

# Aurora Networks Encourages Industry to Adopt Digital HFC Architecture

4 September 2012

## Company identifies Digital HFC architecture as optimum solution to address the growing trend of migration to IP

**SANTA CLARA, CA – September 4, 2012** – Aurora Networks, Inc., the No. 1 optical transport solutions provider for cable operators, has recognized the industry's continued push to migrate to an all-IP network. Dedicated to the evolution of cable, Aurora Networks examined the challenges associated with this trend and analyzed the benefits of different architectures, finally recommending Digital HFC (Hybrid Fiber Coax) architecture, as defined by Aurora Networks, as an optimal solution for cable operators.

The cable industry's HFC architecture has been the foundation for the last decade's service growth and diversification. However, as subscribers' demand for premium services continues to surge, conventional methods are no longer cost effective. It is becoming increasingly expensive to break through each successive bandwidth bottleneck in the HFC network and it is now clear that the HFC network needs to evolve.

One method of evolving the HFC network, both preserving the existing infrastructure investment and leaving room for future innovation, is to extend the digital headend domain out to the fiber optic node; thus moving towards a distributed Digital HFC network. In this scenario, operators migrate the digital-RF interface from the headend to the node, carrying digital content to the node using baseband, data-grade optics and distributing QAM modulation to the nodes. With digital return already in place from the node to the headend, this migration enables a number of benefits, including:

- Drastically expand the capacity per subscriber; up to 158 QAM channels can be efficiently dedicated to a node
- Achieve better service flexibility, QAM reuse, improved service reliability, power and space savings
- Capitalize on the robustness of digital transport in the forward and the return paths, while drastically reducing OPEX
- On a node-by-node basis, choose the transport technology that makes sense for the local demographics, while preserving the ability to centrally manage and monitor the network elements
- Eliminate the degradation and loss induced by analog transmission to the node
- Leverage the economies of scale for baseband optics

Moreover, with growing industry interest in the EPON Protocol over Coax (EPoC) initiative and EPON Optical Line Terminals (OLTs) already distributed to the node, this dovetails seamlessly with the principles of the Digital HFC architecture.

## **What Aurora Networks Says**

“As the industry continues to migrate to all IP, digital HFC architecture is a great solution to the bandwidth challenges,” said John Dahlquist, vice president, marketing, Aurora Networks. “Digital HFC architecture allows operators to simplify the cost and complexity of their networks while maintaining their investment in the HFC network. When combined with a Fiber Deep architecture, no other solution is better positioned to save operators money, and simultaneously, solving the ever increasing bandwidth challenge.”

## **About Aurora Networks**

Aurora Networks, the No. 1 optical transport solutions provider for cable operators, is evolving cable by focusing on innovative solutions that build future-proof networks to accommodate the cable subscriber services of today and tomorrow. Aurora Networks is the only pure-play optical transport solution provider that is focused primarily on cable operators. Using its proven understanding of cable networks, Aurora Networks delivers unique solutions - such as its Fiber Deep architecture and digital return technology - to address specific issues of the cable industry. A technology leader driven by innovation and industry-firsts, Aurora Networks enables leading cable operators across the globe to compete with a cost-effective, optimized launch pad for next-generation cable services. To learn more about Aurora Networks' core cable solutions, please call 408-235-7000 or visit [www.aurora.com](http://www.aurora.com).

*Aurora Networks and the Aurora Networks logo are registered trademarks of Aurora Networks, Inc. in the United States and other countries. Other marks are the property of their respective owners and are used here only for identification purposes.*