



Industrial Temperature Rating
-40° to +85° C

Broad Certifications with Multiple Antennas
FCC (USA), IC (Canada), ETSI (Europe),
Giteki (Japan), and RCM (AU/NZ) (all pending)

On-Module Chip Antenna Available

- Offers greater resistance to de-tuning vs. trace or standard chip antennas
- Larger pin outs simplify manufacturing assembly

Sterling-LWB™

2.4 GHz Wi-Fi® and Bluetooth® Smart Ready Multi-Standard Module

FEATURES AND BENEFITS

- Delivers IEEE 802.11 b/g/n, BT 2.1+EDR, and BLE 4.1 wireless connectivity
- Based on next-generation silicon from Broadcom (BCM4343W)
- Three versions of the module available:
 - SiP without antenna (10 mm x 10 mm x 1.2 mm)
 - With chip antenna (15.5 mm x 21 mm x 2 mm)
 - With external U.FL antenna port (15.5 mm x 21 mm x 2 mm)
- Enhanced collaborative co-existence algorithms
- Nearly 60% lower Active Rx Power Consumption (vs TiWi-BLE)
- Latest Linux and Android drivers supported directly by LSR and Broadcom
- SIG certified Bluetooth driver (QDID: 64781)
- Pre-integrated cloud agent for LSR's exclusive TiWiConnect™ cloud-connectivity platform
- Multiple certified 2.4 GHz antenna options
Chip, Dipole, FlexPIFA™ & FlexNotch™
LSR offers in-house certification of additional antennas at little to no cost

Practical Applications:

Security & Building Automation, Internet of Things / M2M Connectivity, Smart Gateways

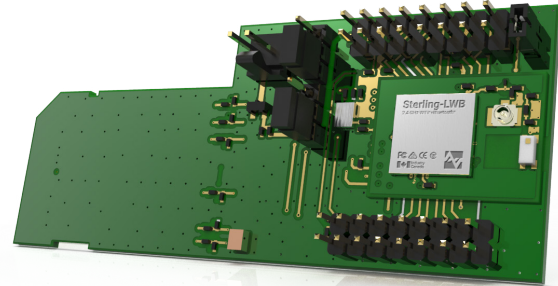
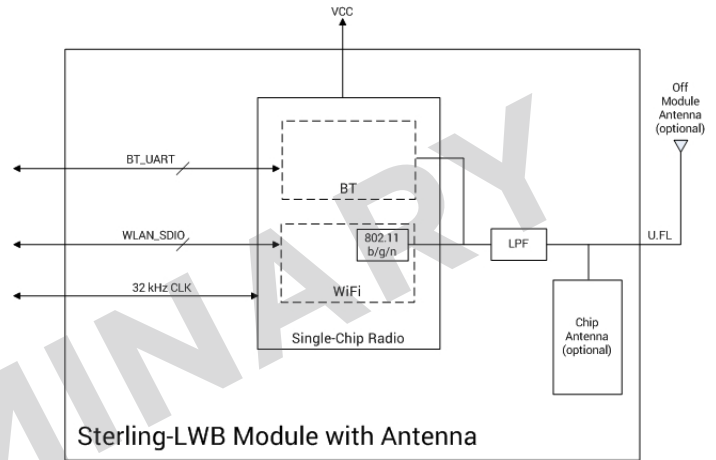
STERLING-LWB MODULE PERFORMANCE

SPECIFICATION	VALUE
Operating Temp	-40 to +85° C
Operating Voltage	3.0 V to 3.6 V
WLAN Transmit Power	802.11b, 11 Mbps CCK: 17.5 dBm 802.11g, 54 Mbps rate: 14.0 dBm 802.11n, 65 Mbps MCS7: 12.5 dBm
WLAN Rx Sensitivity	802.11b, 11 Mbps CCK: -88 dBm 802.11g, 54 Mbps rate: -75 dBm 802.11n, 65 Mbps MCS7: -72 dBm
Bluetooth Transmit Power	8.5 dBm (GFSK)
Bluetooth Rx Sensitivity	-90 dBm (GFSK)

All specifications are preliminary and subject to change.

ORDER INFORMATION

PART NUMBER	DESCRIPTION
450-0152	Sterling-LWB Chip Antenna Module
450-0148	Sterling-LWB U.FL Module
450-0159	Sterling-LWB Base Module (SiP)
450-0155	Sterling-LWB Development Board with U.FL
450-0156	Sterling-LWB Development Board with Chip Antenna



Dev Board with SD card form factor for simple connectivity with Freescale i.MX 6 and other platforms

LSR is the leader in Wireless Product Development, offering true end-to-end solutions through its array of services and technical expertise.



Design Services

LSR delivers complete system solutions from concept to manufacturing. We are your wireless M2M solutions partner, providing complete turnkey services and solutions.

- RF Design/Engineering
- Software/Firmware Design
- Antenna Design
- Industrial Design
- Mechanical Engineering



EMC Testing & Certification

At LSR, we understand it is critical for your company to have a compliant product supported by the appropriate documentation, ready for deployment into the market. LSR provides the experience and knowledge to provide quality test services that meet your timeline and budget.

- On-Site FCC / IC /CE EMC Certification
- Wireless & Antenna Testing
- EMC Testing
- International Testing Services



Wireless Products

LSR offers the fastest, lowest cost way to add wireless capabilities to your product concept. LSR's fully-certified modules and antennas accelerate your time-to-market and support the full breadth of communication technologies, including:

- Wi-Fi®
- Bluetooth®
- Bluetooth® Smart
- ZigBee®
- 802.15.4 & proprietary protocols

Sterling-LWBNBA10