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PRISM® 54Mbps Wireless Local Area Network Access Point



The Intersil ISL39300A WLAN Access Point is a complete wireless high speed Network Access Point (AP) utilizing the Intersil PRISM

Data Sheet

Duette[™] chip set in conjunction with the 3893 WiSOC BB/MAC. It conforms to the IEEE 802.11a, 802.11b and 802.11g protocols and therefore operates in both 2.4GHz ISM and 5GHz UNII frequency bands. It provides a complete PRISM reference design platform of hardware and software to system providers or integrators requiring wireless data communications capability. The Open Source Linux operating system offers a flexible and extensible development platform for making customized Access Points.

The Developers Kit includes a WLAN Access Point reference design, configuration application, source code and documentation. It supports the IEEE 802.11a/b/g network specification for DSSS and OFDM signaling, providing 1-54Mbps data rates. Typical operating ranges are shown in Table 1.

Ordering Information

PART NUMBER	DESCRIPTION	CARDS/SET
ISL39300A-DAPDK-EVAL	Dual Band Access Point Evaluation Kit	1 AP/1 Duette PC Card
ISL39300A-DAPDK-CD	Reference Design	NA

Packaging





Sample plastic enclosure.

Features

- Low cost Zero IF (ZIF) architecture
- · Fully compliant with the IEEE 802.11a, 802.11b and 802.11g WLAN standards
- FCC Certified Under Part 15 to Operate in 2.4 and 5GHz bands
- ETSI EN 300 328 parts 1 and 2, ETSI EN 301 489 parts 1 and 17 Certified
- Supports all features required for Wi-Fi[™] Compliant Access Points
- Support for 54, 48, 36, 24, 18, 12, 9, and 6Mbps OFDM, 11 and 5.5Mbps CCK and legacy 2 and 1 Mbps data rates
- Supports Dual Rx/Tx Antenna Diversity
- Provides 2 Wired ethernet (802.3) ports for WAN and LAN connection (10/100BaseT speeds)
- Supports Power over Ethernet (802.3af according to Draft 3.1) on LAN port
- miniPCI connector for PRISM GT™/Duette add-on card (Dual cell operation)
- · 6 LEDs of which one is user defined
- Open Source Linux operating system offering a flexible and extensible platform for feature development
- · Separate Web File Set for easy user-configuration and upgrading
- Wizard for Automated IP Configuration
- · Enhanced Security via 802.1x, TKIP, and WPA
- Wireless Distribution System (WDS) support for wireless repeater/bridge mode of operation
- · 802.11d regulatory domain selection supported
- Inter Access Point Protocol (IAPP) according to latest draft 802.11f standard
- 802.1d support (Spanning tree protocol)
- Multi-homed IP address selection via static IP, DHCP, or Auto IP
- Internet connection establishment via static IP, DHCP, PPTP, or PPPoE
- MAC cloning
- NAT/NAPT support
- VPN pass-through support (PPTP & IPSec)
- DHCP server
- SNMPv2 support
- HTTP server