

#### **Product Brief**

# 5.8GHz Active Integrated Antenna with LNA and Switch

### Description

BHWR580L is a complete RF Front-End solution from BHW's RF Active integrated Antenna (RFAiA<sup>™</sup>) product family. It integrates a low noise amplifier with ultra-low 1.7dB total noise figure and 10dB gain, and a pair of antennas for Tx/Rx and very stable VSWR under various PCB size and housing conditions, all into a compact 16x12mm design. The separate Tx/Rx antenna architecture minimizes switch loss and allows the insertion of any power amplifier to further boost the transmit power. BHWR580L can be easily surface-mounted to the main product board without requiring any additional impedance matching, resulting in significantly simplified RF design and shorter product development cycle.

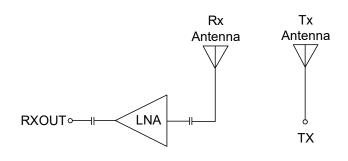
#### **Key Features**

- 5.75-5.85GHz Operation Frequency Range
- Rx Noise Figure: 1.7dB; Gain: 10dB
- LNA Current: 12mA (3.3V)
- No External Matching Required
- Separate Tx/Rx Antenna Architecture
- Option for Insertion of Transmit PA
- ESD Protection on All I/O Ports
- Compact 16x12mm footprint for SMT

### **Key Applications**

- > 5.8GHz Wireless Audio/Video
- > 5.8GHz Data Transmission
- > UAV/Drones
- Remote Control
- Generic 5GHz TDD Radio Designs

### **Functional Block and Product Information**





16x12x0.6mm PCB (After BHWM552 Assembly)



BHWR580L

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For further information, please email to <a href="mailto:support@bhwtechnologies.com">support@bhwtechnologies.com</a>, or contact your local BHW Sales Rep or Distributor. We will send you the complete product datasheet as well as EVB related information.