREE
- 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:

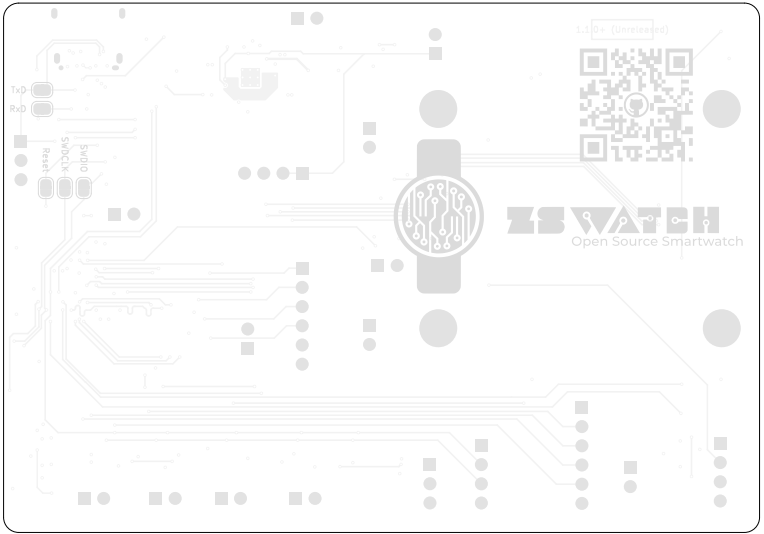
A. FLAMMABILITY RATING MUST MEET OR EXCEED UL94V-0 REQUIREMENTS.
B. Tg 150 C OR EQUIVALENT.
- DESIGN GEOMETRY MINIMUM FEATURE SIZES:

BOARD SIZE 100,000 × 70,000 mm
BOARD THICKNESS 1,582 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: PRELIMINARY	Git Hash: 9176898
		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	Revision: 1.1.0+ (Unreleased)
	Sheet Path:		Reviewer:	Size: A3	Sheet: 1 of 10

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Bottom Fabrication (Scale 1:1)

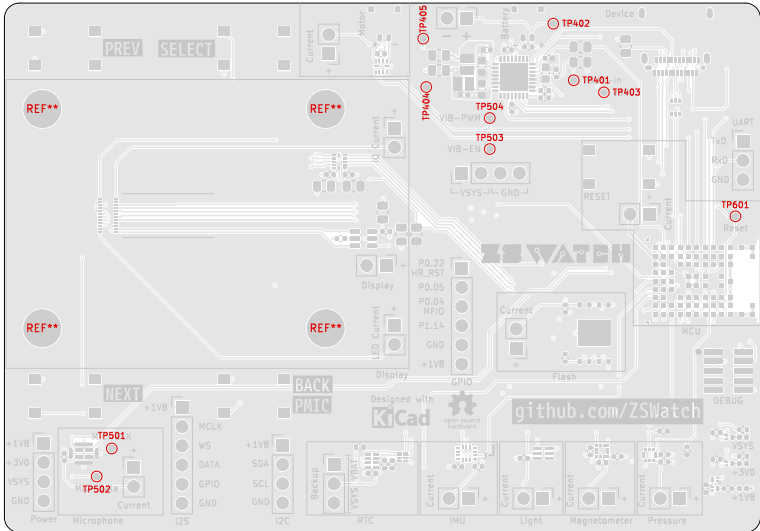


All dimensions are in millimeters unless otherwise specified.

	Comments: ZSWatch	Company: ZSWatch		Variant: PRELIMINARY	Git Hash: 9176898
		Board Name: Watch-DevKit-HW		Project Name: ZSWatch Watch-DevKit	
	Sheet Title: Bottom Fabrication (Scale 1:1)	File Name: ZSWatch-Watch-DevKit.kicad_pcb	Designer: Daniel Kampert	Date: 2025-07-13	Revision: 1.1.0+ (Unreleased)
	Sheet Path:		Reviewer:	Size: A3	Sheet: 2 of 10

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Top Test Points (Scale 1:1)



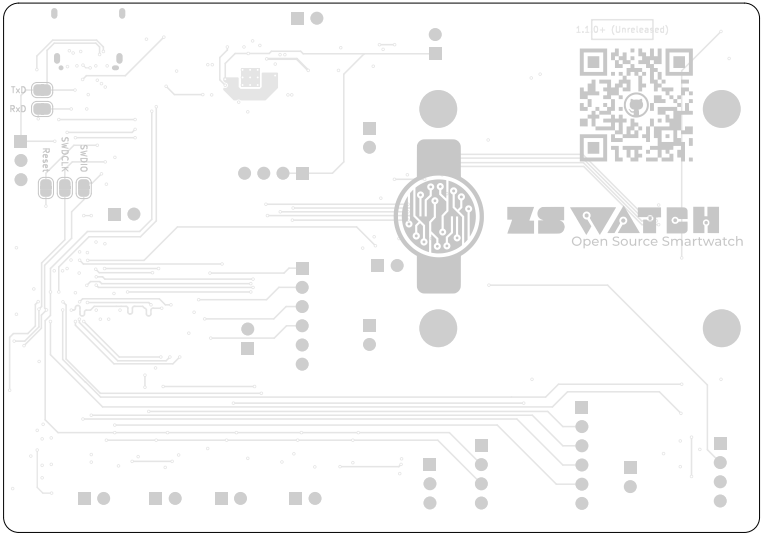
Ref.	Net	X [mm]	Y [mm]
TP401	VBUS-In	233.30	-124.20
TP402	VBAT	230.60	-116.72
TP403	VSYS	237.30	-125.80
TP404	+1V8	213.80	-125.10
TP405	+3V0	213.40	-118.70
TP501	MIC-CLK	172.20	-172.90
TP502	MIC-DATA	170.20	-176.60
TP503	VIB-EN	222.20	-133.30
TP504	VIB-PWM	222.20	-129.20
TP601	RESETn	254.70	-142.20

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: 1.1.0+ (Unreleased)
				Sheet: 5 of 10

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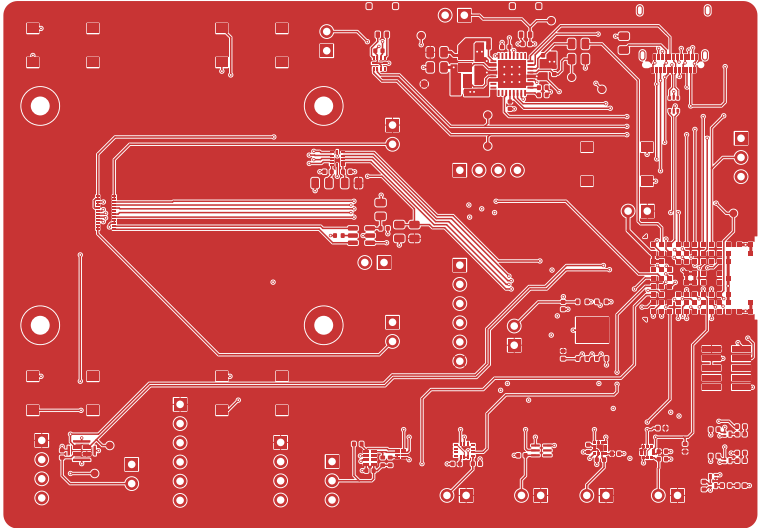
Bottom Test Points (Scale 1:1)



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		Board Name: Watch-DevKit-HW		Project Name: ZSWatch Watch-DevKit	
	Sheet Title: Bottom Test Points (Scale 1:1)	File Name: ZSWatch-Watch-DevKit.kicad_pcb	Designer: Daniel Kampert	Date: 2025-07-13	Revision: 1.1.0+ (Unreleased)
	Sheet Path:		Reviewer:	Size: A3	Sheet: 6 of 10

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F.Cu (Scale 1:1)



	Comments: ZSWatch		Company: ZSWatch		Variant: PRELIMINARY	Git Hash: 9176898
			Board Name: Watch-DevKit-HW		Project Name: ZSWatch Watch-DevKit	
	Sheet Title: F.Cu (Scale 1:1)		File Name: ZSWatch-Watch-DevKit.kicad_pcb	Designer: Daniel Kampert	Date: 2025-07-13	Revision: 1.1.0+ (Unreleased)
	Sheet Path:			Reviewer:	Size: A3	Sheet: 7 of 10

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Inner1 (GND) (Scale 1:1)							
							
		Comments: ZSWatch		Company: ZSWatch		Variant: PRELIMINARY	Git Hash: 9176898
				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: 1.1.0+ (Unreleased)	
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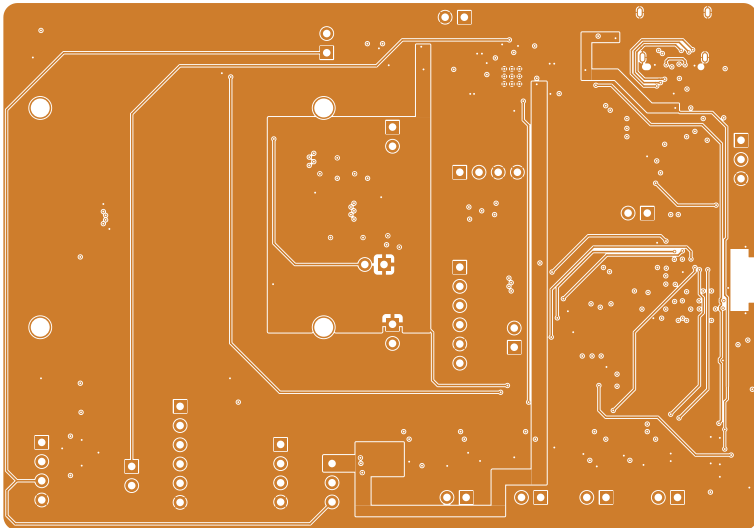
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Watch-DevKit-HW Fabrication Document

B

Inner2 (Scale 1:1)

C



D

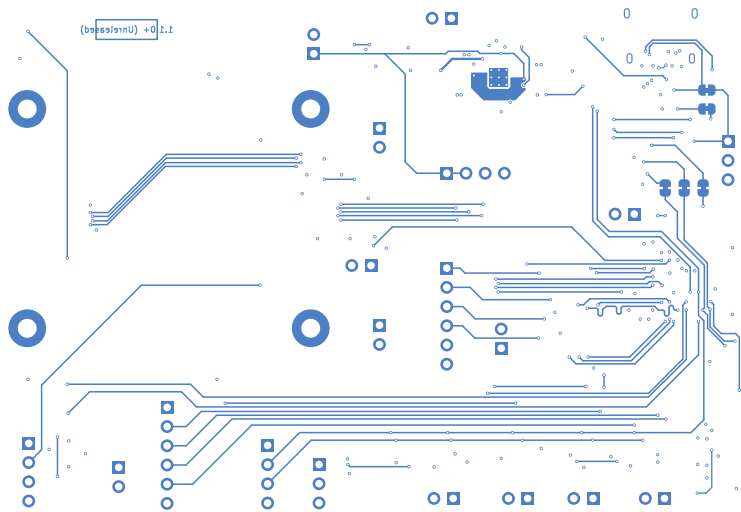
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	Comments: ZSWatch		Company: ZSWatch		Variant: PRELIMINARY	Git Hash: 9176898
			Board Name: Watch-DevKit-HW		Project Name: ZSWatch Watch-DevKit	
	Sheet Title: Inner2 (Scale 1:1)	File Name: ZSWatch-Watch-DevKit.kicad_pcb	Designer: Daniel Kampert	Date: 2025-07-13	Revision: 1.1.0+ (Unreleased)	
	Sheet Path:		Reviewer:	Size: A3	Sheet: 9 of 10	

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B.Cu (Scale 1:1)



	Comments: ZSWatch		Company: ZSWatch		Variant: PRELIMINARY	Git Hash: 9176898
			Board Name: Watch-DevKit-HW		Project Name: ZSWatch Watch-DevKit	
	Sheet Title: B.Cu (Scale 1:1)		File Name: ZSWatch-Watch-DevKit.kicad_pcb	Designer: Daniel Kampert	Date: 2025-07-13	Revision: 1.1.0+ (Unreleased)
	Sheet Path:			Reviewer:	Size: A3	Sheet: 10 of 10