Intersil's latest chip set, PRISM® 2.5, demonstrates the continuing progress Intersil is making toward more highly integrated, feature-rich WLAN silicon high performance solutions for future adapters smaller than present PCMCIA cards. Wireless LAN adapters in smaller forms (CompactFlash, MiniPCI, CardBus or embedded modules) are necessary for wide deployment of wireless connectivity in small devices such as laptops, palmtops, PDAs, and digital cameras, to name just a few. PRISM 2.5 makes a major step by integrating the Baseband Processor (BBP) and Medium Access Controller (MAC) - digital functions done by separate ICs in the PRISM II set. The PRISM 2.5 set also includes die shrinks of the power amplifier and RF/IF converter in much smaller form factors (micro-lead frame packages).

- ISL3984 - 2.4GHz Power Amplifier and Detector
- ISL3685 - 2.4GHz RF/IF Converter and Synthesizer
- HFA3783 - I/Q Modulator/Demodulator Synthesizer
- ISL3873 - Integrated MAC and Baseband Processor
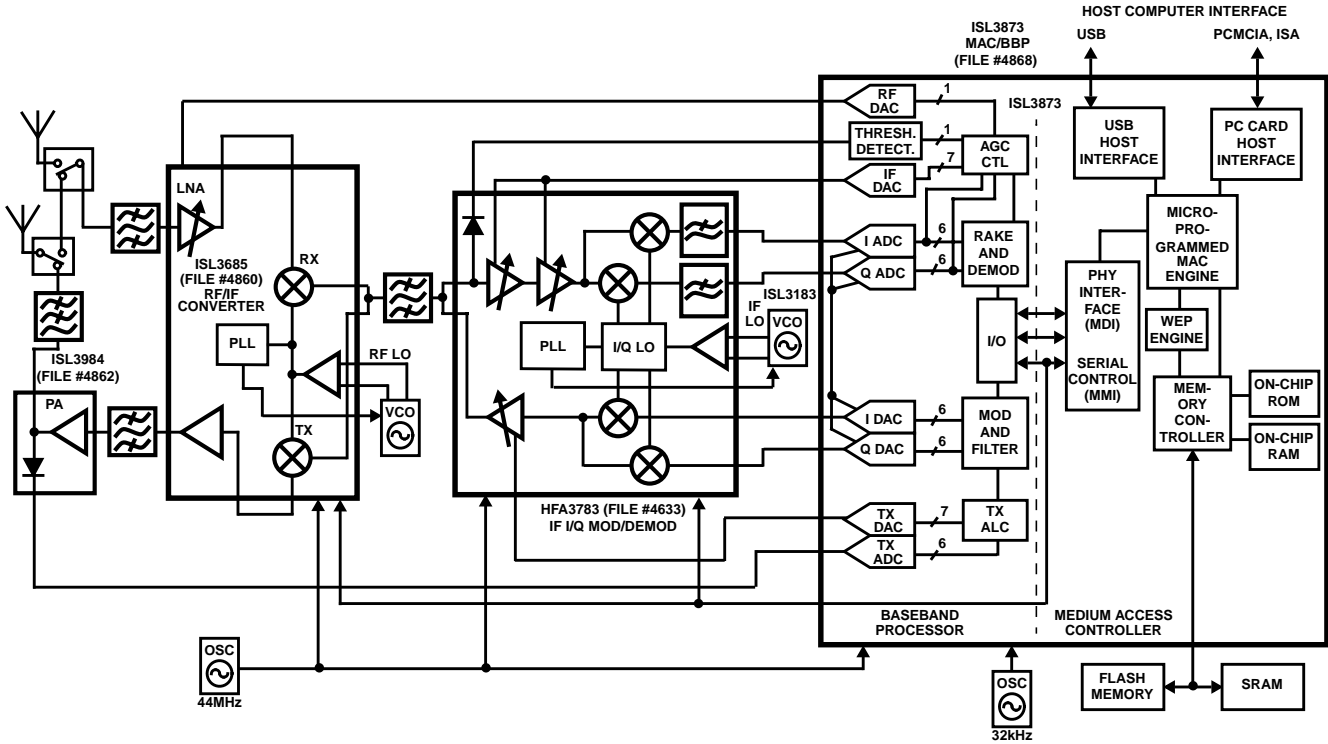- ISL3183 - 748MHz VCO

SPECIFICATIONS

Variable Data Rates	11, 5.5, 2 and 1Mbps
Frequency Band	2.4GHz ISM Band
BER	1×10^{-5} at -83dBm
Dual Mode	IEEE802.11, 1 and 2Mbps
	5.5 and 11Mbps
Range	100m Indoors (Note)
Power Consumption	Same as PRISM I, 2Mbps

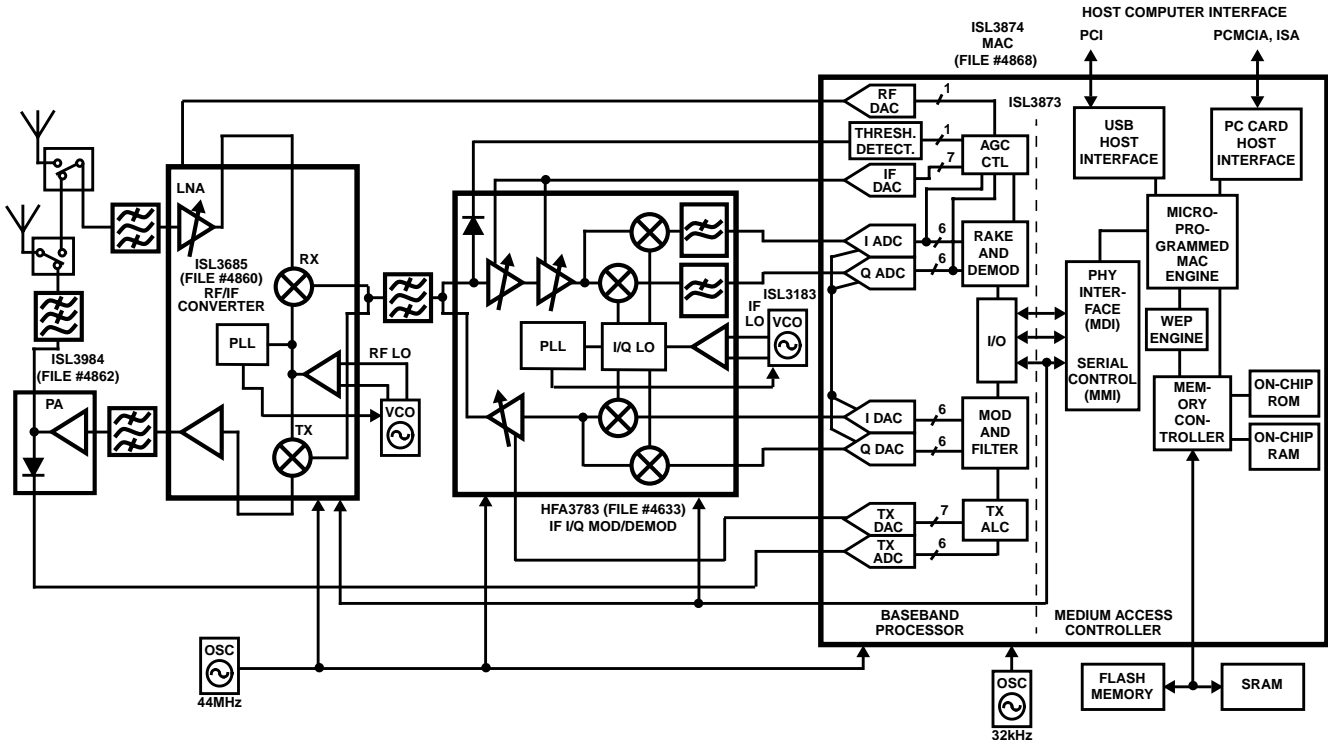NOTE: Range test using AND-C-107 omnidirectional antenna.

PRISM 2.5, 11Mbps ORDERING INFORMATION

PART NUMBER	DESCRIPTION
ISL3984	**2.4GHz Power Amplifier and Detector**
ISL3984IR	16 Ld, 4x4mm MLFP
ISL3984IR96	1000 pcs. Tape and Reel
ISL3685	**2.4GHz RF/IF Converter and Synthesizer**
ISL3685IR	44 Ld, 7x7mm MLFP
ISL3685IR96	1000 pcs. Tape and Reel
HFA3783	**I/Q Modulator/Demodulator and Synthesizer**
HFA3783IN	48 Ld, 7x7mm LQFP
HFA3783IN96	1000 pcs. Tape and Reel
ISL3873	**Wireless LAN Integrated Medium Access Controller with Baseband Processor**
ISL3873IK	V192 Ld, 14x14mm BGA
ISL3873IK96	1000 pcs. Tape and Reel

PRISM 2.5 11Mbps Chip Set Block Diagram (USB)

PRISM 2.5 11Mbps Chip Set Block Diagram (PCI)

For information regarding Intersil Corporation and its products, see web site **www.intersil.com**