BGSA143GL10

Low Resistance Antenna Tuning Switch

Features

- Designed for high-linearity antenna tuning switching and RF tuning applications
- Ultra low R_{ON} resistance of 1.15 Ω 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 x 1.5 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

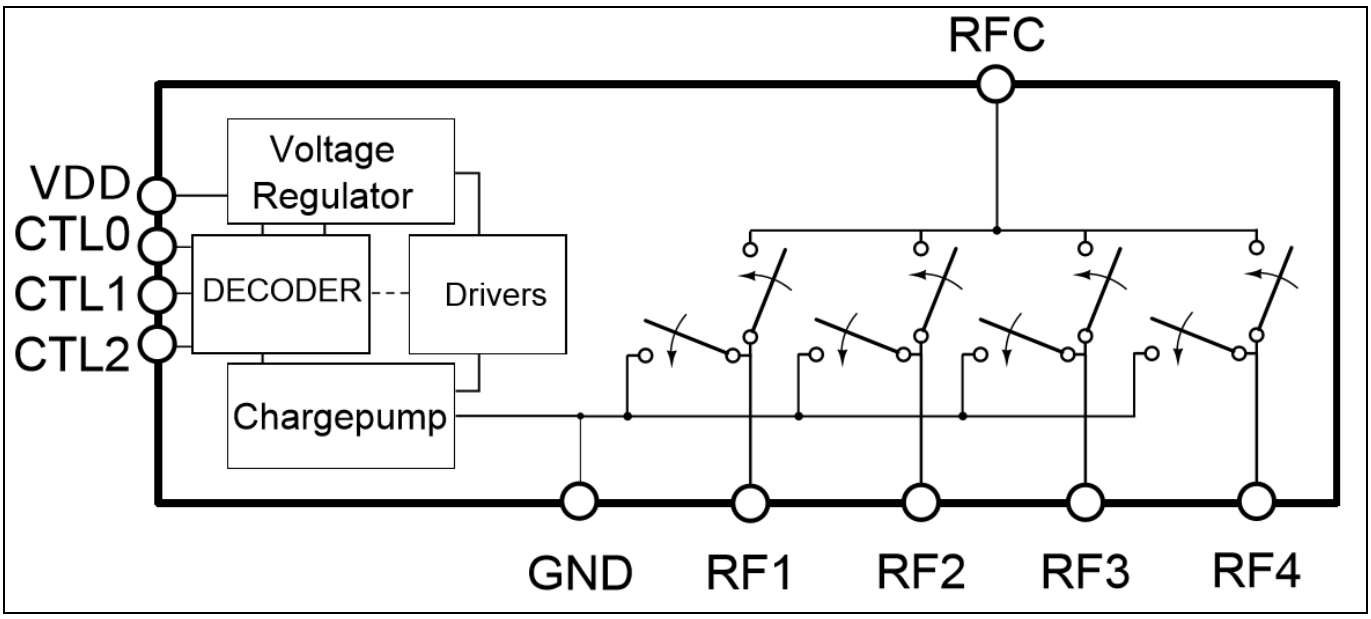

Figure 1 BGSA143GL10 Block diagram

Table 1 Ordering Information

Type	Package	Marking
BGSA143GL10	TSLP-10	AB

WEEE Compliant Package
Halogen-Free
PB Free
RoHS

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