Get high capacity, high-performance, reliable backhaul for DSLAMs with Actelis EFM over Copper.

Actelis enables quick, flexible, and cost effective deployment allowing carriers to reach remote locations as well as expand and extend services from existing locations providing high-end bandwidth services.

High Performance Cost Effective Backhaul for DSLAMs

Actelis' Carrier Ethernet backhaul scales up to 200 Mbps at a more attractive cost and faster time to market than fiber. Actelis' solutions offer greater transmission efficiency to enable wider DSL coverage and advanced services through cost effective high bandwidth backhaul.

High Bandwidth and Scalability - Cost Effective Backhaul Minimizing CapEx

Actelis' Ethernet over Copper solutions offer Symmetrical and Asymmetrical high speed backhaul links transmitting up to 200 Mbps today with additional scalability on the roadmap. Carriers can expand and extend DSLAM deployments with low CapEx transmission to minimize total cost of ownership for backhaul and maximize DSL profitability. Legacy n x T1s/E1s based backhaul can be effectively upgraded by Actelis solutions offering 10x more bandwidth to gain new customers, new services, and new revenues. Push mini DSLAMs out to residential customers where customer density and distance do not justify the cost of running fiber to better serve customers now and proactively avoid customer churn.

Support the Growing Demand for High Bandwidth Services – Expand Existing Service Offerings

Actelis high bandwidth backhaul enables operators to expand their service offerings from existing locations to support the escalating demand for bandwidth driven by IPTV, Video and other bandwidth hungry applications. Utilizing the existing copper infrastructure, carriers can cost effectively distribute more bandwidth per customer while maintaining low CapEx and profitability.

Extended Reach – Reach More Customers – Deploy Where You Need It

Flexible backhaul leveraging Ethernet over Copper with repeaters enables deployment of DSLAMs also to very remote locations out to 100 kft / 30km. Take advantage of the ubiquitous copper infrastructure to enable immediate and cost effective DSL services distribution to un-served or underserved customers and locations that could not be reached before or could not offer even the minimum bandwidth requirements.
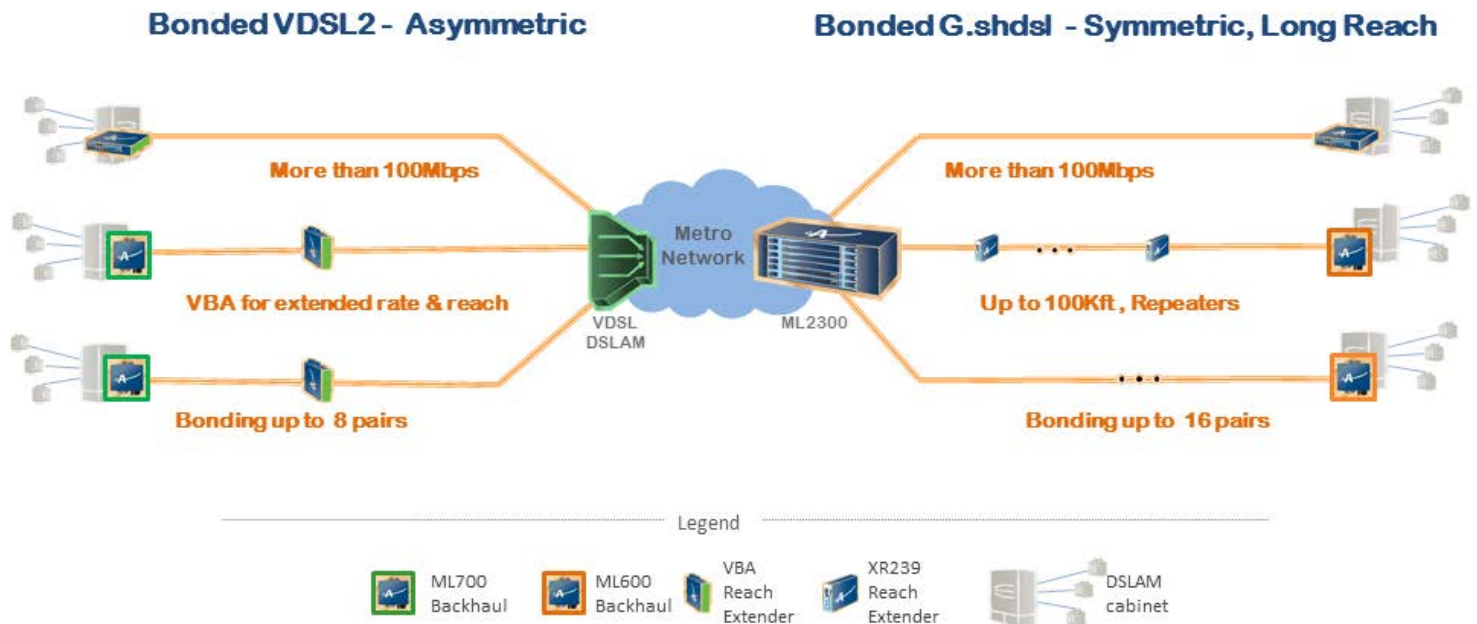
High Reliability - Support QoE Objectives

Maintaining high QoE for subscribers is a must in order to reduce churn. Actelis EoC solutions are rugged and reliable and offer the kind of high performance and service availability today's DSL subscribers demand.

MEF Certified, Comprehensive Demarcation - Efficient Delivery of Advanced Services

Actelis CE 2.0 certified solutions provide advanced Layer 2 (L2) features to effectively differentiate between customers/services using flexible CoS and traffic management per EVC or port. Advanced demarcation capabilities enable efficient link monitoring and trouble shooting. Actelis supports features like ITU Y.1731 performance monitoring, IEEE 802.1ag CFM, ITU Y.1564 traffic generation and comprehensive loopback capabilities to streamline operations.

Actelis DSLAM Backhaul Solutions

Actelis EoC portfolio significantly reduces the complexity and cost associated with DSLAM backhaul while offering carriers to expand and extend their DSL service offering.

Bonded VDSL2 – Asymmetric

More than 100Mbps

VBA for extended rate & reach

Bonding up to 8 pairs

VDSL DSLAM

Metro Network

ML2300

Bonded G.shdsl – Symmetric, Long Reach

More than 100Mbps

Up to 100Kft, Repeaters

Bonding up to 16 pairs

Legend

ML700 Backhaul | ML600 Backhaul | VBA Reach Extender | XR239 Reach Extender | DSLAM cabinet
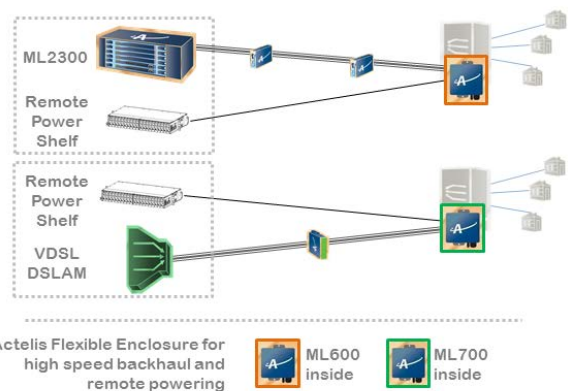
Highlights

- Bonding of up to 32 copper pairs, offering more than 200 Mbps per link
- Reach up to 10 kft/3 km; up to 100 kft/30 km with Actelis' reach and rate extenders
- Offers symmetrical as well as asymmetrical transport solutions in point-to-point and point-to-multipoint scenarios
- Features high reliability and resiliency
- Remote powering
- Advanced Demarcation capabilities, MEF CE1.0 and CE2.0 certified services
- Lower installation complexity with remote powering options and flexible installation enclosures
- Low delay and latency
- PWE solution - easier migration to advanced Services

Actelis Flexible Enclosures

- No Local powering requirements
- Lowering site complexity
- Faster time to install
- Lowering monthly recurring site cost
- High Speed Backhauling

ML2300

Remote Power Shelf

Remote Power Shelf

VDSL DSLAM

Actelis Flexible Enclosure for high speed backhaul and remote powering

ML600 inside | ML700 inside

High Performance Broadband over Copper

Actelis
Networks™

The Portfolio

Actelis offers a wide portfolio offering a flexible selection of NTUs and Aggregation to fit various deployment scenarios.

- Highest rate and reach with Actelis' EFM*plus*™ and Dynamic Rate Boost (DRB) advanced technologies
- Most rugged and reliable backhaul wity EFM over Copper equipment
- Flexible deployemnt anywhere there is copper – 10x more than E1/T1 , faster and easier than fiber or microwave
- Provides more bandwidth over greater distance with fewer pairs than competing copper-based solutions

DSLAM Backhaul
VDSL2 based solutions

The NTU - ML740
- Compact and Hardened
- Ethernet over copper utilizing VDSL2 technology. Supports vectoring.
- Bonding up to 8 pairs
- MEF based services

The Aggregation Platform - VDSL DSLAM *
- Any 3RD party DSLAM with bonding capabilities
- Shorten ROI via higher DSLAM utilization
- DSLAM can be located in cabinets or COs

Rate and Reach Amplifier - VDSL2 Broadband Amplifier (VBA)
- 2 ports, 4 ports, multiport
- Installed in splicing or cross box
- Any DSLAM
- Transparent to Bonding, Vectoring, MLT
- POTS Line powering

Enclosures
Flexible Installation and Powering
- Compact for outdoor installation
- Option for remote powering, local AC or DC

DSLAM Backhaul
G.SHDSL based solutions

The NTU - ML640
- Compact and Hardened
- Ethernet over copper utilizing G.shdsl technology
- Bonding up to 16 pairs
- MEF based Services

The Aggregation Platform - ML2300/ML230
- High density, flexible size to cost effectively fit various scenarios
- Hardened chassis, pluggable cards
- Aggregating up to 256 pairs per 4U

Reach and Rate Repeaters - XR239
- Rate and Reach extended, up to 9 hops
- 2 pair in , 2 pair out
- Remotely powered
- Advanced management, troubleshooting

Enclosures
Flexible Installation and Powering
- Compact for outdoor installation
- Option for remote powering, local AC or DC

*Actelis aggregation platforms currently support G.shdsl and would support bonded VDSL2 as part of future release

High Performance Broadband over Copper