Infineon'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-VDSL2800

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

Infineon technologies

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

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.
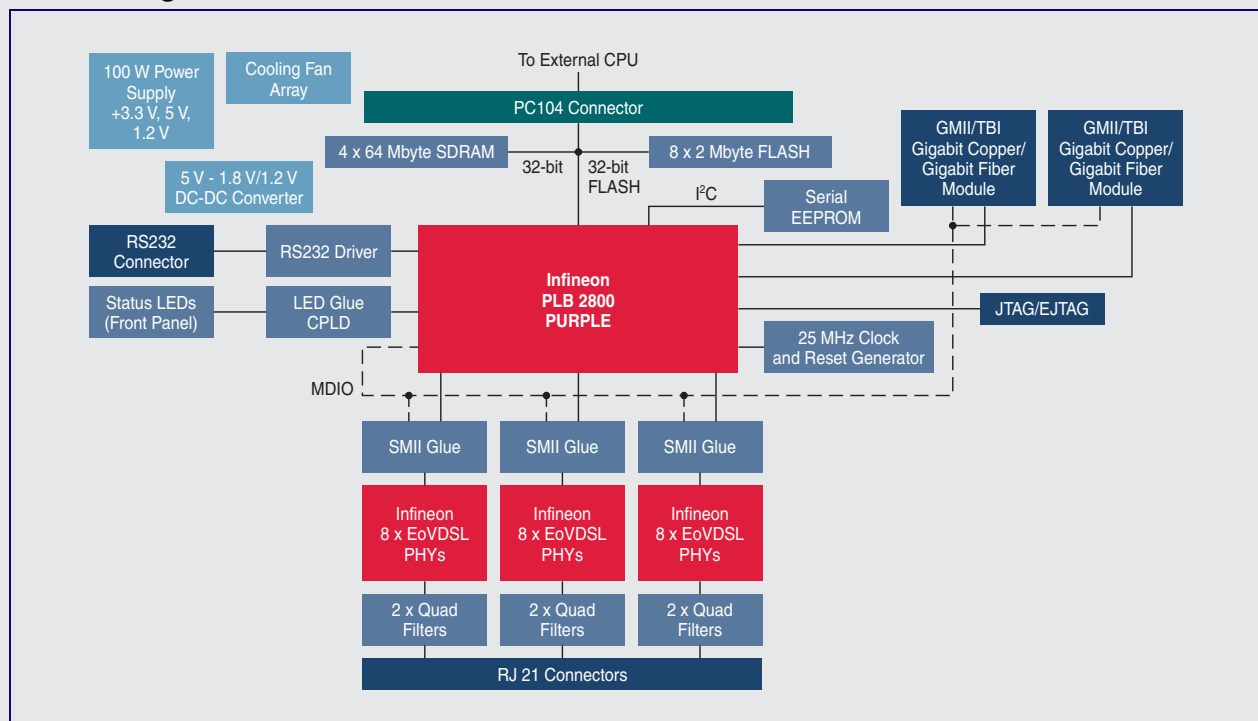
Purchase Info

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

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