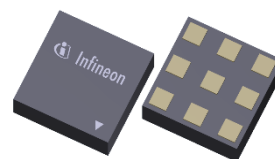


BGSA200ML9

Two throws low resistance antenna tuning switch

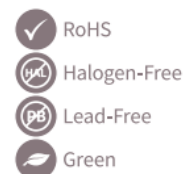
Features

- 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 μ A
- Switching speed <5 μ s
- Self-resonant frequency >8250 MHz
- Small form factor 1.1 mm x 1.1 mm (MSL1, 260 $^{\circ}$ 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 8.25GHz; 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.

Two throws low resistance antenna tuning switch

Block diagram and ordering information

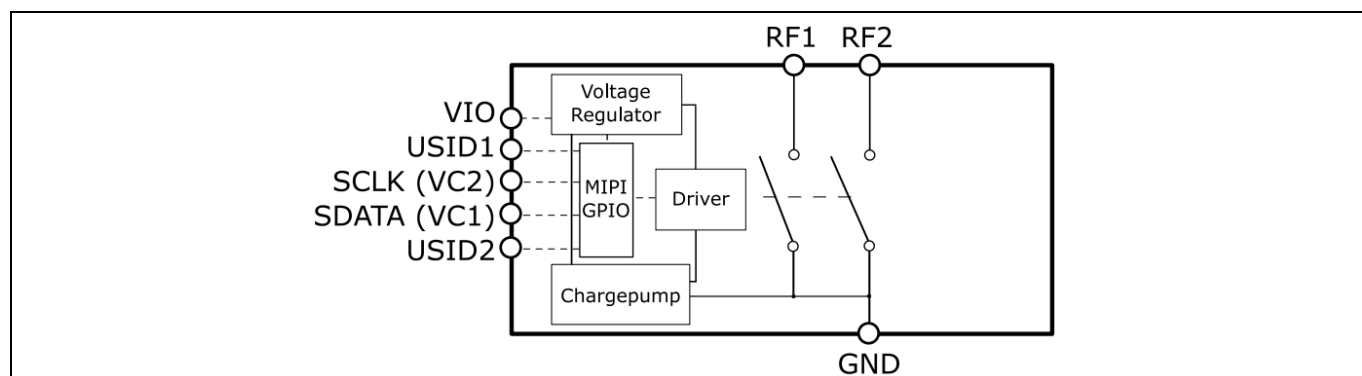


Figure 1 BGSA200ML9 Block diagram

Table 1 Ordering Information

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

For more technical information, please contact our Technical Assistance Center or your local Infineon representative.

Trademarks

All referenced product or service names and trademarks are the property of their respective owners.

Edition 2019-09-16

Published by

Infineon Technologies AG
81726 München, Germany

© 2023 Infineon Technologies AG.
All Rights Reserved.

Do you have a question about this document?

Email: erratum@infineon.com

Document reference

ifx1

IMPORTANT NOTICE

The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics ("Beschaffenheitsgarantie").

With respect to any examples, hints or any typical values stated herein and/or any information regarding the application of the product, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation warranties of non-infringement of intellectual property rights of any third party.

In addition, any information given in this document is subject to customer's compliance with its obligations stated in this document and any applicable legal requirements, norms and standards concerning customer's products and any use of the product of Infineon Technologies in customer's applications.

The data contained in this document is exclusively intended for technically trained staff. It is the responsibility of customer's technical departments to evaluate the suitability of the product for the intended application and the completeness of the product information given in this document with respect to such application.

For further information on the product, technology, delivery terms and conditions and prices please contact your nearest Infineon Technologies office (www.infineon.com).

WARNINGS

Due to technical requirements products may contain dangerous substances. For information on the types in question please contact your nearest Infineon Technologies office.

Except as otherwise explicitly approved by Infineon Technologies in a written document signed by authorized representatives of Infineon Technologies, Infineon Technologies' products may not be used in any applications where a failure of the product or any consequences of the use thereof can reasonably be expected to result in personal injury.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Infineon:](#)

[BGSA200ML9E6327XTSA1](#)