

# Heartrate-HW

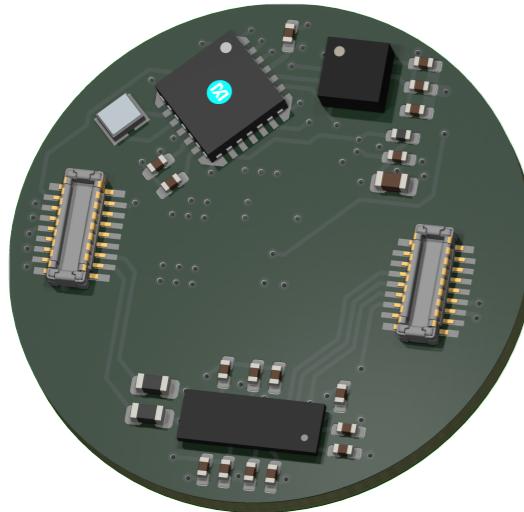
Variant: **CHECKED**

2026-02-20

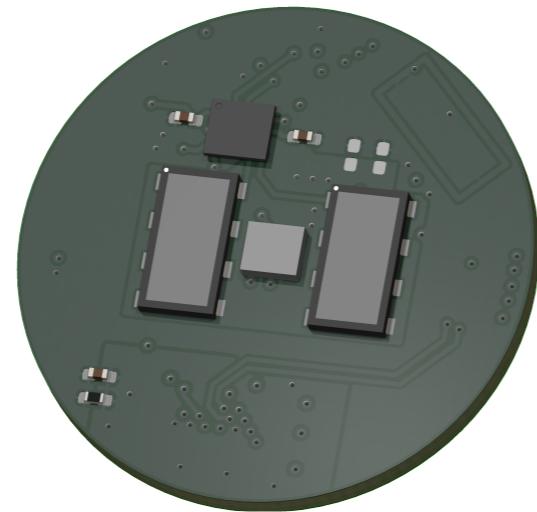
**Rev + (Unreleased)**

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**TOP VIEW**



**BOTTOM VIEW**



## DESIGN CONSIDERATIONS

**DESIGN NOTE:**  
Example text for informational design notes.

**DESIGN NOTE:**  
Example text for debug notes.

**DESIGN NOTE:**  
Example text for cautionary design notes.

**DESIGN NOTE:**  
**Example text for critical design notes.**

**LAYOUT NOTE:**  
**Example text for critical layout guidelines.**

## NOTES

Comment

Not fitted components are marked as **X**

DRAFT - Very early stage of schematic, ignore details.

PRELIMINARY - Close to final schematic.

CHECKED - There shouldn't be any mistakes. Contact the engineer if you find any.

RELEASED - A board with this schematic has been sent to production.

Date: 20-Feb-2026

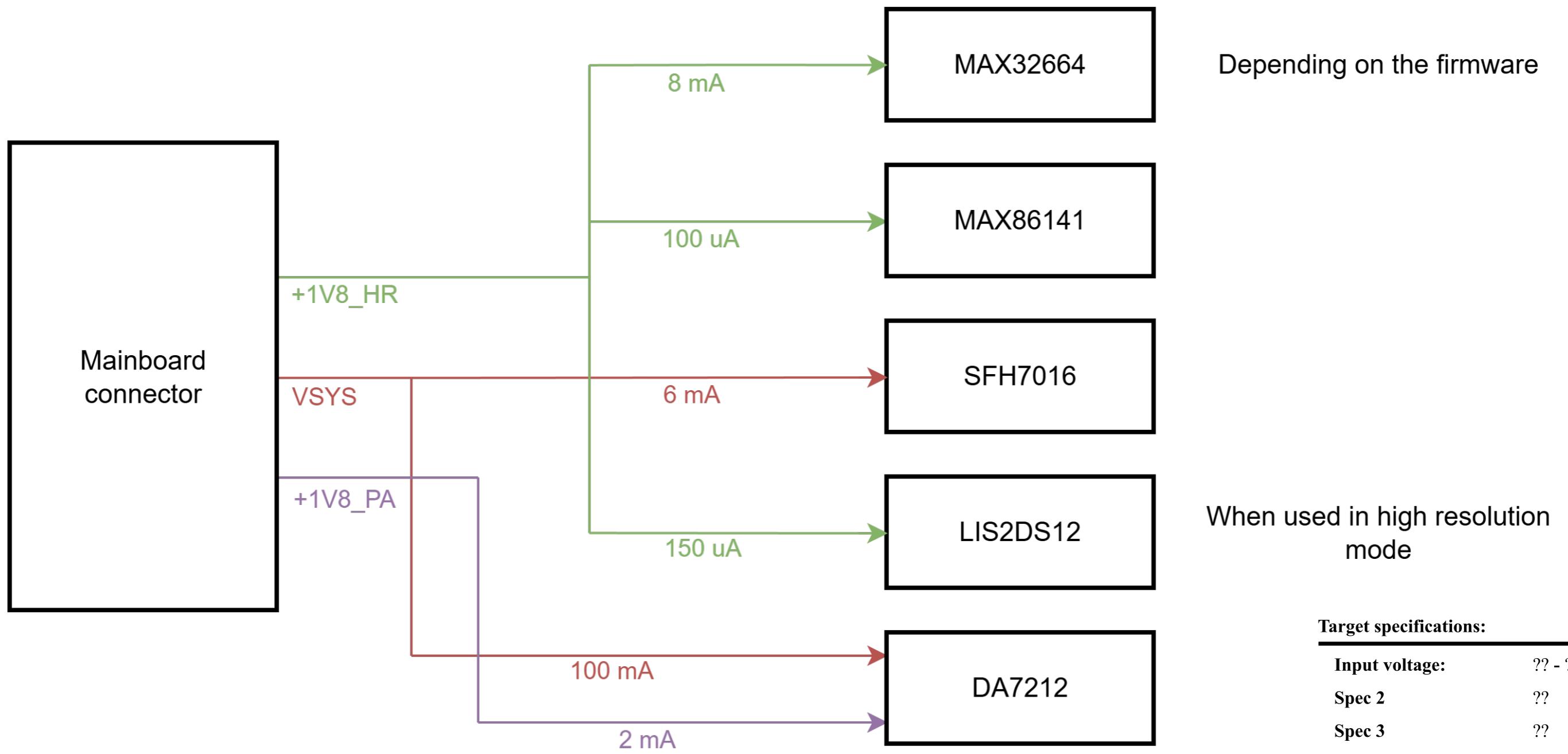
|  |                                    |   |                             |                             |
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|  | Comments:                          | Company:<br>ZSWatch                       | Variant:<br>CHECKED         | Git Hash:<br>6736584        |
|  | Board Name:<br><b>Heartrate-HW</b> | Project Name:<br><b>ZSWatch Heartrate</b> |                             |                             |
|  | Sheet Title:<br>/                  | File Name:<br>ZSWatch-Extension.kicad_sch | Designer:<br>Daniel Kampert | Date:<br>2025-07-13         |
|  | Sheet Path:<br>/                   | Reviewer:                                 | Size:<br><b>A3</b>          | Revision:<br>+ (Unreleased) |

## [2] Block Diagram

|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| A |   |   |   |   |   |   | A |
| B |   |   |   |   |   |   | B |
| C |   |   |   |   |   |   | C |
| D |   |   |   |   |   |   | D |
| E |   |   |   |   |   |   | E |
| F |   |   |   |   |   |   | F |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

|           |                                    |                                       |   |                      |                             |
|-----------|------------------------------------|---------------------------------------|---|----------------------|-----------------------------|
| Comments: | Company:<br><b>ZSWatch</b>         |                                       | Variant:<br>CHECKED                       | Git Hash:<br>6736584 |                             |
|           | Board Name:<br><b>Heartrate-HW</b> |                                       | Project Name:<br><b>ZSWatch Heartrate</b> |                      |                             |
|           | Sheet Title:<br>Block Diagram      | File Name:<br>Block Diagram.kicad_sch | Designer:<br>Daniel Kampert               | Date:<br>2025-07-13  | Revision:<br>+ (Unreleased) |
|           | Sheet Path:<br>/Block Diagram/     |                                       | Reviewer:                                 | Size:<br><b>A3</b>   | Sheet:<br><b>2 of 8</b>     |

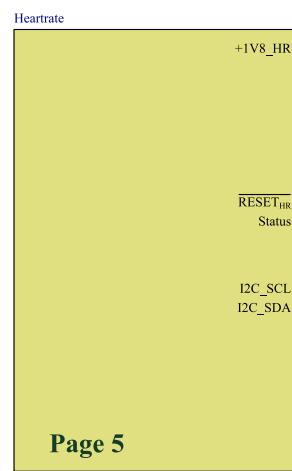
### [3] Power - Topology



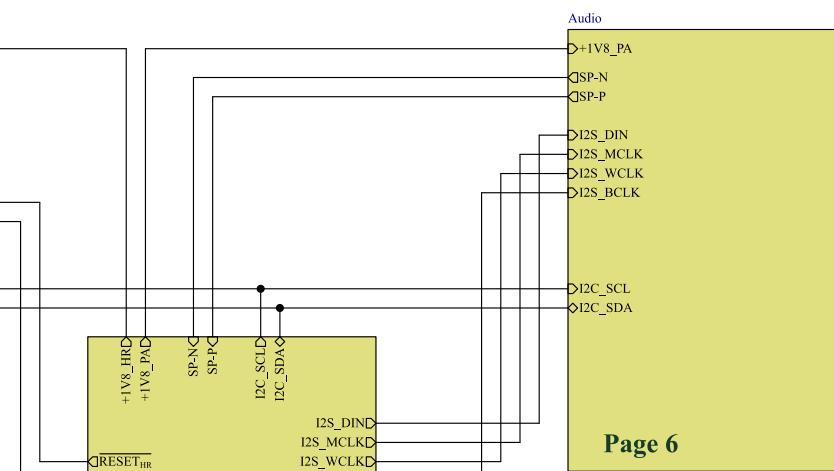
|                                    |   |                             |                                       |
|------------------------------------|---|-----------------------------|---------------------------------------|
| Comments:                          | Company:<br>ZSWatch                       | Variant:<br>CHECKED         | Git Hash:<br>6736584                  |
| Board Name:<br><b>Heartrate-HW</b> | Project Name:<br><b>ZSWatch Heartrate</b> |                             |                                       |
| Sheet Title:<br>Power - Topology   | File Name:<br>Power - Topology.kicad_sch  | Designer:<br>Daniel Kampert | Date:<br>2025-07-13<br>+ (Unreleased) |
| Sheet Path:<br>/Power - Topology/  | Reviewer:                                 | Size:<br><b>A3</b>          | Sheet:<br><b>3 of 8</b>               |

# [4] Project Architecture

A

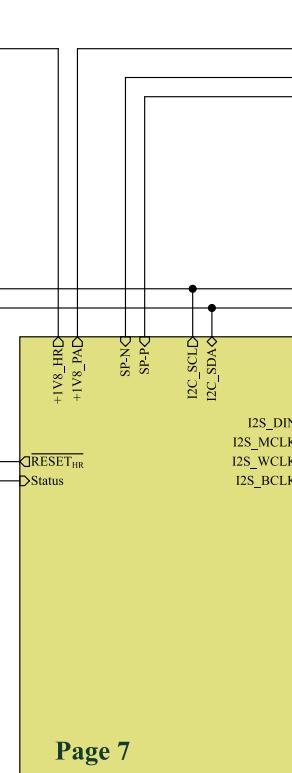
**Page 5**

File: Heartrate.kicad\_sch

**Page 6**

File: Audio.kicad\_sch

B

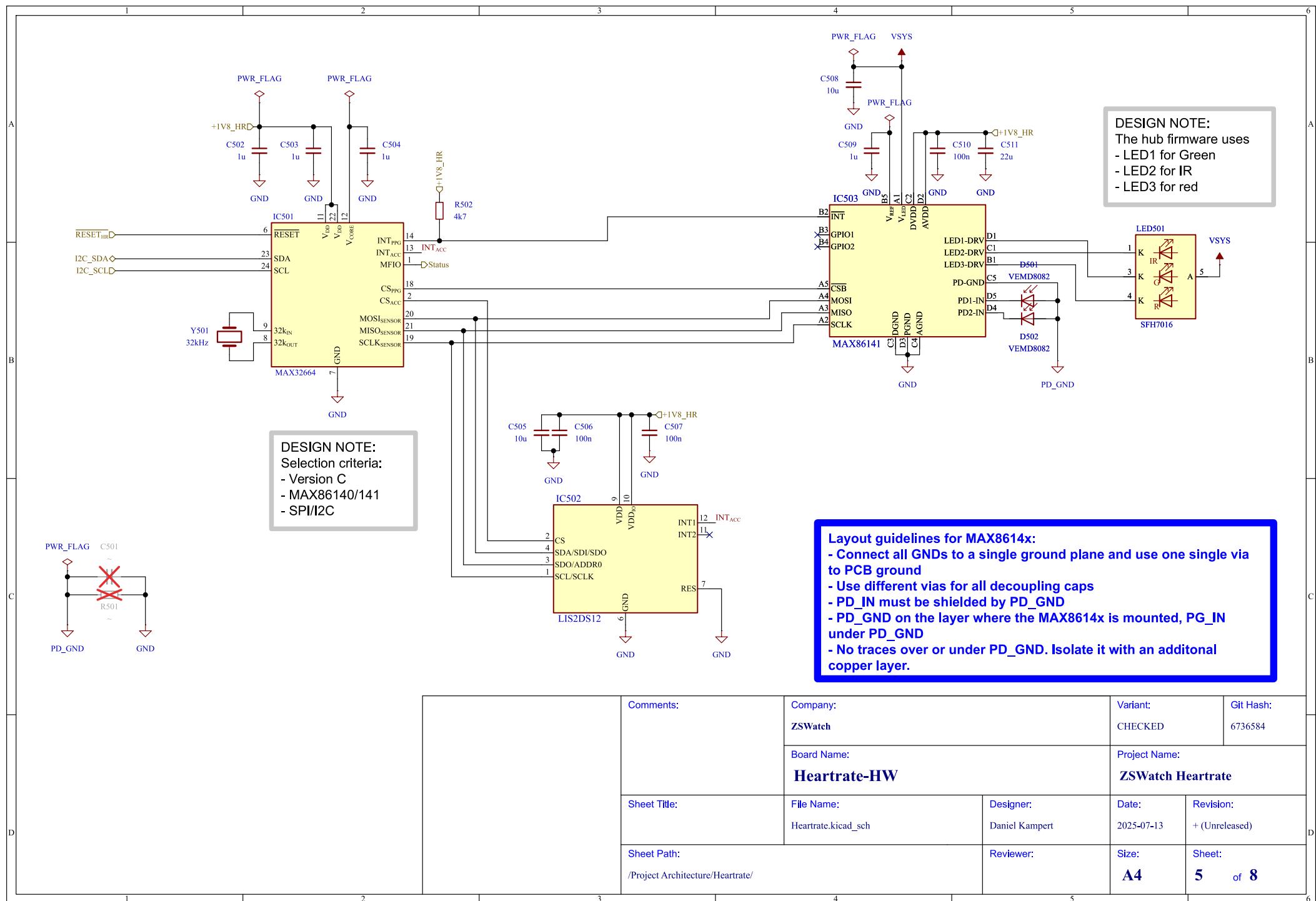
**Page 7**

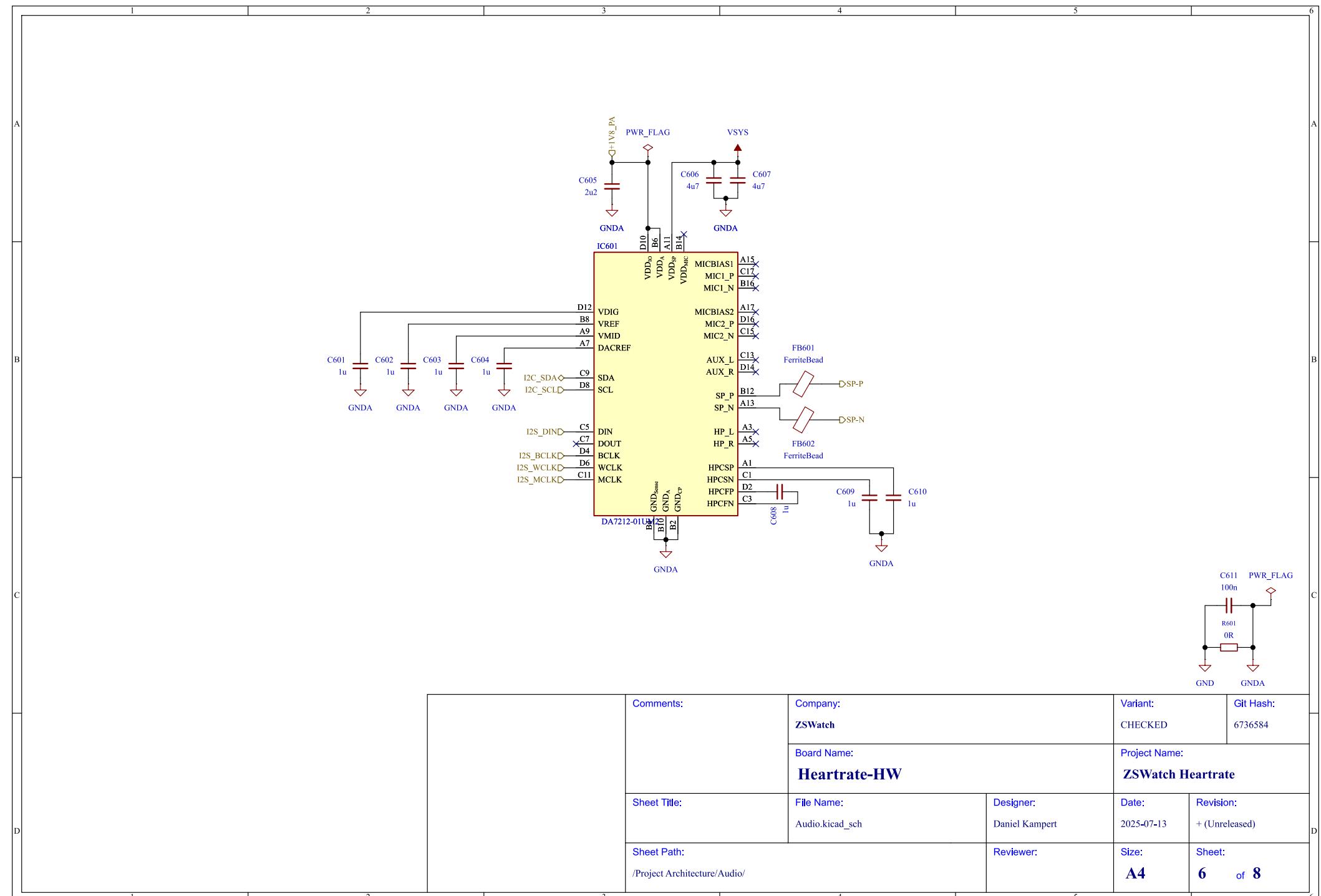
File: Connectors.kicad\_sch

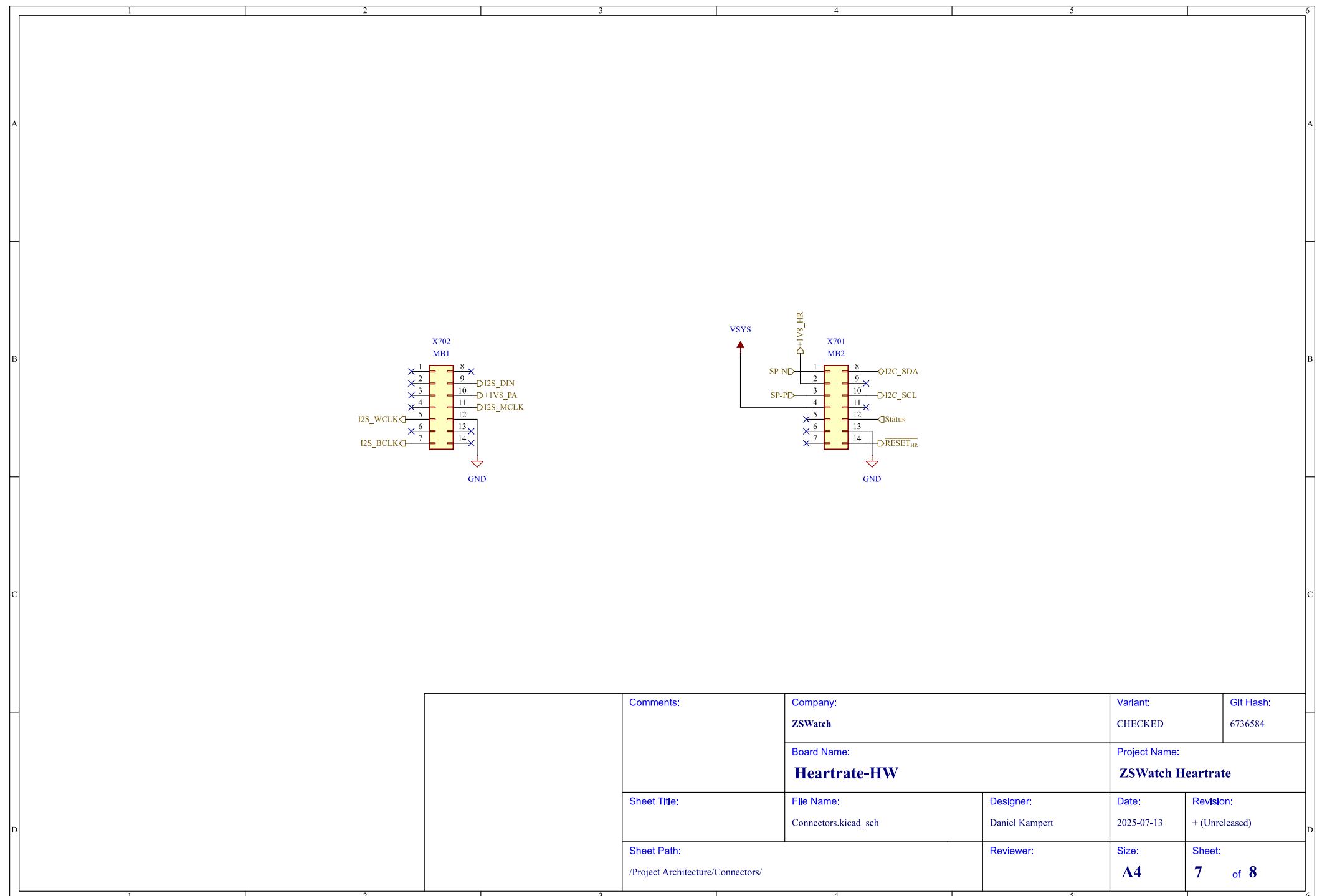
C

D

|  |                                       |  |                             |  |
|--|---------------------------------------|--|-----------------------------|--|
|  | Comments:                             | Company:<br><b>ZSWatch</b>                   | Variant:<br>CHECKED         | Git Hash:<br>6736584                               |
|  | Board Name:<br><b>Heartrate-HW</b>    | Project Name:<br><b>ZSWatch Heartrate</b>    |                             |  |
|  | Sheet Title:<br>Project Architecture  | File Name:<br>Project Architecture.kicad_sch | Designer:<br>Daniel Kampert | Date:<br>2025-07-13<br>Revision:<br>+ (Unreleased) |
|  | Sheet Path:<br>/Project Architecture/ |  | Reviewer:                   | Size:<br><b>A4</b><br>Sheet:<br><b>4 of 8</b>      |







# [8] Revision History

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| A | <pre> \${RELEASE_TITLE_1.0.0}  \${RELEASE_BODY_1.0.0}</pre> | <pre> \${RELEASE_TITLE_...}  \${RELEASE_BODY_...}</pre>   | <pre> \${RELEASE_TITLE_...}  \${RELEASE_BODY_...}</pre>   | <pre> \${RELEASE_TITLE_...}  \${RELEASE_BODY_...}</pre>   | A   |
| B |   |   |   |   | B   |
| C |   |   |   |   | C   |
| D |   |   |   |   | D   |
|   |   | <p>Comments:</p> <p>Sheet Title:<br/>Revision History</p> <p>Sheet Path:<br/>/Revision History/</p> | <p>Company:<br/><b>ZSWatch</b></p> <p>Board Name:<br/><b>Heartrate-HW</b></p> <p>File Name:<br/>Revision History.kicad_sch</p> <p>Reviewer:</p> | <p>Variant:<br/>CHECKED</p> <p>Project Name:<br/><b>ZSWatch Heartrate</b></p> <p>Designer:<br/>Daniel Kampert</p> <p>Date:<br/>2025-07-13</p> <p>Revision:<br/>+ (Unreleased)</p> | <p>Git Hash:<br/>6736584</p> <p>Size:<br/><b>A4</b></p> <p>Sheet:<br/><b>8 of 8</b></p> |