Tool Brief



EASY 5120

Wireless VoIP Router Reference Package V1.2

The EASY 5120 reference package demonstrates Infineon's Wireless VoIP router capabilities. This reference platform allows system engineers to develop time-to-market VoIP router products.

The EASY 5120 reference design is based on Infineon's VoIP, SLIC, SoC and wireless LAN technologies to provide excellent voice quality and high data transmission throughput through both wired and wireless access. VINETIC-2CPE (PEB 3332 EL) a hardware DSP, together with SLIC-DC (PEF 4268 T) provide excellent voice quality. In the software package, the SIP protocol, supplementary services, QoS capability for voice and fast NAT are embedded.

Applications

The EASY 5120 reference package meets all relevant requirements for voice transmission and supports industry standard vocoders (G.711 a/u, G.723, G.726, G.728 and G.729), dynamic jitter buffer, T.38 fax relay and line echo cancellation.

The package consists of the ADM5120 network processor, SLIC-DC, VINETIC-2CPE, and WIIdCard-G 802.11g wireless module.

A fully software-based programmable AC/DC interface provides multi-regional compatibility without the need for hardware modifications for simplicity of design and reduced BOMs.

Hardware Features

- One WAN interface on-board
- Four LAN interfaces on-board
- Two POTS interfaces for analog telephones or fax machines
- One PSTN lifeline
- 802.11g wireless module with Mini-PCI interface
- RS-232 daughter board serial interface
- Support for EJTAG debugger interface
- Requires +12 V power supply

Software Features

- Embedded Linux® kernel version 2.4.20
- Device drivers for all internal peripherals
- Supports TCP/IP related networking protocols (IP, TCP, UDP, ARP, RARP, ICMP, DHCP, PPP, and PPPoE)
- NAT, NAPT, ALG, Firewall, Address filtering, DNS, NTP
- Download function via TFTP
- Web based configuration
- SIP complies with RFC 3261
- SDP complies with RFC 2327
- Media transport through UDP and RTP/RTCP
- Caller ID display/transmit
- Supplementary call features (call on hold, call transfer, call forwarding and call waiting)
- In-band DTMF signal transmission
- Provides jitter buffer adjustment (fixed or dynamic)
- Silence Suppression, Voice Activity
 Detection and Comfort Noise Generation
- Line Echo Cancellation complies with G.165/G.168
- Voice Codec includes: G.711, G.723.1, G.726, G.728, G.729 A/B and G.729E
- Provide FAX pass-through (G.711) and FAX relay (T.38)
- Provides QoS including: DiffServ marking, Type of Service (ToS) marking, voice and data traffic prioritization and bandwidth management

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Ordering Information

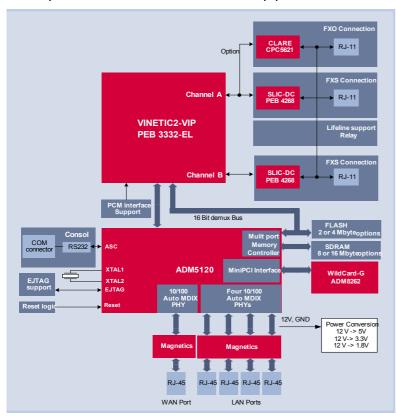
Core Technology Products

Product	Sales Code	Description	Package
VINETIC-2CPE	PEB 3332 EL	VINETIC-2CPE is an analog voice access IC with two-channel codec optimized for Customer Premises Equipment (CPE).	PG-LBGA-144-1
SLIC-DC	PEF 4268 T	SLIC-DC is a high-voltage ringing Subscriber Line Interface Circuit with integrated DC/DC converter.	P-DSO-24-1
ADM5120	ADM5120	Communication network processor for higher layer communication interfaces and management	BGA-324
WildCard-G	ADM8262	Wireless module 802.11 b/g with mini-PCI interface	LQFP-128

Reference Platform

Product Sales Code	Description	Package
EASY 5120	3 ,	One board and Linux Software package

Complete wireless VoIP Application Example



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