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Support / Wiki:

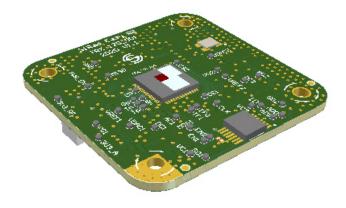


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# **Product Sheet**

# SiRad Easy® r4 Radar Front End (RFE) Board TRX\_120\_067\*



\* Available as SiRad\_Easy\_r4\_RFE\_TRX\_120\_067+ (including lens & reflector).

| Status:  | Date:            | Author:            | Filename:                           |           |
|----------|------------------|--------------------|-------------------------------------|-----------|
| Release  | 02-Jan-2023      | Silicon Radar GmbH | Product_Sheet_SiRad_Easy_r4_RFE_TR> | (_120_067 |
| Version: | Document number: | Package:           | Marking:                            | Page:     |
| 1.0      | -                | -                  | -                                   | 1 of 5    |



#### **Version Control**

| Version | Changed section | Description of change | Reason for change |
|---------|-----------------|-----------------------|-------------------|
| 1.0     | all             |                       | Initial document  |

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#### 1 Hardware

- Pluggable 120 GHz front end board with single channel radar transceiver TRX\_120\_067
- 40 mm x 40 mm PCB with 4 x M2.5 screw holes
- Powered by SiRad Easy® r4 Base Board
- Target detection status LED
- 3 x Base Board connectors mounted (P1, P2, P3)
- Placeholder for reflector

Required: SiRad Easy® r4 Base Board.

 $Recommended: Lens \ (part \ number \ 000017 \ with \ 10 \ mm \ spacers), comes \ with \ SiRad\_Easy\_r4\_RFE\_TRX\_120\_067+.$ 

Recommended: Reflector (part number 000757), comes with SiRad\_Easy\_r4\_RFE\_TRX\_120\_067+.

### 2 Specifications

| Parameter    | Value   |  |
|--------------|---|--|
| Size         | 40 mm x 40 mm x 8 mm  |  |
| Weight       | 8 g   |  |
| Power Supply | Provided by SiRad Easy® r4 Base Board, only                                     |  |
|              | 3 x Base Board connectors mounted (P1, P2, P3)                                  |  |
| Interfaces   | <ul> <li>2 x signal I/O port (10 pins), BTB connector (0.5 mm pitch)</li> </ul> |  |
|              | <ul> <li>1 x signal I/O port (20 pins), BTB connector (0.5 mm pitch)</li> </ul> |  |

The electrical characteristics and antenna position for the mounted radar transceiver can be found in the <a href="https://rxx.120\_067">TRX\_120\_067</a> data sheet.

### 3 Mechanical Drawing

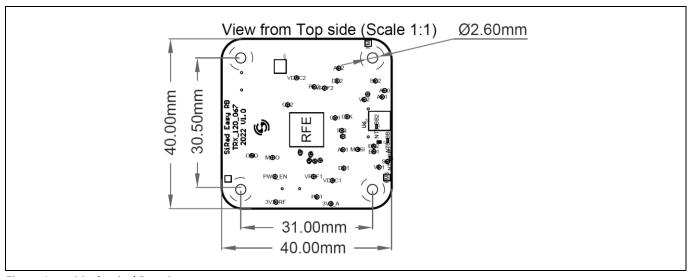


Figure 1 Mechanical Drawing



## 4 Pinout Description

Below figures show the pinout descriptions of the Base Board connectors and connected test points.

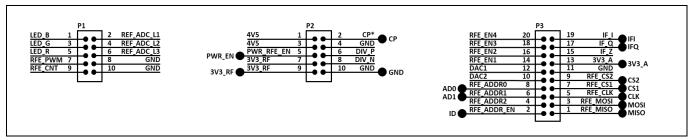


Figure 2 Pinout Description - Version 1.0

#### 5 Modular System

The SiRad Easy® r4 RFE Board TRX\_120\_067 is part of the SiRad Easy® r4 modular evaluation kit, consisting of Base Board, exchangeable RFE boards covering select radar transceivers of Silicon Radar's portfolio, Breakout Board and other accessories. A detailed description and compatibility information of related parts can be found under SiRad Easy® r4 Boards & Accessories.

**Product Sheet** Version 1.0 02-Jan-2023



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