

General Features

Transmission modes

VDSL2 profiles	8a, 8b, 8c, 8d, 12a, 12b, 17a, 30a
Data rate	Up to 100 Mbps upstream / 100 Mbps downstream
Band-plans	Conforms to NA, EUR & Swedish band-plans
Annex	A/B/C
Parameter configurability	997.1 Compliant

Advanced Features from ITU

OLR	Supports bit swapping, SRA and dynamic interleaver depth (D) change
US0	Supported
PBO	Both UPBO and DPBO supported

Unique Features

QoS	Flexible packet sorting based on EtherType, VLAN ID or VLAN priority (supports QinQ).
Legacy compatibility	Compatible with POTS and ISDN

Interfaces

RJ-11	RJ-11 VDSL2 connector
RJ-45	RJ-45 Ethernet connector

Power Supply

USB	The Ethernet dongle is powered through the USB connector
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VDSL2

The last mile broadband solution

VDSL2 Ethernet dongle

EVB2301-BL/Eth+USB



Applications

- VDSL2 dongle
- VDSL2 bridge
- Low cost VDSL2 upgrade for current ADSL gateway with WAN and USB port

This is a reference design for a high performance and low cost Ethernet connected VDSL2 bridge powered through a USB connector and based on the MT2301 DMT chip.

The USB power supply enables this device to be deployed with legacy ADSL gateways without any additional power adapter.

This is a perfect solution for fast VDSL2 deployment and our area efficient design enables attractive casing possibilities. This extremely cost efficient design is a smart choice for operators and service providers looking for a low CAPEX VDSL2 migration path.

VDSL2

The last mile broadband solution

Simplicity with Ethernet RJ-45

This design provides VDSL2 connectivity through Ethernet RJ-45 connection, the by far most spread network connection interface, which enables products based on this reference design easily to overcome any connectivity problem with current installations, which will both simplify and lower the CAPEX of a VDSL2 migration.

Fully standard-compliant ensures solid interoperability

The MT2301 DMT and 3301 AFE fully complies with the ITU-T standards for VDSL2. In addition to the standard compliancy, Metanoia's technical support will ensure complete interoperability with other chip vendors to provide a solid VDSL2 experience.

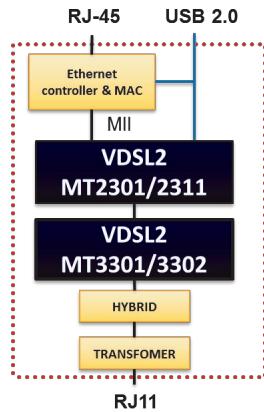
Cost-efficiency enables smooth VDSL2 migration

This very cost-efficient design enables a low CAPEX solution to migrate to VDSL2, this is especially beneficial solution in the case where telco's customers have low to none economic will to invest in new hardware for faster internet.

Small size enables user friendly casing

The small size of this design enables customers to easily design a user friendly and attractive casing, which will leverage the business case further.

Block diagram for Ethernet VDSL2 dongle with USB power supply :



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