

Infinion's SP-VDSL2800 is a highly integrated Layer 2+ Ethernet over VDSL (EoVDSL) switch evaluation and demonstration system.

Drawing on Infineon's advanced chip technology and extensive system design know-how, the SP-VDSL2800 combines Infineon's high-capacity Purple switch-on-a-chip and Infineon's field proven EoVDSL PHYs for a one stop shop Ethernet access solution. The SP-VDSL2800 is designed to accelerate system vendors time-to-market, and to increase deployment of EoVDSL access applications.

The SP-VDSL2800 comes complete with chassis, power supply, and LED front panel. It features 24 single-port EoVDSL PHYs, as well as two Plug and Play GbE Copper (GbEC) or GbE Fiber (GbEF) uplink modules. The main board is expandable up to 48 EoVDSL PHYs.

A CLI-based Configuration Tool, BSP, and API software package are provided to explore the SP-VDSL2800 switching and management features.



#### Functionality

- Stand alone 24 VDSL port + 2GbE copper or fiber uplink Ethernet switch
- Management Console based on RS 232 serial port
- Unmanaged/ Managed Modes of Operation
- Software development and debugging based on internal MIPS or external PCI/Generic host bus-based daughter cards

#### Hardware Features

- 24 built-in EoVDSL PHYs
- GbE Copper and Fiber modules provide GMII/TBI-based interfaces to the main board
- Ethernet switch based on Infineon's PEF 2800 Purple configurable Switch-on-a-Chip (SoC)

- 256 Mbytes on-board SDRAM, 16 Mbytes Flash for code storage, and program/data execution of MIPS CPU
- PC104 connector to interface with external CPU via PCI or generic bus interfaces
- On-board EEPROM for IC configuration and default settings

#### Software Features

- Board Software Package (BSP) for VxWorks
- All basic API functions including port, LED, and switch engine configuration
- CLI-based Configuration Tool based on API functions
- Monitoring and configuration of Ethernet PHY and links and all switching functions

- Access to complete internal PLB 2800 address maps, including packet buffer, address, VLAN and Flow Definition tables
- Remote TFTP server-based code download to Flash/SDRAM through any standard Ethernet port

#### Included in Kit

- One CD-ROM with complete documentation set
- One SP-VDSL2800 main board and chassis
- GbE modules based on customer-ordered configuration
- 4 x 64 Mbyte SDRAM
- 8 x 2 Mbyte Flash memory
- RS 232 C straight cable
- Power connection cable

#### Power Specifications

- 110-240 V, 0.85 -1.65 A
- DC 3.3 V, 10 A; +5 V, 10 A; +12 V, 2 A; -12 V, 0.3 A

# SP - VDSL 2800

24-Port EoVDSL Evaluation/Demo Kit  
 PLB 2800, Purple Configurable SoC  
 PEF 22818, VDSL5100-D  
 PEF 22815, 4bVDSL-A  
 PEF 22810, VDSL-L

Never stop thinking.



## Hardware Description

The SP-VDSL2800 Evaluation/Demo Kit is an all inclusive, configurable Ethernet over VDSL switch based on Infineon's VDSL5100 chip set and Purple Layer 2+ Switch-on-a-Chip. The SP-VDSL2800 is available in two basic configurations, 24 EoVDSL+ 2GbE Copper, or 24 EoVDSL + 2GbE Fiber. Two slots can be configured for either copper or fiber GbE uplink modules. The SP-VDSL2800 features a wide range of system interfaces including PCI, Generic and IIC interfaces.

## Software Description

The SP-VDSL2800 Configuration Tool is an API based configuration software that provides a simple and friendly CLI-based user interface with which you can control the data structures of the PLB 2800 IC and EoVDSL PHYs.

The SP-VDSL2800 Evaluation/Demo Kit also includes the Configuration Tool API, as well as a Board Support Package (BSP) to aid application developers.

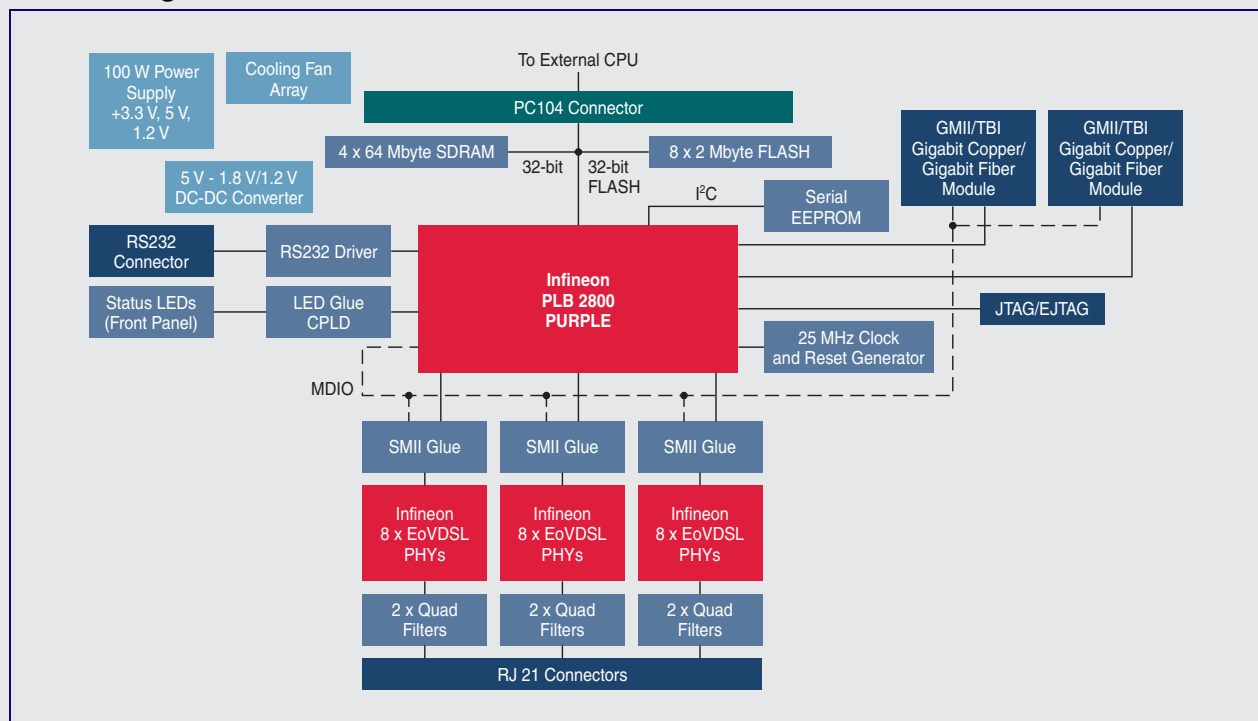
## Purchase Info

Order code: SD-VDSL2800

## Ordering Information

Product	Sales Code	Description	Package
Purple2800	PLB 2800 E	Configurable Layer 2+ Switch-on-a-Chip	P-BGA-388
VDSL5100-D	PEF 22818 F	VDSL Digital Transceiver	P-TQFP-144-10
4bVDSL-A	PEF 22815 F	4-band VDSL Analog Front End	P-TQFP-64
VDSL-L	PEF 22810 T	VDSL Line Driver	P-DSO-8

## Block Diagram of the SP-VDSL2800



How to reach us:  
<http://www.infineon.com>

Published by  
**Infineon Technologies AG,**  
 St.-Martin-Strasse 53,  
 D-81669 München

© Infineon Technologies AG 2003. All Rights Reserved.

### Attention please!

The information herein is given to describe certain components and shall not be considered as a guarantee of characteristics.

Terms of delivery and rights to technical change reserved.

We hereby disclaim any and all warranties, including but not limited to warranties of non-infringement, regarding circuits, descriptions and charts stated herein.

### Information

For further information on technology, delivery terms and conditions and prices please contact your nearest Infineon Technologies Office.

### Warnings

Due to technical requirements components may contain dangerous substances. For information on the types in question please contact your nearest Infineon Technologies Office.

Infineon Technologies Components may only be used in life-support devices or systems with the express written approval of Infineon Technologies, if a failure of such components can reasonably be expected to cause the failure of that life-support device or system, or to affect the safety or effectiveness of that device or system. Life support devices or systems are intended to be implanted in the human body, or to support and/or maintain and sustain and/or protect human life. If they fail, it is reasonable to assume that the health of the user or other persons may be endangered.

Template: tb\_tmplt.fm/2/2003-05-01