PE53110

Document Category: Product Brief
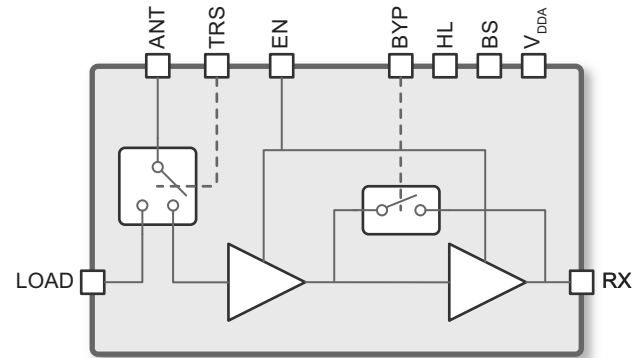
Single Channel Switch LNA Module, 3.3 GHz - 3.8 GHz

pSemi™
A Murata Company

Features

- Wide frequency range with internal matching
- Integrates single-channel LNA with bypass and high power switch
- Max RF input power
  - 5W Pavg for long term
  - 10W Pavg for short term
- 1.65 dB noise figure
- 30 dBm OIP3/ 32 dB gain at full gain mode
- +105 °C operating temperature
- Low power consumption: 90 mA
- Compact package size of 32-lead 5x5 mm

Applications

- 4G/4.5G TD-LTE macro/micro cell
- Pre-5G/5G massive MIMO systems
- Receiver protection system

Figure 1 ▪ PE53110 Functional Diagram

Product Description

The PE53110 is a highly integrated front-end module targeted for wireless infrastructure applications such as TDD macro/micro base stations and MIMO applications. It is designed for use at the front end of a receiver chain for a TDD-based system. The PE53110 is ideally suited for 4G or next-generation 5G solutions, or small cell applications.

The single-channel receiver integrates an LNA with bypass function and a high power switch. The PE53110 can be utilized across the 3.3–3.8 GHz frequency range with internal impedance matching networks.

This receiver utilizes pSemi's UltraCMOS SOI technology which supports input RF power signal up to 5W average power, assuming 8 dB PAR and very low noise figure, excellent linearity and very low power consumption.

Ordering Information

Table 1 lists the available ordering codes for the PE53110 as well as available shipping methods.

Table 1 ▪ Order Codes for PE53110

Order Codes	Description	Packaging	Shipping Method
PE53110A–Z	PE53110 Switch and LNA	32-lead 5x5 mm LGA	3000 units/T&R
EK53110–01	PE53110 Evaluation kit	Evaluation kit	1/Box

Document Categories

Advance Information

The product is in a formative or design stage. The datasheet contains design target specifications for product development. Specifications and features may change in any manner without notice.

Preliminary Specification

The datasheet contains preliminary data. Additional data may be added at a later date. pSemi reserves the right to change specifications at any time without notice in order to supply the best possible product.

Product Specification

The datasheet contains final data. In the event pSemi decides to change the specifications, pSemi will notify customers of the intended changes by issuing a CNF (Customer Notification Form).

Product Brief

The product brief contains summary product information.

Sales Contact

For additional information, contact Sales at sales@psemi.com.

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