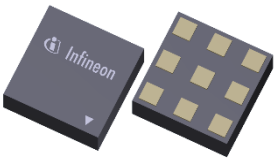
BGSA200ML9

Two throws low resistance antenna tuning switch

Features



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

Potential applications

- Impedance, antenna and Inductance tuning
- Tunable filters

RoHS
Halogen-Free
Lead-Free
Green

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 8.25GHz; 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.

Block diagram and ordering information

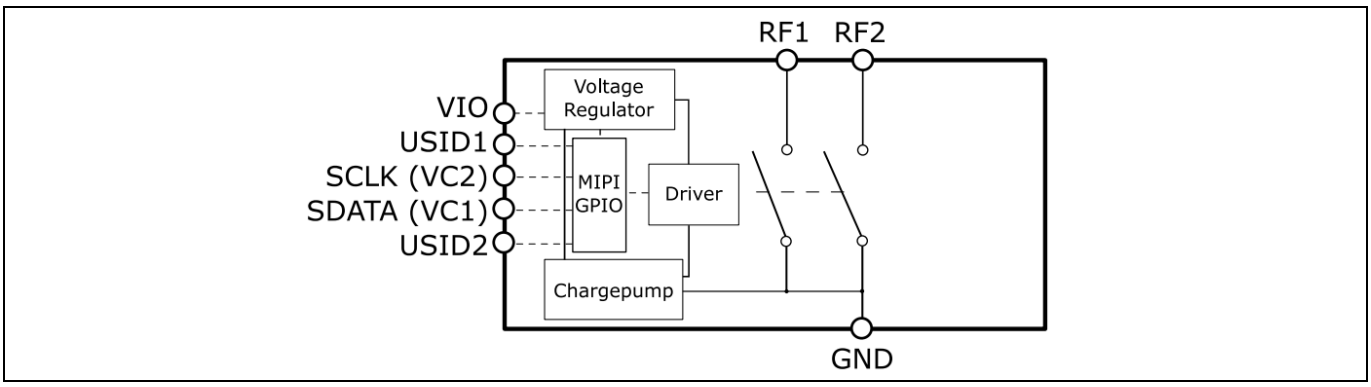


Figure 1 BGSA200ML9 Block diagram

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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Document reference
ifx1

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