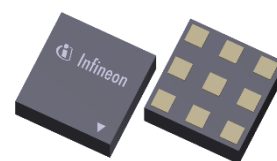


BGSA200ML9

Two throws low resistance antenna tuning switch

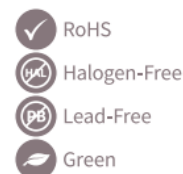
Features

- Low R_{ON} resistance of $1.4\ \Omega$ at each port in ON state
- Low C_{OFF} capacitance of $157\ \text{fF}$ at each port in OFF state
- High RF operating peak voltage handling of $50\ \text{V}$ in OFF state
- Low harmonic generation
- MIPI RFFE 2.1 control interface
- Support of MIPI and GPIO control modes
- $1.8\ \text{V}$ and $1.2\ \text{V}$ V_{IO} operation
- Extremely low current consumption of $22\ \mu\text{A}$
- Switching speed $<5\ \mu\text{s}$
- Self-resonant frequency $>8250\ \text{MHz}$
- Small form factor $1.1\ \text{mm} \times 1.1\ \text{mm}$ (MSL1, $260\ ^\circ\text{C}$ per JEDEC J-STD-020)



Potential applications

- Impedance, antenna and Inductance tuning
- Tunable filters



Description

The BGSA200ML9 is a versatile shunt to ground 2 x Single-Pole Single-Throw (2xSPST) RF antenna tuning switch. It is optimized for low C_{OFF} as well as low R_{ON} enabling applications up to $8.25\ \text{GHz}$; ideally fitting for antenna tuning purpose.

The BGSA200ML9 integrates on-chip CMOS logic and power supply regulation. Thanks to its 4 states USID1 and USID2 feature, it can be controlled either with GPIO lines or MIPI RFFE bus. Each switch throw can be programmed individually or altogether. Up to 3 instantiations of the same device can be controlled using the same RFFE bus when in MIPI RFFE mode.

Two throws low resistance antenna tuning switch

Block diagram and ordering information

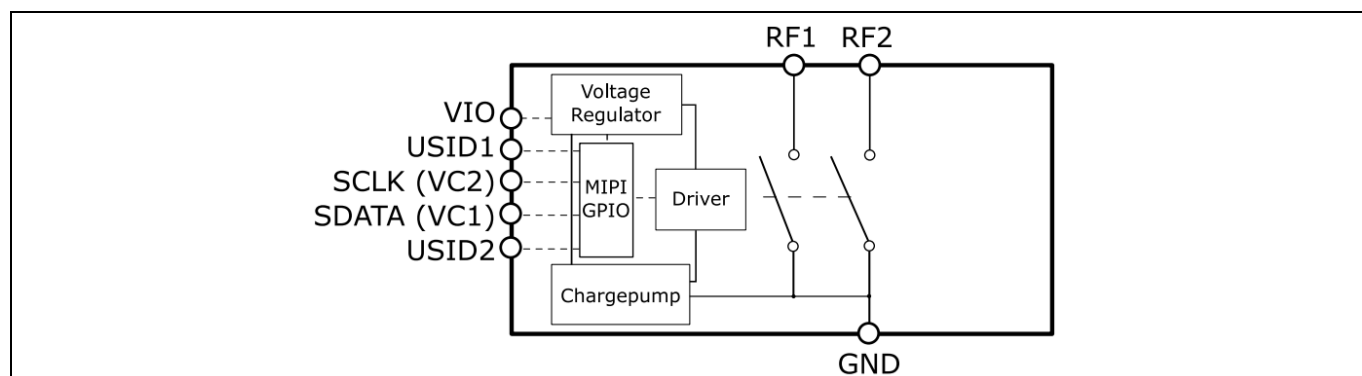


Figure 1 BGSA200ML9 Block diagram

Table 1 Ordering Information

Type	Marking	Package	Product name
BGSA200ML9	A2	TSLP-9-8	BGSA 200ML9 E6327

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Edition 2019-09-16

Published by

Infineon Technologies AG
81726 München, Germany

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