



Lantiq™ VINAX™-L/-M

VDSL2/ADSL/2/2+ Central Office Chipset

Features

- Highly optimized chip sets matching all VDSL2 profiles from 8a-d up to 30a
- Per port support of legacy ADSL/2/2+ backward compatibility
- 8 port (-M) and 4 port (-L) granularity
- Low power consumption
- Programmable transmit power up to 20.5dBm (with opt. LD supply)
- Extended US0 band up to 552kHz (Single/Double/Quadruple US0)
- Region specific bandplans and RFI-notches fully programmable
- Support for Long-Reach VDSL2
- 4 port (-M) and 2 port (-L) Ethernet PHY-Layer bonding supported
- System support for Dual Latency
- Per port independent ATM and PTM framing configuration
- Pre-emption and per bearer flow-control for improved system QoS
- On-Line reconfiguration including Seamless Rate Adaptation (SRA) and Dynamic Rate Repartitioning (DRR)
- Virtual noise for higher system stability
- Diagnostic modes DELT and SELT
- Worldwide bandplan requirements covered with one single hybrid design
- Industrial temperature range from -40°C up to +85°C

VINAX™ V2 is the newest generation of VDSL2/ADSL/2/2+ chipsets for Central Office based applications. It includes dedicated variants for 17MHz and 30MHz applications. These options allow system vendors to offer highly optimized VDSL2/ADSL2+ systems for Exchange, Cabinet, and MxU market segments.

The -M and -L variants are optimized in terms of their density, power, and cost to support the large-scale deployment of VDSL2 technology in next-generation telecom networks. Both variants are based upon a 3-chip architecture, and support line-card densities of 48 ports or higher. They are ADSL/2/2+ backwards compatible (up to 20.5dBm) and offer full programmability (PSD, band plan, etc.) without any need for external filters. VINAX™-M has an 8 port granularity for high-density Exchange and Cabinet applications whereas VINAX™-L has a 4-port granularity for lower-density MxU applications.

To meet the increasing demand for IPTV and VoIP applications, VINAX™ V2 supports enhanced Quality-Of-Service functionalities including Retransmission, Seamless-Rate-Adaptation, Dual Latency, Pre-Emption, and Virtual Noise. To extend the range of VDSL2 long-haul applications, VINAX™ V2 offers bonding functionality of 2 ports (VINAX™-L) or 4 ports (VINAX™-M).

Applications

- Central Office and Remote ATM/IP DSLAMs
- Digital Loop Carrier (DLC)
- Integrated Packet Voice & Data (IPVD) line cards
- Multi Service Access Network Platforms (MSAN)
- Multiple Dwelling/Tenant Units (MDU/MTU) networking
- Optical Network Termination/Unit (ONU/ONT)
- FTTC/FTTB & LAN extension

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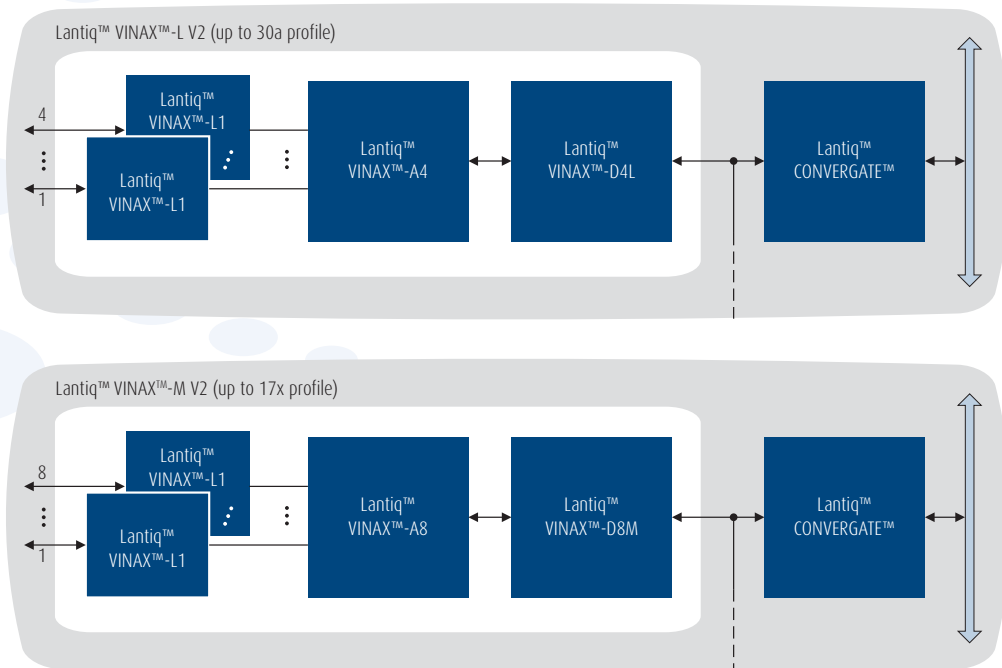
Supported Standards

- VDSL2 (G.993.2)
- ADSL2/2+ (G.992.1, G.992.3, G.992.5)
- VDSL1 (G.993.1, T1.424, TS 101 270)
- EFM (IEEE 802.3 ah)
- Retransmission G.998.4

Interfaces

- R-MII, S-MII, SSS-MII
- POSPHY - L2
- MDIO, parallel host
- JTAG interface

VINAX™-Architecture



Product Summary

Product	Sales Code	Description	Package
VINAX™-D4L	PEF 88004	4-channel 30 MHz DFE	PG-LBGA-324-15
VINAX™-D8M	PEF 88008	8-channel 17 MHz DFE	PG-LBGA-324-15
VINAX™-A4	PEF 88204	4-channel 30 MHz AFE	PG-LBGA-324-12
VINAX™-A8	PEF 88208	8-channel 17 MHz LD	PG-LBGA-324-12
VINAX™-L1	PEF 88601	1-channel 30 MHz LD	P-TSSOP-16



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Information For further information on technology, delivery terms and conditions and prices, please contact the nearest Lantiq Office (www.Lantiq.com).

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