

BGSA143GL10

Low Resistance Antenna Tuning Switch

Features

- Designed for high-linearity antenna tuning switching and RF tuning applications
- Ultra low R_{ON} resistance of 1.15Ω at each port in ON state
- Low C_{OFF} capacitance of 140 fF at each port in OFF state
- High RF operating peak voltage handling of 42 V in OFF state
- Resonance-Stopper Antenna Tuning
- Low harmonic generation
- 3 GPIO pins control interface
- No RF parameter change within supply voltage range
- Small form factor $1.1 \times 1.5 \text{ mm}^2$ (MSL1, 260°C per JEDEC J-STD-020)
- RoHS and WEEE compliant package



Description

BGSA143GL10 is a small and versatile Single-Pole Quad Throw (SP4T) RF switch optimized for low C_{OFF} as well as low R_{ON} enabling applications up to 6.0GHz. GPIO digital control lines offer the possibility to adopt SP4T, SPDT along with SPST topology for an optimum flexibility in RF Front-end designs.

BGSA143GL10 is ideal for high Q tuning applications. This single supply chip integrates on-chip CMOS logic control. It can be driven by 2 or 3 CMOS or TTL compatible control input signals. Due to its high RF voltage ruggedness and OFF RF ports reflective short feature, it is suited for switching any reactive devices such as inductors and capacitors in RF matching circuits without significant losses, also mitigating or even eradicating unwanted parasitic RF resonances.

Block diagram and ordering information

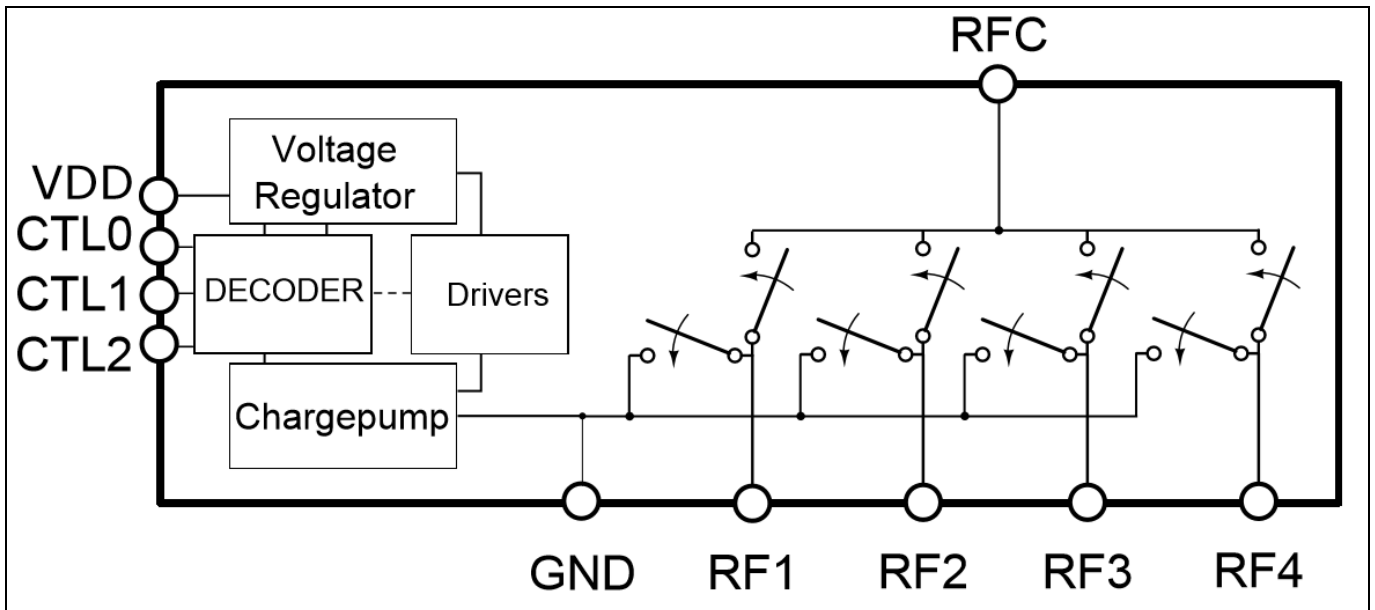


Figure 1 BGSA143GL10 Block diagram

Table 1 Ordering Information

Type	Package	Marking
BGSA143GL10	TSLP-10	AB



WEEE Compliant Package



Halogen-Free PB Free



RoHS

Trademarks

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

Edition 2019-10-16
Published by
Infineon Technologies AG
81726 München, Germany

© 2019 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.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [RF Switch ICs](#) category:

Click to view products by [Infineon](#) manufacturer:

Other Similar products are found below :

[MASW-008853-TR3000](#) [MASW6010G](#) [BGSX210MA18E6327XTSA1](#) [CG2185X2](#) [CG2415M6](#) [MA4AGSW1A](#) [MA4SW410](#)
[MA4SW410B-1](#) [MASW-002102-13580G](#) [MASW-005100-11940W](#) [BGS 12PL6 E6327](#) [BGS1414MN20E6327XTSA1](#)
[BGS1515MN20E6327XTSA1](#) [SKY13374-397LF](#) [CG2415M6-C2](#) [AS222-92LF](#) [MASWSS0201TR](#) [MASW-007075-000100](#) [MASW-004103-](#)
[13655P](#) [MASW-003102-13590G](#) [MASWSS0202TR-3000](#) [MASW-008543-TR3000](#) [MA4SW310B-1](#) [SW-313-PIN](#) [CG2430X1](#) [SKY13405-](#)
[490LF](#) [SKYA21001](#) [SKY13415-485LF](#) [MMS008PP3](#) [SKY13319-374LF](#) [SKY13404-466LF](#) [SKY13473-569LF](#) [SKY13626-685LF](#)
[NJG1809ME7-TE1](#) [SKY13343-92LF](#) [MASW-002103-13635P](#) [SKY13417-485LF](#) [MASW-004103-13650P](#) [NJG1649HB6](#)
[RFASWE660DTF03](#) [BGSA14GN10E6327](#) [FM1694C](#) [XMSS1R6G0PA-001](#) [AW13612FLR](#) [AW13102DNR](#) [FM3418C](#) [AW13508QNR](#)
[AW13418RQNR](#) [FM8648M](#) [FM8545](#)