

StarModuleSLC910 Integration Guide

Rev 1.0

Author:

Luciano Ruggiero

Introduction

The StarModuleSLC910 is an FSK RF half-duplex transceiver working at 910MHz, made to be installed on fixed or mobile devices.

Digital interface

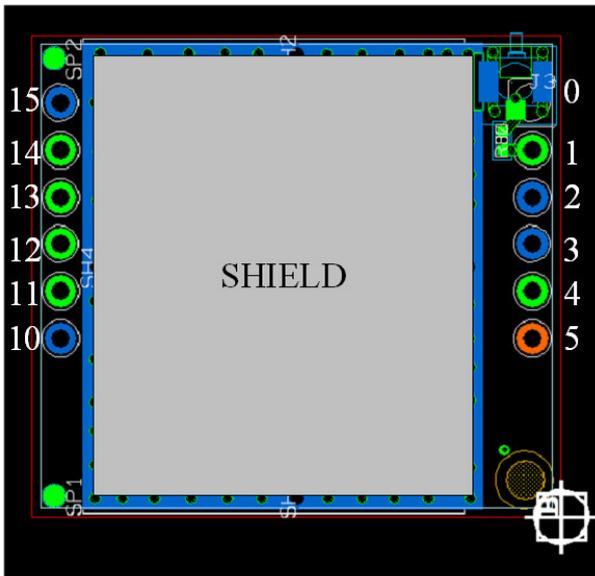
Digital Interface with host system:

Data communication with host is implemented using a UART @38400, N, 8, 1

Control is implemented using IDLE/RX line and receiving Carrier Detect indication.

Pinout

TOP VIEW



Number	Direction	Description
0	-	RF CONNECTOR
1	-	NC
2	-	GND
3	-	GND
4	Input	RESET
5	-	Vcc(5.5 – 3.1V)
10	-	GND
11	Input	RX_DATA
12	Output	TX_DATA
13	Input	IDLE/RX
14	Output	CD# (active low)
15	-	GND

IDLE/RX	Function
HIGH	Sleep
LOW	Rx mode
	Receive data on TX_DATA, CD# asserted means RF channel is busy

RF interface

StarModuleSLC910 has 50 Ohm impedance on RF out in TX and RX mode, therefore impedance matching is required for antenna system of host.

Care must be taken for the proximity of conductive materials or the user’s hand that will cause a mismatch of the antenna, decreasing the transceiver RF characteristics.

Moreover, care must be taken to ensure that the host system doesn’t have spurious emissions in the range 910MHz+/-100kHz, that could cripple receiver sensitivity: it is advised to put a ground plane under the RF module and to filter the power supply.

Noisy parts, like system buses, must be shielded in order not to irradiate spurious fields.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference, and
- 2) This device must accept any interference received, including interference that may cause undesired operation.

Any change or modification to the product not expressly approved by Datalogic Scanning Group S.r.l. could void the user's authority to operate the device.

Examples

BC40X0



GM4100

