PEB 3314/ 3318/ 3324/ 3328 (VINETIC-4M, -8M, -4VIP, -8VIP)
PEB 4264/ 4265/ 4266 (SLIC-S, -E, -P)
Voice and InterNet Enhanced Telephony Interface Circuit

The VINETIC-Family of codec/SLIC chip sets provides a 4 or 8 channel analog termination, optimized for Access Network and Customer Premises applications.

The software programmable VINETIC builds on the success of the well-known DuSLIC chip set. VINETIC adds a comprehensive set of new system features especially designed for packet based voice transmission, as used in VoDSL, VoIP and VoCable.

VINETIC Family

Applications
- Packetized and Switched Networks
- Integrated Access Devices (IAD), xDSL-NTs
- Cable Modems
- Routers, Voice Gateways, VoIP
- Access Network, DLC, WLL
- PBX, VoIP-PBX, ISDN-TA/-PBX

Voice over Packet Features
- Integrated Voice Compression Codecs:
  - G.728
  - G.723.1
  - G.729 A/B/E
  - G.726 ADPCM (32, 16, 24, 40 kbit/s)
- Patent Indemnification for Vocoder Algorithms available

- Line Echo Cancellation (LEC):
  - Near- and Far-End-Echo
  - Up to 128 ms tail
  - Exceeding G.165/G.168/ G.168-2000
- DSP Power According to System Port Density
- ATM AAL2 and RTP/UDP packet preprocessing
- T.38 Fax Relay Support
- Software controlled Integrated Test & Diagnostic Functions ITDF to support Line Testing (GR 909) and Quality of Service (QoS)

Codec/SLIC Features
- Fully programmable 4-, 8-channel CODEC
- Specification according to ITU-T Q.552, G.712, LSSGR

- Uses Infineon's well-known DuSLIC SLICs
- AC and DC characteristic software programmable
- Flexible Interfaces: PCM, IOM; serial, parallel microcontroller/ host processor interface
- Enhanced Power Management
- Optimized Filter Structures for V.90 (56 k) Transmission including Robbed-Bit-Signaling Filter
- Integrated DTMF Receiver
- Integrated Caller-ID Generator (FSK and DTMF)
- Internal programmable balanced ringing up to 100 V_{RMS} and 50 V_{RMS} unbalanced ringing
- Full support of external unbalanced ringing
- Metering pulse up to 2.5 V_{RMS} at 200 Ω (12/16 kHz)

www.infineon.com/vinetic

V I N E T I C
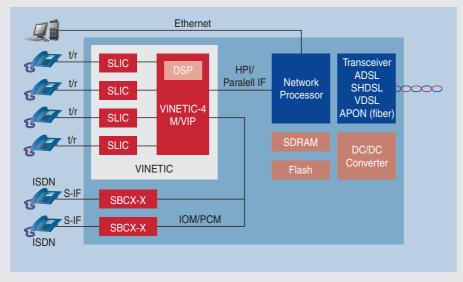
Enhanced Solutions for Next Generation Analog Telephony

Infineon technologies

N e v e r   s t o p   t h i n k i n g .

VINETIC Family Overview

Chip Set	VINETIC-4 VIP	VINETIC-8 VIP	VINETIC-4 M	VINETIC-8 M	VINETIC-4 S	VINETIC-8 S
Product ID	PEB 3324	PEB 3328	PEB 3314	PEB 3318	PEB 3304	PEB 3308
Channels	4	8	4	8	4	8
Supported SLICs	SLIC-P (PEB 4266), SLIC-E (PEB 4265), SLIC-E2 (PEB 4265-2), SLIC-S (PEB 4264), SLIC-S2 (PEB 4264-2), TSLIC-E (PEB 4365), TSLIC-S (PEB 4364)					
Echo Cancellation (G.165/168)	up to 128 ms	up to 128 ms	up to 16 ms	up to 16 ms	No	No
ADPCM (G.726)	Yes	Yes	Yes	Yes	No	No
Complex Voice Codecs (G.723, G.729, G.728)[1]	Yes	Yes	No	No	No	No
Fax Relay T.38 [2]	Yes	Yes	No	No	No	No
DTMF Receiver, Caller-ID, Tones	Yes	Yes	Yes	Yes	No	No
Packet Preprocessing (AAL2, IP)	Yes	Yes	Yes	Yes	No	No
External RAM Required	No	No	No	No	No	No
Integrated Code RAM for Firmware Download	Yes	Yes	No	No	No	No
Line Testing ITDF [3]	Yes	Yes	Yes	Yes	Yes	Yes
Package	LBGA-176 TQFP-176	LBGA-256	LBGA-176 TQFP-176	LBGA-256	LBGA-176 TQFP-176	LBGA-256

[1] Patent indemnification available
[2] Fax Relay T.38 and T.30 modulation code can be downloaded onto the on-chip RAM
[3] Integrated Test and Diagnosis Functions

Integrated Access Device (IAD)

Application Example for One Hardware for All "Voice over Packet" Applications

Documentation and Development Tools

- Evaluation Board EASY334 + Control Software (VINETICON)
- Coefficient Calculation Software (VINETICOS)
- Reference Manuals for: System Concept, Hardware and Software
- Software User's Guide
- API Interface

Attention please!
The information herein is given to describe certain components and shall not be considered as warranted characteristics.

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