

1.0 GENERAL INFORMATION

1.1 System Overview

The BST1918 combines low noise high power transceiver(s) and sophisticated management capability to offer a radio solution for 1.9 GHz **BWIN™ BASED ON DOCSIS™** base stations. Out-of-band signaling over the single cable connection with the VCom BST1918 allows for full SNMP management (via the WM4040) of the operational parameters. Built-in power detectors allow for easy input and output level configuration.

1.2 BST1918 Features

- High output power: +31 dBm carrier level with 64QAM
- Automatic transmit power control automatically corrects for cable loss and input level changes
- RF output mutes when changing output configuration or in a switchover situation
- Low noise: <4 dB including duplexer loss
- Digital temperature compensation to guarantee specifications over full operating temperature range
- All local oscillators are frequency synthesized and locked to a common high stability reference from the WM4040
- FLASH memory for easy software updates
- Externally connected antennas (60°, 90°, 120°, Omni)
- High reliability, state-of-the-art design using microstrip, MMIC and surface mount technology
- Conservative component derating and 100% burn in help ensure reliable operation

Full SNMP management when combined with the WM4040:

| Monitors | Controls | Alarms |
|-----------------------|--|---------------------|
| Transmit IF Level | RF Output Power Setting | Phase Lock Lost |
| Transmit RF Level | RF Output Power Mode (closed-loop power control, open loop gain control) | Overheating |
| Receive IF Level | RF Output Mute | Loss of Transmit IF |
| Internal Temperature | Receive Gain | Transmit RF Level |
| Module Serial Numbers | | |
| Transmit Phase Lock | | |
| Receive Phase Lock | | |