REIDITE ELECTRONICS

XIPHOS Mechanical Drawings

Detailed mechanical reference

Carrier-board design guide

v1.0

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Company:	REIDITE Electronics
Document:	XIPHOS mechanical drawing package
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1 Release evolution

The following table lists document releases and their dates.

Version	Date	Changes
v0.1	2025-01-22	Initial draft of document structure.
v1.0	2025-02-02	Release 1.0 for distribution.
v1.1	2026-01-26	Pinout updated from official diagram; diagram embedded in Models datasheet; new Pinout reference document added.

2 Hardware version guide

This documentation applies to XIPHOS hardware version **3.2.0**. Ensure that your module and carrier design match this revision; for other hardware versions, contact REIDITE Electronics or refer to the XIPHOS product page (downloads).

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3 Overview

This document provides detailed mechanical drawings and integration guidance for carrier-board development. It includes board outline (open frame and encapsulated), connector placement, mounting hole patterns, keep-out zones, and stack height considerations.

Dimensions are given in millimetres unless otherwise noted. For the latest revisions and all XIPHOS documents, see the XIPHOS product page (downloads).

4 Board outline

Dimensions are in millimetres. The open-frame variant (XIPHOS-X1, XIPHOS-X2) is shown below; the encapsulated variant (Phantom Forge®) has the same footprint with additional height and outline details in the mechanical package.

4.1 Open frame --- mechanical drawings

The following drawings define the board outline, mounting holes, and key dimensions for the open frame version. Four through-holes **Ø2,20 mm** (4× THRU ALL) are used for mounting.

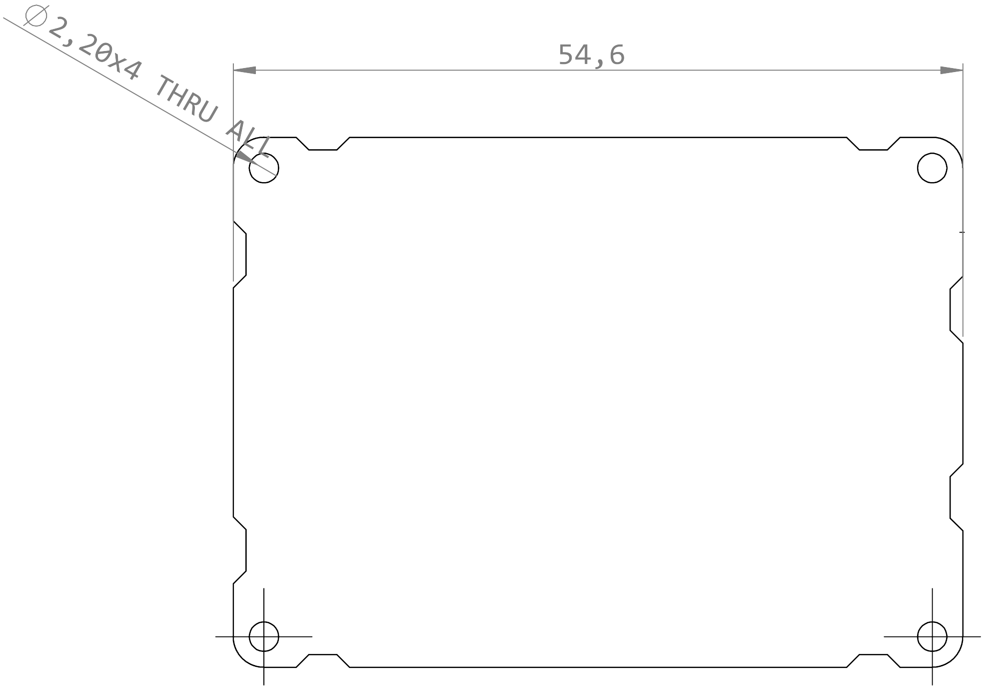

Figure 1: Open frame — top view. Overall length 54,6 mm (typical). Mounting holes Ø2,20×4 THRU ALL.

5 Connector placement

6 Mounting holes

7 Keep-out zones

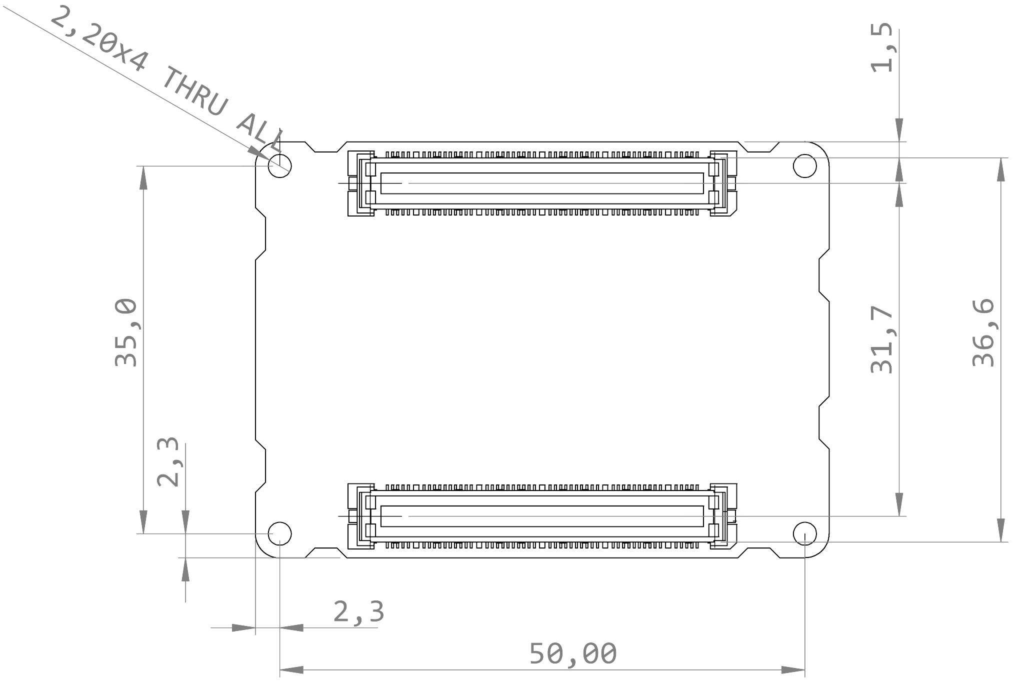

Figure 2: Open frame — bottom view. Width 50,00 mm; height 35,0–36,6 mm. Corner cutout 2,3 mm; 4× Ø2,20 THRU ALL.

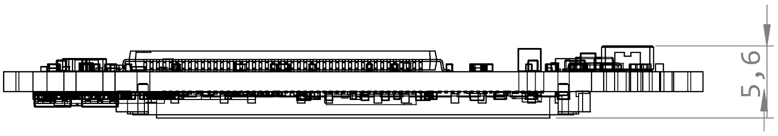

Figure 3: Open frame — long side view.

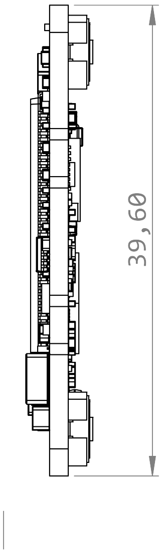

Figure 4: Open frame — short side view. Stack height 5,6 mm (ref.).

Connector placement drawing (placeholder).
Add XY coordinates and reference datum.

Figure 5: Connector locations and reference datum.

Mounting hole pattern (placeholder).
Include hole sizes, positions, and tolerances.

Figure 6: Mounting hole pattern and dimensions.

8 Stack height

Define the total stack height including connector mating height and maximum component height on the module. Provide minimum and maximum stack-up values for carrier design.

- Module thickness: TBD
- Connector mating height: TBD
- Maximum component height: TBD

9 Mating connectors

Specify the recommended mating connectors for J1 and J2, including pitch, manufacturer, and part numbers. Use the exact footprint and mechanical drawings from the connector vendor.

- J1 connector: Hirose FX11LA-100/10
- J2 connector: Hirose FX11LA-100/10

Top and bottom keep-out areas (placeholder).
Show component height limits and no-go zones.

Figure 7: Keep-out zones and height restrictions.

10 Tolerances

Unless otherwise specified, mechanical dimensions are subject to standard manufacturing tolerances. Provide final values for outline, hole location, and connector placement for production release.

- Outline tolerance: TBD
- Hole location tolerance: TBD
- Connector placement tolerance: TBD

11 Revision history

The following table lists revisions of this document.

Table 1: Revision history.

Version	**Date**	**Changes**
v0.1	2025-01-22	Initial draft of mechanical drawing package.
v1.0	2025-02-02	Release 1.0 for distribution.
v1.1	2026-01-26	Documentation update; pinout reference and new Pinout document.

12 Disclaimer

This document is released as version 1.0 for distribution. For the latest revisions and mechanical data, refer to the REIDITE Electronics website and the XIPHOS product page (downloads). REIDITE Electronics reserves the right to make changes without notice.