



Micro Access Point Solution

Product Data Sheet

Introduction

In computer networking, a Wireless Access Point (WAP) is a device that allows wireless communication devices to connect to a wireless network using Wi-Fi, Bluetooth or related standards. The WAP usually connects to a router, and can relay data between the wireless devices (such as computers or printers) and wired devices on the network. GlobalEdge has developed a unique, modular, small footprint Access Point Solution, which we call it as Micro AP or μ AP. This can be easily integrated with existing stand alone products in the market.

Key Features

- Small footprint for easy integration into existing solutions
- Efficient Code for maximum throughput
- Effective Power Management for use in portable devices
- Configurable number of simultaneous connections
- Uses a well defined Hardware Abstraction Layer to integrate into various Wi-Fi chipsets
- Uses an Operating System Abstraction Layer to work with different Operating Systems

Description

GlobalEdge's Access Point stack has been designed for easy integration into existing solutions like DSL Routers, Cable Modems, Set-Top-Box's and Media Servers. Due to its small footprint and configurable features it can also be integrated directly inside Wi-Fi Chipsets.



All the images, logos and names belong to their respective owners.

Specifications

Wireless Interface

- 802.11 a/b/g Standards Compliant
- Open/Shared Authentication
- Auto G-mode Protection
- Per Station Rate Adaptation
- WEP, WPA and WPA2 Security support
- RTS/CTS Support
- Fragmentation Support
- Short/Long Preamble Support
- 802.11d (Region) Support
- Disable Broadcast SSID Support
- Supports a maximum of 253 Stations

Specifications Contd.

Security

- WEP 64-bit / 128-bit
- Pass Phrase and PMK Key Generation
- WPA/WPA2 Authenticator
- TKIP/CCMP Encryption
- PTK/GTK MIC Error Handling
- MAC Filtering
- RADIUS Client
- EAP Client

AP Configuration

- Serial Port Configuration
- Remote Configuration via Telnet
- Browser Based Configuration

Network Components

- 802.1d Bridging
- NAT based Firewall
- DHCP Server and Client
- HTTP Server

Power Management

- 802.11 Power Save Support
- Configurable DTIM Periods
- Dynamic Transmit Power Control
- Dynamic Rate Control

Wi-Fi Chipset Interface

- I/O Bus
- Memory Bus
- SDIO
- SPI
- PCI (as supported by Processor and Wi-Fi Chipset)

WAN Interface

- Ethernet
- Cable Modem
- DSL Modem as required

Diagnostics

- LED Status Display
- AP Status Report

Testing

- Tested with Atheros Chipset
- Interoperated with Atheros, Intel, Broadcom, Marvell and RaLink Wireless Chipsets

Memory

- Dynamic memory requirement : 4KB to 192KB

Code Size

- Code Size: 52KB
- Data Size: 12KB

Applications

Embedded Access Point for use in

- Mobile Phones & PDA
- Laptops
- Automobiles, Buses and Trains

Standard Access Point for integration into:

- DSL Routers & Cable Modems
- Set-Top-Box's & Media Servers

Low Power Access Point Solution

- Solar / Wind Power AP Solutions

AP for Local Wi-Fi Networks

- Malls
- Airports
- Railway & Bus Stations