

# BGSA148MN10

## Ultra small antenna tuning SP4T with resonance stoppers

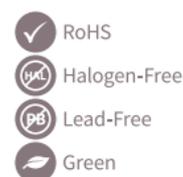
### Features

- Ultra low  $R_{ON}$  resistance of  $0.8 \Omega$  in ON state
- Low  $C_{OFF}$  capacitance of 155 fF in OFF state
- RF operating voltage handling 45 V in OFF state
- MIPI RFFE 2.1 control interface
- Support both 1.8V and 1.2V VIO operation
- External USID\_SEL pin enabling 4 default USID addresses
- Small form factor 0.95 mm x 1.3 mm (MSL1, 260 °C per JEDEC J-STD-020)



### Potential applications

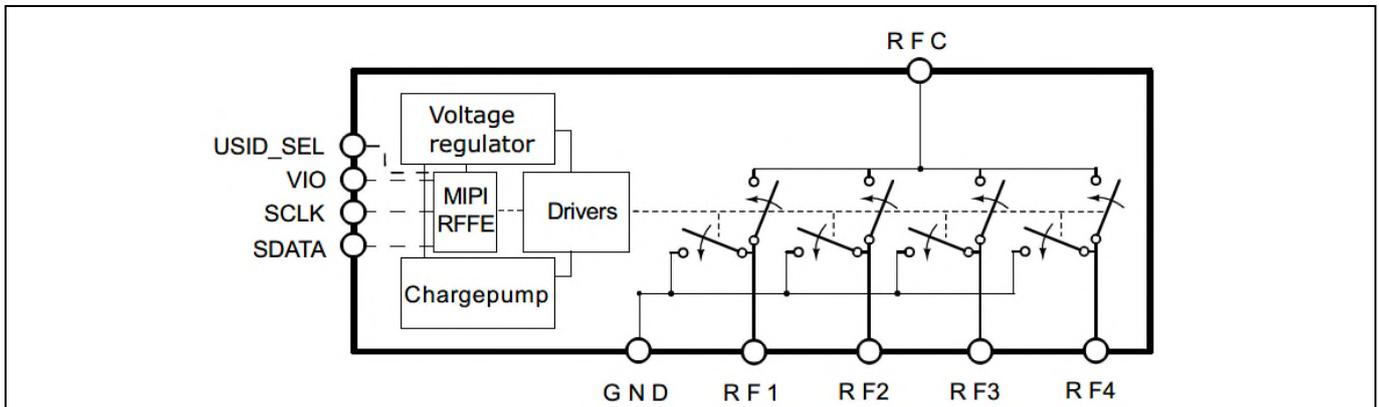
- Impedance, antenna and Inductance tuning
- Tunable filters



### Description

The BGSA148MN10 is a single-pole four throws (SP4T) antenna tuning switch optimized for RF applications up to 7.125GHz. The BGSA148MN10 is made of 4 low ON resistance / low OFF capacitance series switches and 4 shunt to ground switches enabling on-demand open-reflective or short-reflective OFF ports behaviour. This last feature is of great value to reduce antenna engineer development time in case of unwanted antenna resonance or to improve antenna efficiency with less component tuning effort.

## Block diagram and ordering information



**Figure 1 BGSA148MN10 Block diagram**

**Table 1 Ordering Information**

| Type        | Marking | Package   | Product name       |
|-------------|---------|-----------|--------------------|
| BGSA148MN10 | A8      | TSNP-10-9 | BGSA 148MN10 E6327 |

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