

Broadcom BCM4360

Broadcom BCM94360CS2/BCM4360 Wireless WiFi and Bluetooth Module Instruction Manual

For Apple Laptops Models A1465 and A1466

1. INTRODUCTION

This document serves as an instruction manual for the Broadcom BCM94360CS2/BCM4360 Wireless WiFi and Bluetooth Module. It provides essential information regarding the module's features, compatibility, installation procedures, operational guidelines, maintenance, and troubleshooting. Please read this manual thoroughly before attempting installation or use to ensure proper function and to prevent damage to the module or your device.

2. PRODUCT OVERVIEW

The Broadcom BCM94360CS2/BCM4360 is an internal wireless communication module designed for specific Apple Laptop models. It integrates both Wi-Fi and Bluetooth capabilities, supporting the 802.11ac Wi-Fi standard for high-speed wireless networking and Bluetooth for connecting peripherals.

This module is specifically designed for use with the following Apple Laptop models:

- Apple Laptop Model A1465
- Apple Laptop Model A1466

Important Note: Apple produced different revisions of models A1465 and A1466 across various years. It is crucial to verify the specific year and revision of your laptop to ensure compatibility, as physical dimensions and connector placements for internal components can vary. This module is generally intended for 2013 and later revisions of these models. Incompatible models may result in incorrect fitment or non-functional antennae connections.

The module requires macOS 10.15 Catalina or a newer operating system version for full functionality.

4. SETUP AND INSTALLATION

Installation of this internal component requires technical proficiency and specialized tools. It is highly recommended that installation be performed by a qualified technician. Incorrect installation can lead to damage to the module or your laptop, voiding any warranty.

4.1. Pre-Installation Checklist

- Ensure your laptop is powered off and disconnected from all power sources.
- Gather necessary tools (e.g., pentalobe screwdriver, Torx screwdrivers, spudger, anti-static wrist strap).
- Work in a clean, static-free environment.
- Back up any critical data on your laptop before proceeding.

4.2. Installation Steps (General Guide)

1. **Disassemble Laptop:** Carefully open your Apple Laptop according to its specific service manual or reputable repair guide. This typically involves removing the bottom case and disconnecting the battery.
2. **Locate Existing Wireless Card:** Identify the current wireless card. It is usually secured by a small screw and has antenna cables connected to it.
3. **Disconnect Antenna Cables:** Gently disconnect the antenna cables from the old wireless card. Note their original positions for correct reattachment.
4. **Remove Old Card:** Unscrew the retaining screw and carefully slide out the old wireless card from its slot.
5. **Install New Module:** Insert the Broadcom BCM94360CS2/BCM4360 module into the slot, ensuring it is fully seated. Secure it with the retaining screw.
6. **Reconnect Antenna Cables:** Carefully reattach the antenna cables to the corresponding connectors on the new module. Ensure a secure connection.
7. **Reassemble Laptop:** Reconnect the battery and reassemble the laptop, ensuring all screws are tightened appropriately and no internal cables are pinched.
8. **Power On and Test:** Power on your laptop and verify that Wi-Fi and Bluetooth functions are operational.



Image 3: The Broadcom BCM94360CS2/BCM4360 module packaged in an anti-static bag. This packaging protects the sensitive electronic components from electrostatic discharge during shipping and handling. Always handle the module by its edges to prevent damage.

5. OPERATING INSTRUCTIONS

Once correctly installed, the Broadcom BCM94360CS2/BCM4360 module should be automatically recognized by macOS (version 10.15 Catalina or newer). No additional drivers are typically required for basic functionality.

5.1. Wi-Fi Connectivity

1. Navigate to **System Settings** (or System Preferences) > **Network** > **Wi-Fi**.
2. Ensure Wi-Fi is turned **On**.
3. Select your desired Wi-Fi network from the list and enter the password if prompted.

5.2. Bluetooth Connectivity

1. Navigate to **System Settings** (or System Preferences) > **Bluetooth**.
2. Ensure Bluetooth is turned **On**.
3. Your Mac will search for discoverable Bluetooth devices. Select the device you wish to pair and follow the on-screen instructions.

6. MAINTENANCE

The Broadcom BCM94360CS2/BCM4360 module is an internal component and generally requires no routine user maintenance. To ensure its longevity and optimal performance:

- Keep your laptop in a clean, dust-free environment.

- Avoid exposing your laptop to extreme temperatures or humidity.
- Do not attempt to clean the module directly once installed. If internal cleaning is required, consult a professional.
- Ensure proper ventilation for your laptop to prevent overheating, which can affect all internal components.

7. TROUBLESHOOTING

If you encounter issues after installing the module, consider the following troubleshooting steps:

- **Wi-Fi or Bluetooth Not Detected:**
 - Double-check all internal connections, especially the module's seating in its slot and the antenna cables.
 - Ensure your macOS version is 10.15 Catalina or newer.
 - Reset your Mac's NVRAM/PRAM and SMC.
- **Poor Wi-Fi Signal or Slow Speeds:**
 - Verify antenna cables are securely connected and not damaged.
 - Ensure there are no physical obstructions or interference sources near your laptop or Wi-Fi router.
 - Test with another Wi-Fi network to rule out router issues.
- **Bluetooth Devices Not Pairing:**
 - Ensure the Bluetooth device is in pairing mode and within range.
 - Remove and re-add the Bluetooth device in macOS Bluetooth settings.
 - Check for any software updates for macOS.

If issues persist after attempting these steps, it is advisable to consult a professional repair service or contact the seller for further assistance.

8. SPECIFICATIONS





Feature	Detail
Brand	Broadcom
Model Numbers	BCM4360, BCM94360CS2, BCM94360CS2AX
Apple Part Number	653-0023
Wireless Type	802.11ac Wi-Fi
Hardware Interface	Bluetooth
Data Link Protocol	Bluetooth
Compatible Devices	Apple Laptop A1465, Apple Laptop A1466 (specific year models)
Minimum Required OS	Mac OS 10.15 Catalina
Item Weight	0.353 ounces (approx. 10 grams)
Product Dimensions (LxWxH)	1.18 x 1.06 x 0.04 inches (approx. 30 x 27 x 1 mm)
UPC	722851200681


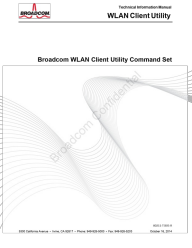
9. WARRANTY AND SUPPORT

This product typically comes with a 30-day Dead On Arrival (DOA) warranty, covering defects present upon receipt. Please refer to your purchase documentation for specific warranty terms and conditions.

For technical support, warranty claims, or further assistance, please contact the seller or retailer from whom you purchased this module. Provide your order details and a clear description of the issue to facilitate a prompt resolution.

Related Documents - BCM4360

	<p>Broadcom Shell: Accessing Network Hardware Components</p> <p>A guide to accessing the Broadcom Shell (bcm-shell) on Cisco network devices, detailing methods for interacting with Broadcom Network Forwarding Engines (NFE) and T2 ASICs on fabric modules and line cards.</p>
	<p>Broadcom CVPM02, CVPM05, CVFM04 User Guide: Installation and Management</p> <p>Comprehensive user guide for Broadcom CVPM02, CVPM05 Power Modules and CVFM04 Cache Module. Learn about installation, configuration, monitoring, and specifications for MegaRAID cache backup solutions.</p>
	<p>DX Unified Infrastructure Management 20.4: Release Notes and User Guide</p> <p>Explore the comprehensive release notes and user guide for Broadcom DX Unified Infrastructure Management (DX UIM) version 20.4. This document details new features, installation, administration, and troubleshooting for robust IT infrastructure monitoring.</p>
	<p>Broadcom Emulex Host Bus Adapters Installation Guide Release 14.4</p> <p>This installation guide (Release 14.4) from Broadcom provides detailed instructions for setting up Emulex Host Bus Adapters (HBAs), including models LPe38100, LPe37100, LPe36000, LPe35000, LPe32000, and LPe31000 series. It covers installation, compatibility, major features, specifications, and regulatory information.</p>

 The image shows the top portion of a legal document. It features the Broadcom logo at the top left. Below the logo, there is a dense block of text, which appears to be the beginning of the 'Terms and Conditions of Sale' document.	<p>Broadcom Semiconductor Solutions Terms and Conditions of Sale</p> <p>Official terms and conditions governing the sale of Broadcom semiconductor products and software licenses, covering applicability, orders, pricing, delivery, warranty, licenses, limitations of liability, and general provisions.</p>
 The image shows the top portion of a technical guide. It features the Broadcom logo at the top left. Below the logo, there is a title 'Broadcom WLAN Client Utility Command Set' and a large, stylized graphic that resembles a signal or a network diagram.	<p>Broadcom WLAN Client Utility Command Set Guide</p> <p>Comprehensive guide to the Broadcom WLAN Client Utility Command Set, detailing various commands for configuration, control, and diagnostics of wireless network interfaces.</p>