Wireless LAN 802.11a/b/g OFDM / CCK DSSS Baseband Processor

PRISM™

The Intersil ISL3865A OFDM / CCK Direct Sequence Spread Spectrum (DSSS) baseband processor contains all the functions necessary for both a 5 GHz 802.11a and 2.4GHzb/g baseband transceiver.

The ISL3865A has on-board A/Ds and D/A for analog I and Q inputs and outputs, for interfacing with ISL3680, ISL3690 or ISL3686X Direct Conversion Transceivers. Built-in flexibility allows the ISL3865A to be configured through a general purpose control bus, for a range of applications. Both the receive and transmit paths utilize digital AGC control to obtain maximum performance in the analog portions of the transceiver. The ISL3865A is housed in a 14x14 mm thin plastic Ball Grid Array suitable for PC Card applications.

Ordering Information

PART NUMBER	TEMP. RANGE (^{o}C)	PACKAGE	PKG. DWG. #
ISL3865AIK	-40 to 85	192 Ld BGA	V192.14x14
ISL3865AIK-TK	-40 to 85	Tape and Reel	

Features

- Complete OFDM/DSSS Baseband Processor
- RAKE Receiver with Decision Feedback Equalizer
- Processing Gain. .FCC Compliant
- Programmble Data Rates
- Small Package . . . . 14 x 14mm CABGA
- 1.8V core, 3.3V I/O, 40MSPS Operation
- 16-bit Parallel Meduim Access Controller (MAC) Interface
- Modulation Methods. . . . . OFDM, DBPSK, DQPSK, CCK
- On-Chip A/D and D/A Converters for I/Q Data, AGC, and Adaptive Power Control
- Supports Short Preamble
- Low cost ZIF architecture

Applications

- Wireless LAN Systems Targeting IEEE802.11a/b/g standards
- Wireless LAN access point and bridge products
- Notebook Computer
- Wireless Digital Audio, Video, Multimedia
- Spread Spectrum WLAN RF Modems
- TDMA or CSMA Packet Protocol Radios