METANOIA
義傳科技股份有限公司
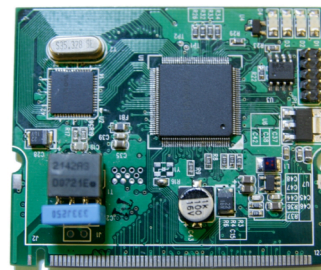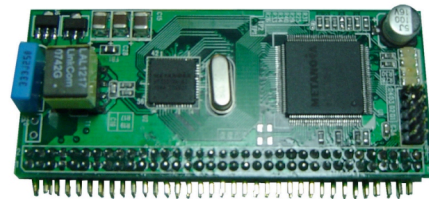## Metanoia Communications Inc.

VDSL PHY Module

"AEROLite"

Introduction

AEROLite is a Long Reach Ethernet (LRE) module. The module is designed for replacing Ethernet PHY without software modification. It uses well proven Ethernet and VDSL technologies to extend Ethernet over single-pair phone line by using a VDSL signal. Up to 100/60 Mbps transition bandwidth within 300m and 40/10 Mbps for 1km long range connections provide ultra-high performance to the pervasive telephone line network. With different band plan supported, we can have symmetric upstream and downstream. It has the advantages of minimum installation time (simply as plug-n-play) and minimum installation expense by allowing video streaming and data to share the same telephone line without interference. Furthermore, power over telephone line module is an option for those who have no power supply in the far end.

The Metanoia Communications LRE solution, including the CO (Central Office) site module HOPE and CPE (Customer Premise Equipment) site module AERO, delivers everything which needed to quickly deploy a high-speed IP-based network for providing high-speed Internet access, video-on demand services, and voice services. The resulting compact, cost-effective form factor offers an attractive LRE solution system integrators, small business and building owners.
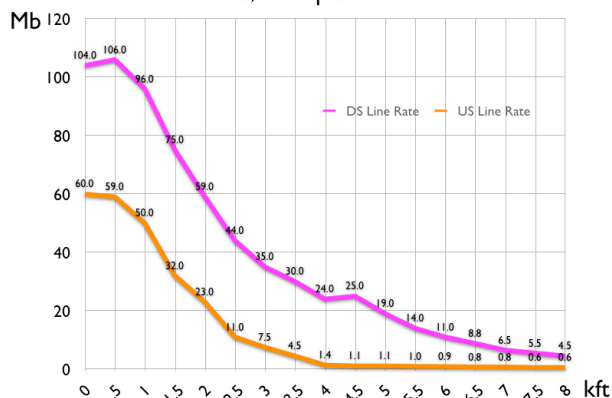
Features

- Easy to replace CAT-5 to twist pair or BNC cable without software change
- 1 full-duplex VDSL links via RJ-11/BNC connectors
- Hardware configurable Standalone/CPU assistant
- Selectable CO and CPE mode
- Selectable fast and interleaved mode
- Selectable target data rate
- Selectable target SNR margin
- Flexible band plan supported including 998 ISDN, 997 ISDN, symmetric ISDN
- Predefined 8 profile setting
- Standard VDSL/MCM MIB supported
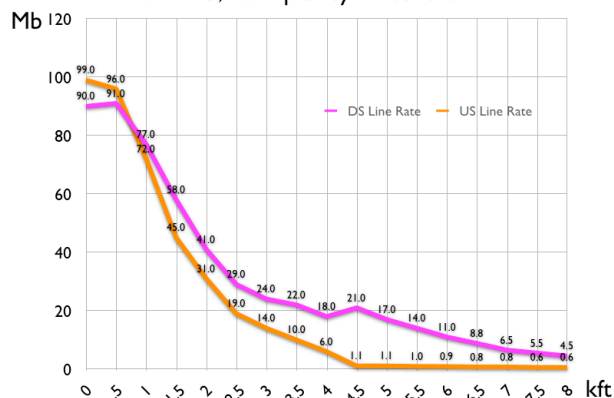- Compliant with ETSI, ITU and ANSI standards

Specifications

- Board dimension: (A) 73mm x 31 mm (B) 59mm x 49mm
- Power supply: DC 5 Volt over 3.5mm DC jack.
- Power consumption: Max 1.3 Watt maximum.
- Interface: MII/SMII/SSSMII
- Standard: Full ITU-T G.993.1 (VDSL) and G.997.1 compatible.
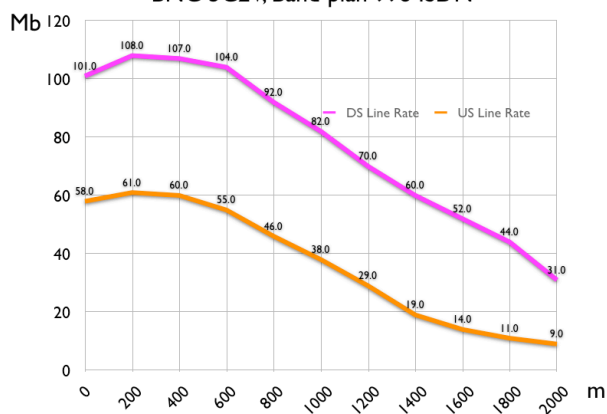- Operation temperature : -20 ~ 60 C

Performance
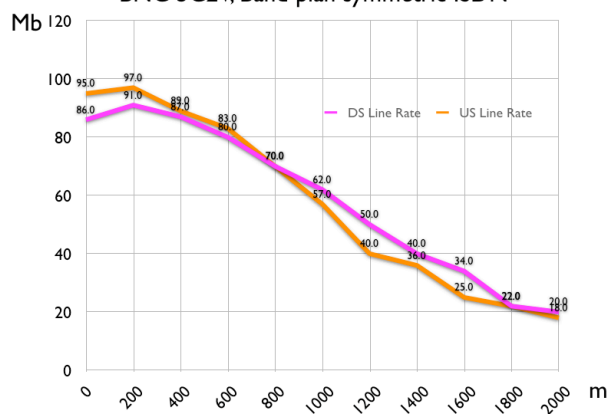
26 AWG, Band plan 998 ISDN

26 AWG, Band plan symmetric ISDN
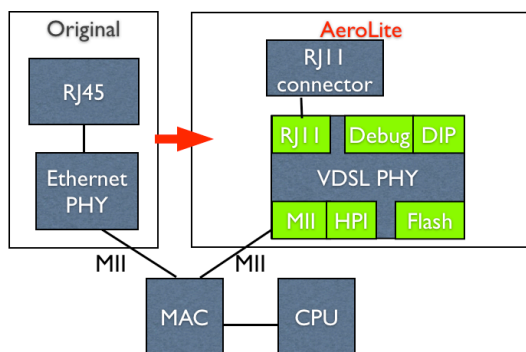

BNC 5C2V, Band plan 998 ISDN

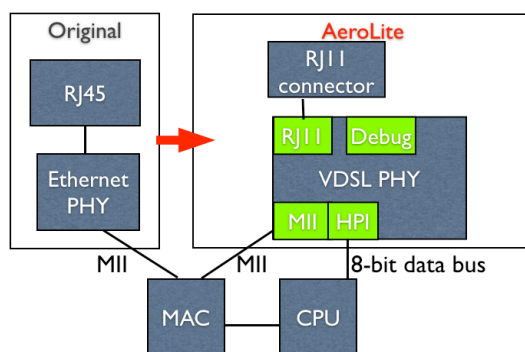### BNC 5C2V, Band plan symmetric ISDN

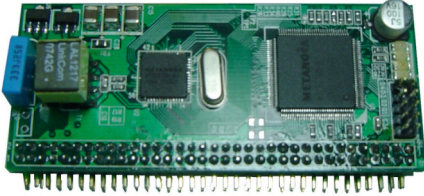## Installation

Standalone mode
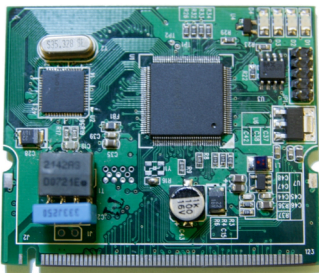

CPU management

Connector Type

(A) Header 2.0mm 35x2

(B) Mini-PCI connector

Applications

- IP CAM extender
- IP STB extender
- Video server extender
- Ethernet device extender