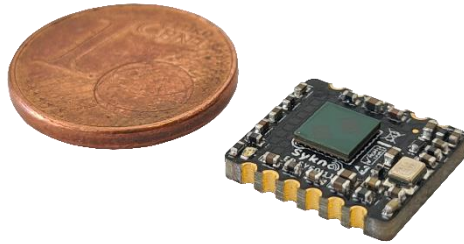


Sykno GmbH

Feature Sheet

ERSY60I11

Miniaturized Radar Module



Infineon

Associated
Partner

Applications

- Presence detection
- Home automation
- Industrial sensing
- Security radar systems
- Automotive in-cabin monitoring (CPD)
- Ranging and speed measurements

Features

- ✓ Powered by Infineon XENSIV™ radar sensor BGT60UTR11AIP
- ✓ 1 Tx and 1 Rx channel
- ✓ Evaluation board available including extensive software*
- ✓ Software library available on request
- ✓ Dielectric lens available on request

Description

The products of the ER series are optimized for the smallest possible form factor and are therefore extremely space-saving. They comprise a set of radar chips on an optimized high-frequency carrier board, which can be soldered onto standard boards. An optional C-library can be adapted to common ARM systems and allows simple communication and data processing by controlling all high-frequency parameters and radar signal processing. An evaluation module (ERSY60I11-Eval) with a graphical user interface and real-time display of the data is also available for evaluating the modules.

* <https://youtu.be/dg2sauHAa1g?si=i8NGDIslpVzbiTcm>



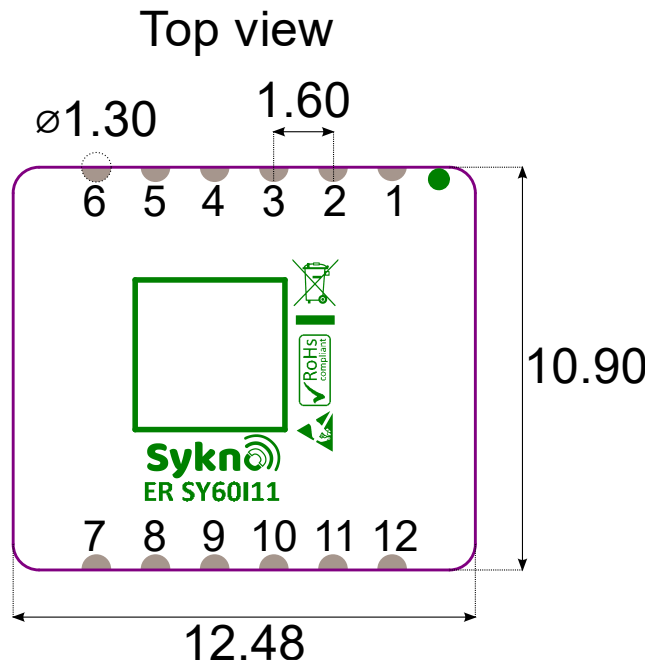
Electrical Characteristics

Chipset	Infineon BGT60UTR11AIP
Frequency range	57,4 – 63,0 GHz
Transmit power	5 dBm (conducted)
Field-of-view	±60° (can be narrowed with lens)
Antennas	1 Tx, 1 Rx
Sample rate	4 Msps
Connectivity	SPI
Power consumption	0,27 mW (sleep) – 313 mW (active, no duty cycling)

Further information can be found in the datasheet of the chipset BGT60UTR11AIP¹.

¹ <https://www.infineon.com/cms/de/product/sensor/radar-sensors/radar-sensors-for-iot/60ghz-radar/bgt60utr11aip/>

Mechanical Properties [mm]



Pin Assignment

1	1.8V supply
2	GND
3	3.3V supply
4	GND
5	MMIC IRQ
6	N/C
7	MMIC SPI CLK
8	GND
9	MMIC SPI MOSI
10	MMIC SPI MISO
11	MMIC SPI NCS
12	MMIC RST