

# **KON-TR-01**

**IQRF range check adapter**

**for DK-EVAL-04**

**User's Guide**

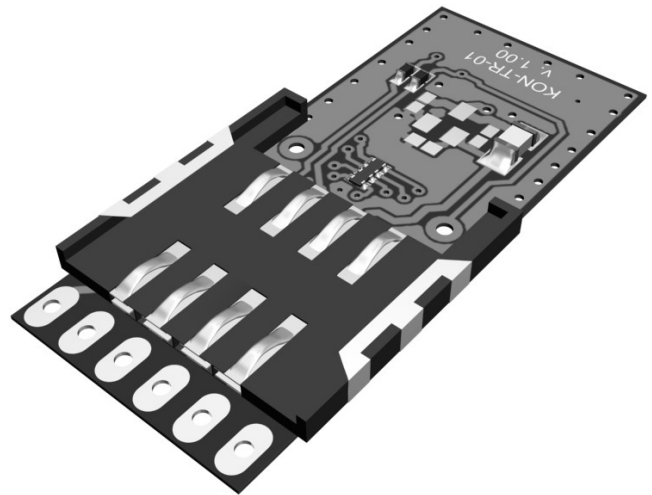


## Description

KON-TR-01 is an adapter to check RF range of TR modules in SIM format with built-in LDO voltage regulator using the DK-EVAL-04 development kit.

DK-EVAL-04 is optimized for space but not for the range. Thus, the range is shortened due to compressed PCB layout for ~ 30% when used without KON-TR-01.

This kit is redesigned and renamed from the former adapter KON-EXT-01.



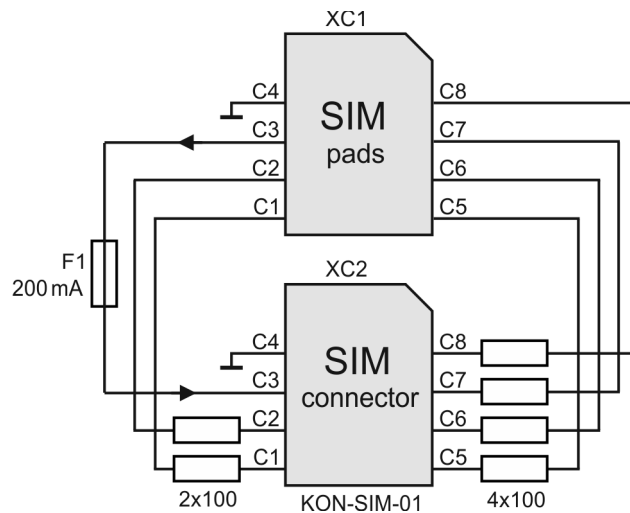
## Applications

- For range check using DK-EVAL-04
- For TR modules compatible with the SIM connector, with built-in LDO voltage regulator (e.g. TR-52B, TR-53B or TR-52D)

## Key features

- To be plugged in DK-EVAL-04 via SIM connector
- Series protection resistors on I/O pins
- Resettable fuse for power supply

## Schematics



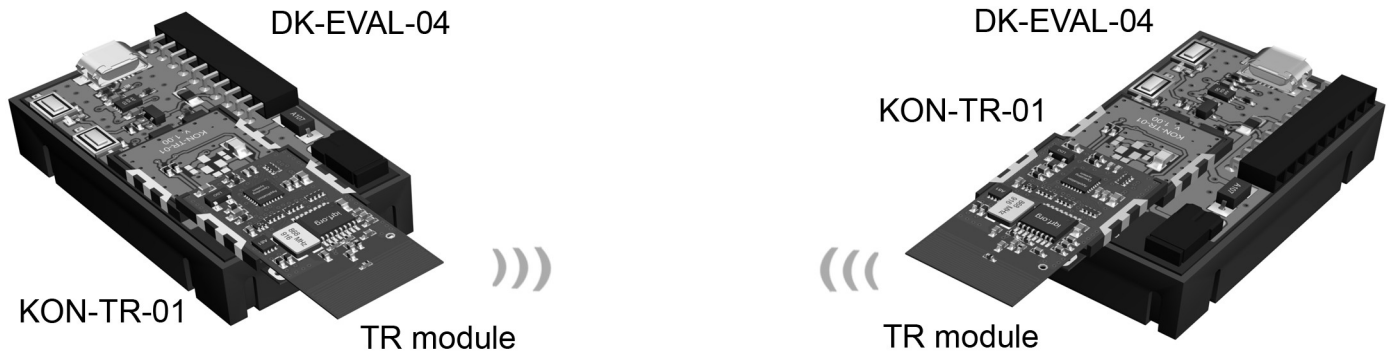
## Hardware

### Connectors

- XC1: PCB edge connector to be plugged in the DK-EVAL-04 SIM socket
- XC2: SIM connector for TR module

## Application

### Typical usage



**Tip:** Use basic example E09-LINK from IQRF Startup package for range check.

**Tip:** Use DK-EVAL-04 with and without adapter KON-TR-01 to observe the difference in range due to PCB layout.

**Caution:** The TR module can be plugged / unplugged into / from the SIM connector while powered off only.

**Caution:** It is not allowed to use this adapter for SMT TR modules like TR-54D to avoid short circuit due to metallic holder of the SIM connector.

**Caution:** It is not allowed to use the above mentioned configuration for TR modules without LDO voltage regulator (e.g. TR-55D).

**Tip:** For TR modules without LDO voltage regulator (e.g. TR-55D) use KON-TR-01L adapter instead to this.

## Product information

### Pack list

- KON-TR-01                      IQRF range check adapter

### Recommended options

- DK-EVAL-04                      IQRF development kit
- KON-TR-01L                      Adapter for TR modules without LDO voltage regulator

### Ordering code

- KON-TR-01                      IQRF range check adapter

### Document history

- 130114                              Redesigned from KON-EXT-01
- 120725                              First release (KON-EXT-01)

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# Sales and Service

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ETSI EN 300220-1:00, ETSI EN 300390-2V.1.1.1:00*

*Complies with FCC directives FCC CFR, Title 47, Part 15, Section 15.209, FCC CFR, Title 47, Part 15, Section 15.249*

*Complies with Directive 2002/95/EC (RoHS)*



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