

Support / Wiki:

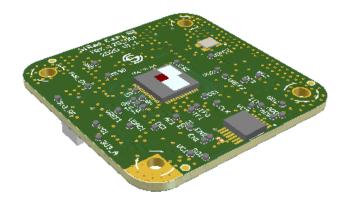


Silicon Radar GmbH Im Technologiepark 1 15236 Frankfurt (Oder) Germany

tel: +49 335 / 228 80 30 fax: +49 335 / 557 10 50 info@siliconradar.com www.siliconradar.com

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_TRX	(_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

Table of Contents

1	Hardware	3
2	Specifications	3
	Mechanical Drawing	
4	Pinout Description	4
5	Modular System	4



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	 2 x signal I/O port (10 pins), BTB connector (0.5 mm pitch) 	
	• 1 x signal I/O port (20 pins), BTB connector (0.5 mm pitch)	

The electrical characteristics and antenna position for the mounted radar transceiver can be found in the TRX_120_067 data sheet.

3 Mechanical Drawing

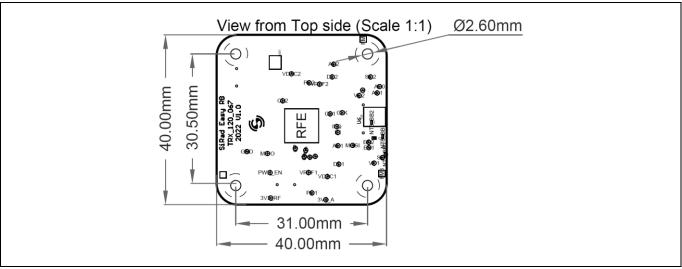


Figure 1 Mechanical Drawing



4 Pinout Description

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

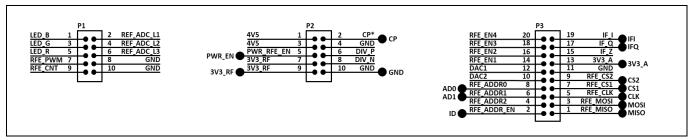


Figure 2 Pinout Description - Version 1.0

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

GILICON **radar**

Disclaimer

Silicon Radar GmbH 2022. The information contained herein is subject to change at any time without notice.

Silicon Radar GmbH assumes no responsibility or liability for any loss, damage or defect of a product which is caused in whole or in part by

- (i) use of any circuitry other than circuitry embodied in a Silicon Radar GmbH product,
- (ii) misuse or abuse including static discharge, neglect, or accident,
- (iii) unauthorized modifications or repairs which have been soldered or altered during assembly and are not capable of being tested by Silicon Radar GmbH under its normal test conditions, or
- (iv) improper installation, storage, handling, warehousing, or transportation, or
- (v) being subjected to unusual physical, thermal, or electrical stress.

Disclaimer: Silicon Radar GmbH makes no warranty of any kind, express or implied, with regard to this material, and specifically disclaims any and all express or implied warranties, either in fact or by operation of law, statutory or otherwise, including the implied warranties of merchantability and fitness for use or a particular purpose, and any implied warranty arising from course of dealing or usage of trade, as well as any common-law duties relating to accuracy or lack of negligence, with respect to this material, any Silicon Radar product and any product documentation. Products sold by Silicon Radar are not suitable or intended to be used in a life support applications or components, to operate nuclear facilities, or in other mission critical applications where human life may be involved or at stake. All sales are made conditioned upon compliance with the critical uses policy set forth below.

CRITICAL USE EXCLUSION POLICY: BUYER AGREES NOT TO USE SILICON RADAR GMBH'S PRODUCTS FOR ANY APPLICATIONS OR IN ANY COMPONENTS USED IN LIFE SUPPORT DEVICES OR TO OPERATE NUCLEAR FACILITIES OR FOR USE IN OTHER MISSION-CRITICAL APPLICATIONS OR COMPONENTS WHERE HUMAN LIFE OR PROPERTY MAY BE AT STAKE.

Silicon Radar GmbH owns all rights, titles and interests to the intellectual property related to Silicon Radar GmbH's products, including any software, firmware, copyright, patent, or trademark. The sale of Silicon Radar GmbH's products does not convey or imply any license under patent or other rights. Silicon Radar GmbH retains the copyright and trademark rights in all documents, catalogs and plans supplied pursuant to or ancillary to the sale of products or services by Silicon Radar GmbH. Unless otherwise agreed to in writing by Silicon Radar GmbH, any reproduction, modification, translation, compilation, or representation of this material shall be strictly prohibited.