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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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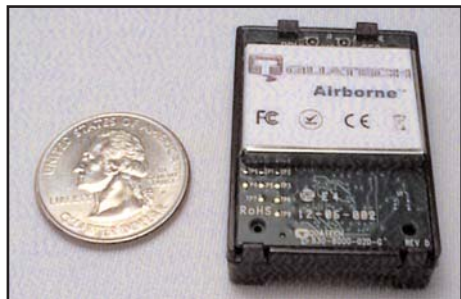
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Airborne™ Embedded Wireless Device Server Module Serial to 802.11b/g Wireless LAN

WLNG-AN-DP100 series
WLNG-SE-DP100 series

Preliminary



HTML interface. An integrated web server makes it easy to remotely monitor and control any device using a standard browser. Additionally, the OEM can create custom web pages that deliver content from their application.

Applications

The Airborne™ modules have been designed to provide wireless LAN and Internet connectivity in these industries:

- transportation
- medical
- warehouse and logistics
- point-of-sale (POS)
- industrial automation
- military
- scientific research

Equipment with an embedded Airborne™ module can be monitored and controlled by a handheld device, by a PC in a central location or over the Internet.

The Evaluation & Design Kit provides software and utilities that allow a developer to quickly and easily operate and evaluate the Wireless Device Server module.

KEY FEATURES

- Extended operating temperature range (-40°C to +85°C) and environmental specifications
- Advanced security: WEP (64 & 128 bit), WPA and 802.1x (LEAP) authentication
- Low power modes
- Highly integrated 802.11b/g wireless module with radio, base-band & application processor
- Quick time to market & reduced development costs
- Configurable serial, digital & analog I/O ports
- Integrated RTOS, TCP/IP Stack and CLI
- FCC Part 15 Class B Sub C Modular Approval
- Reduces need for RF and communications expertise
- Five year warranty

High performance device networking solutions

Airborne™ is a line of highly integrated 802.11 radios and modules. The wireless device server module includes a radio, (which may be purchased separately) a base-band processor, an application processor and software for a “drop-in” web-enabled WiFi solution. Since there’s no need to develop the software, or to develop the RF and communications expertise in-house, OEMs can realize reduced product development costs and a quick time-to-market. Airborne™ modules provide instant LAN and Internet connectivity, and connect through standard serial interfaces (other Airborne modules offer an Ethernet interface) to a wide variety of applications.

Highly interoperable with advanced security

The extremely small footprint design makes Airborne™ easy to embed into new or existing designs. The module is interoperable with industry standard 802.11 access points and advanced security standards such as WEP, WPA and LEAP, that provide a low cost infrastructure for connection to a LAN and to the Internet. The built-in TCP/IP stack and application software provide embedded devices with instant LAN and Internet connectivity without special programming of the module - only simple configuration is required using DPAC’s

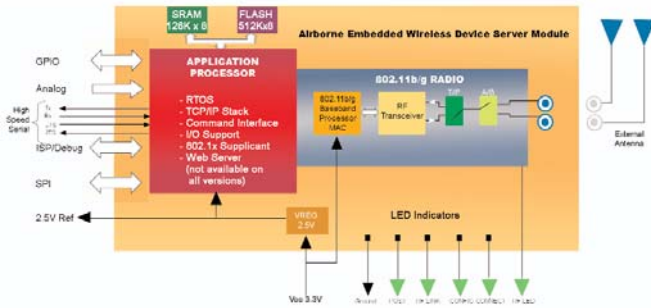
Model Selection Guide

Model No.	Interface					WiFi	Security		
	UART	RS-232	RS-422/485	SPI	Digital & Analog I/O	802.11b/g	WEP (64 & 128 bit)	WPA	LEAP*
WLNG-AN-DP101	●	●			●	●	●	●	●
WLNG-AN-DP102				●	●	●	●	●	●
WLNG-SE-DP101	●	●	●			●	●	●	
To evaluate all available features and receive evaluation tools, order below.									
WLNG-EK-DP001	Evaluation & Design Kit, includes Wireless Access Point								
WLNG-EK-DP003	Evaluation & Design Kit, does not include Wireless Access Point								

All 802.11b/g products are RoHS-compliant.

* feature supported in special firmware

Block Diagram



Specifications

Technology	IEEE 802.11b/g, WiFi compliant (802.11i, 802.11e, 802.11d capable)
Frequency	2.400 ~ 2.4835 GHz (US/Can/Europe) 2.471 ~ 2.497 GHz (Japan)
Modulation Technology	DSSS, CCK, OFDM
Modulation Type	DBPSK, DQPSK, CCK, BPSK, QPSK, 16QAM, 64QAM
Network Access Modes	Ad-hoc, infrastructure
Channels	USA/Canada: 11 channels (1 - 11) Europe: 13 channels (1 - 13) Japan: 14 channels (1 - 13 for g rates) (1 - 14 for b rates) France: 4 channels (10 - 13)
Wireless Data Rate	802.11b - 11, 5.5, 2, 1 Mbps 802.11g - 54, 48, 36, 24, 18, 12, 9, 6 Mbps
MAC	CSMA/CA with ACK, RTS, CTS
RF Power	+19.3 dBm (typical) Approx. 85 mW peak for B rates +15 dBm (typical) Approx. 32 mW average for B rates +21.5 dBm (typical) Approx. 143 mW peak for G rates +12 dBm (typical) Approx. 16 mW average for G rates
Sensitivity	-71dBm for 54Mbps -77dBm for 36Mbps -83dBm for 18 Mbps -85dBm for 11Mbps -87dBm for 1Mbps
Protocols	TCP/IP, ARP, ICMP, DHCP, DNS, HTTP
Data Transfer	UDAP Discovery TCP/IP, HTTP, UDP
Security	WEP 64 and 128bit (RC4), WPA (TKIP), 802.1x (EAP)
Antenna	Two U.FL coaxial connectors, 50 ohms, supports receive diversity
Supply	3.3 Vdc +/-5%
Current Consumption	575mA - transmit mode (typical) 375mA - receive mode (typical) To be spec'd - power save mode (IEEE) To be spec'd - (full power down)
Power Up Inrush Current	3000 mA (max) 20ms
Serial Interface Data Throughput	UART: to be specified SPI: to be specified
Digital I/O	Up to 8 digital I/O ports and status
Analog Inputs	Up to 8 channels, 10-bit resolution, single ended, 0-2.5V
Operating Temperature	Temperature: -40°C - +85°C Relative humidity: 5% - 95% (non-condensing) Vibration: 20G peak-to-peak, 20 Hz-2KHz Shock: 1500G, peak-to-peak, 0.5mS
Connector	36 Pin (Hirose DF12-36DS-0.5 V) 4-mm height
Interface	CF+ via a 50pin Hirose 0.5mm pitch surface mount connector
Agency Approvals	FCC Part 15 Class B Sub C Intentional Radiator CE ETSI EN300 328, EN301 489, ETSI 60950-1 IC RSS210 RoHS and WEEE compliant

Mechanical Outline

