

## Powering Network Transformation

*Best-in-class Packet Optical & DCI Solutions*

### SOLUTIONS FOR THE HYPERSCALE GENERATION

Video, hyperscale cloud, IoT, and mobile broadband applications continue to multiply at rapid rates across the globe. These bandwidth-intensive, on-demand applications are driving unparalleled growth in data traffic and placing unprecedented demands on the underlying transport infrastructure that operators rely on to deliver high quality communications services to end-user enterprise, carrier, and residential customers. In this dynamic, cloud-centric networking environment, network architects face a number of formidable challenges, including:

- Cost effectively managing unpredictable traffic volumes, types, and patterns
- Delivering profitable and competitive end-user services
- Reducing network costs and complexity while enabling cost-efficient scalability
- Meeting heightened end-user expectations for uninterrupted service quality and assured SLAs
- Optimizing network architectures for disruptive technology trends and innovations

To address these challenges and remain competitive in the rapidly evolving communications landscape, network operators and content providers require a trusted networking partner with purpose-built solutions and an unwavering commitment to their business success.

### INDUSTRY INNOVATOR OFFERING UNRIVALED EXPERTISE

Coriant end-to-end, multi-layer transport solutions provide the resilient foundation for the largest and most demanding Tier 1 networks in the world and span a wide breadth of critical networking applications, including mobile backhaul, Data Center Interconnect (DCI), metro and long haul transport, enterprise private line, Fixed Mobile Convergence (FMC), and legacy SONET/SDH migration.

### PURPOSE-BUILT PACKET OPTICAL & DCI SOLUTIONS

Coriant's purpose-built packet optical transport and DCI solutions are founded upon proven technology driving unmatched levels of efficiency, flexibility, scalability, and openness in multi-layer transport networks. Coriant innovations propel network transformation with:

- **Unsurpassed** high density and low power consumption
- **Industry-leading** optical transport scalability, programmability, and awareness
- **Unique** hybrid switching for service agnostic infrastructure
- **Cutting-edge** disaggregated and open DCI system innovation
- **Innovative** Coriant® Pluggable Optical Layer flexibility and efficiency
- **Advanced** synchronization for evolving mobile networks including LTE and 5G

Coriant solutions include end-to-end network management tools and Software Defined Networking (SDN) capabilities that simplify service provisioning and reduce OpEx via the highest degree of automation, programmability, and control – under any network conditions.

### CORIANT FAST FACTS

- **Proven supplier** to leading network operators, including 9 of the top 10 global Tier 1 service providers and the industry's premier Web 2.0 operators
- **Best-in-class solutions** purpose-built for mobile and fixed network operators, cloud and data center providers, enterprises, and government agencies
- **More than 500 customers** worldwide across six continents and in more than 100 countries
- **IP and packet optical transport expertise** empowering our industry-leading end-to-end, multi-layer solutions portfolio
- **Open and innovative approach** meets evolving hyperscale architecture demands and disaggregated networking environments
- **35+ years of experience** delivering carrier-class networking products and services
- **Distinguished heritage** of networking innovation with over 1,800 patents
- **World-class service and support** with global reach and local expertise



Coriant's global operations include our in-house manufacturing and operations center in Germany, R&D centers of excellence in Germany, the United States, Portugal, China, and Finland, and sales and support offices throughout the world.

## AGILE, INNOVATIVE, AND COMMITTED PARTNER

Technology leadership and world-class service excellence, combined with a proven culture of innovation and forward-looking vision for next-generation transport networks optimized for hyperscale growth, are key Coriant attributes that underlie our strategic partnerships with leading network operators around the world. Our commitment to our customers' business success is backed by technical expertise, operational agility, and – most importantly – the innovative solutions and services that network operators are looking for in a market that is constantly evolving. Coriant customers include AT&T, JPNAP, MTS, Retelit, SK Telecom, SwissIX, Telefónica, and Windstream.

## INTELLIGENT MULTI-LAYER TRANSPORT – SIMPLE, FLEXIBLE, SCALABLE

The Coriant edge-to-core solutions portfolio leverages industry-recognized leadership in packet optical networking, best-in-class DCI, expertise in coherent optical transmission, and innovative IP/MPLS smart routing technology optimized for LTE and LTE-A networks. Our SDN-enabled, multi-layer transport solutions offer customers a broad range of benefits in access, backhaul, metro, regional, and core transport segments, including:

- **Maximize power efficiency, footprint, and pay-as-you-grow scalability** in high-capacity carrier transport and DCI applications
- **Optimize end-to-end service delivery** in access and aggregation networks with a single, unified transport platform
- **Increase flexibility and scalability** by adapting configurations to achieve the most efficient traffic management to meet evolving network requirements
- **Grow mobile backhaul capacity** from small cell sites and macro-cell aggregation to over a terabit at gateway sites
- **Ease migration from TDM** to packet services while improving resource utilization with packet-optimized transport
- **Extract maximum value** from fiber assets with superior 100G+ performance even in the most challenging fiber conditions
- **Extend the lifetime of your network** with flexi-rate innovation supporting the upgrade of 40 channel or other fixed grid systems to 100G/150G/200G without touching your existing line systems
- **Improve resiliency and resource utilization** with unique, optically meshed network capabilities proven in Tier 1 networks and advanced packet optical grooming optimized to serve all network architectures
- **Reduce CapEx and OpEx** with a completely automated optical layer enabling simplified network expansion and rapid service activation

### THE CORIANT END-TO-END PRODUCT PORTFOLIO

#### DCI & Packet Optical

##### *Purpose-Built DCI*

- Coriant Groove™ G30 DCI Platform
- 7300 OLS

##### *Access-to-Core DCI & Packet Optical Transport*

- hiT 7300 Multi-Haul Transport Platform
- mTera® Universal Transport Platform
- 7100 Packet Optical Transport Solutions
- 7090 Packet Transport Solutions
- 7610 Service Edge Platform

#### Intelligent Network Management

- Transport Network Management System (TNMS)
- 8000 Intelligent Network Manager (INM)

#### Software Defined Networking

- Coriant Transcend™ SDN Solution

#### IP/MPLS Routing

- 8600 Smart Router Series
- 8800 Smart Router Series

#### MSPP and Cross-Connect/TDM Solutions

- hiT 70xx MSPP
- 6300 Managed MSPP/Transport Platform
- SN 9000 Multiservice Switch
- 5000 Digital Cross-Connect Series
- SN 16000 BB-DCS/Optical Switch
- 8100 Managed Access System
- DNX Cross-Connect Platform

## CORIANT® GLOBAL SERVICES

With a proven track record of service excellence to service providers around the world, Coriant offers a comprehensive range of high value service solutions covering all phases of the network lifecycle – plan, deploy, operate, and optimize. Coriant® Global Services combines extensive in-house service expertise with a responsive high-touch delivery model to help our customers meet their business objectives and maximize the value of their infrastructure.

## PURPOSE-BUILT DCI SOLUTIONS

### Data Center Interconnect

Coriant DCI solutions provide programmable high speed secure bandwidth for cloud and metro applications. By offering the highest density solutions with the lowest total cost of ownership and best-in-class low power consumption, Coriant enables ICPs, CSPs, CNPs, and enterprises to meet the surging demand for DCI high speed connectivity driven by cloud-centric consumer and business services. Coriant DCI solutions include the Coriant Groove™ G30 DCI Platform, 7100 Packet Optical Transport Solutions, and hiT 7300 Multi-Haul Transport Platform.

### Coriant Groove™ G30 DCI Platform

Purpose-built for Data Center Interconnect (DCI) high speed metro and long haul applications, the Coriant Groove™ G30 DCI Platform can be equipped as a muxponder terminal solution and as an Open Line System (OLS) optical layer solution. The disaggregated, silicon photonics-enabled Groove G30 delivers industry-leading flexibility, cost-effective scalability, and plug-and-play modular architecture.



Key features of the Coriant Groove™ G30 DCI Platform muxponder configuration include:

- **Highest Density** – industry-leading system density supports 3.2 Tbps in 1RU driving significant space and OpEx savings
- **Lowest Power Consumption** – 0.45W per GbE of duplex traffic enables up to 70 percent lower power consumption per 100G versus competing products, dramatically reducing energy costs and offering OpEx savings
- **Lowest First Cost** – simple pay-as-you-grow system design and mix and match pluggable interfaces deliver the industry's lowest first cost for 10G, 40G, and 100G services, enabling cost-efficient deployment and easy capacity scaling as data center traffic increases as well as the lowest cost for onsite sparring
- **Leading Programmability and Reach** – powered by Coriant CloudWave™ Optics, the Groove G30 DCI Platform supports dynamically adjustable modulation formats (16QAM, 8QAM, QPSK) to deliver cost-optimized optical reach in both metro and long haul applications and enable rapid capacity increases as data center traffic escalates

## HIGH VALUE APPLICATIONS

In a wide variety of applications, Coriant's packet optical, DCI, and IP/MPLS solutions help network operators maximize the value of their transport infrastructure, simplify network operations, and ensure the highest level of end-user service quality.

- **Data Center Interconnect** – ensure efficient, low latency transport and future-proof scalability to meet demanding DCI requirements
- **Converged Packet Optical Transport** – leverage the benefits of reduced CapEx and OpEx and increase revenues by integrating both the packet transport switching layer and WDM optical layer into the same network element
- **Mobile Backhaul and Fixed Mobile Convergence** – maximize performance and increase bandwidth cost effectively with solutions tailored to meet specific backhaul requirements, including edge routing for 4G/5G evolution and MPLS-TP full packet backhaul (PTN) for mobile and fixed mobile convergence
- **Business and Wholesale Ethernet Services** – support MEF certified EPL, EVPL, EPLAN, EVPLAN, E-Tree, E-Access, and E-Transit services with speeds ranging from Mbps delivered on a 10 Mbps access circuit to 100 Gbps based on 100 GbE or LAG-aggregated 10 GbEs
- **Private Optical Networks** – enable flexible and future-proof enterprise solutions to interconnect data centers for cloud, business continuity, disaster recovery, and other applications
- **Transport SDN** – transform your network with open and multi-layer control enabling new applications including bandwidth-on-demand, Network as a Service, and SLA-aware service assurance
- **Network Migration** – ease network and service migration challenges with a full range of packet and optical technologies – SONET/SDH, OTN, Carrier Ethernet, MPLS-TP, IP/MPLS, WDM, and ROADM
- **Router Optimization** – reduce CapEx and enable more efficient use of router slots and ports by using the transport network to groom traffic from multiple locations onto a smaller number of high speed router ports
- **Submarine Networks** – simplify network design and reduce OpEx in hybrid subsea and terrestrial network applications with a single, future-proof transport platform, eliminating the need for multiple platforms with multiple network management systems

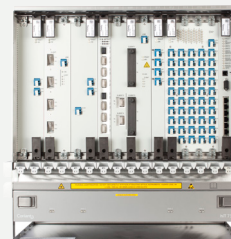
Key features of the Coriant Groove™ G30 DCI Platform OLS configuration include:

- **Open Line System** – prevents vendor lock-in by disaggregating the optical layer from the transmission layer and enables the Groove OLS to be paired with either Groove or third-party DCI transponder solutions
- **Industry-leading Optical Layer Density** – supports up to 96 channels in 1RU with full WDM terminal functionality, including passive and active optical layer functions, delivering three times the density over comparable solutions and enabling significant OpEx savings via minimized footprint and power efficiencies
- **Unmatched Configuration Flexibility** – configurable technology for coherent or direct detect (PAM4) applications including a diverse range of optical layer functions in compact modular pluggable formats such as multiplexing/demultiplexing, preamplifier, booster amplifier, local add/drop amplifier, optical channel monitoring, optical protection, OSC, OTDR, and tunable DCM functions
- **Open Management** – shares common YANG model based NETCONF and RESTCONF and other northbound management and control interfaces of the Groove G30 DCI Platform for fast deployment and ease of integration into any OSS environment

## PACKET OPTICAL TRANSPORT SOLUTIONS

### Coriant® hiT 7300 Multi-Haul Transport Platform

The Coriant® hiT 7300 Multi-Haul Transport Platform is an SDN-ready coherent optical transport system that maximizes reach, capacity, and network availability in regional, long haul, and ultra-long haul networks. In addition to industry-leading power consumption and density, the hiT 7300 offers Coriant CloudWave™ Optics enabled flexi-rate interfaces that support 150G (8QAM) and 200G (16QAM) wavelengths, super-channels to 1 Tbps, and flexi-grid ROADMs capabilities. These combined features empower network operators to maximize the spectral efficiency of their fiber infrastructure. Coriant CloudWave™ Optics together with an optimized set of EDFA and Raman amplifiers and the industry's most advanced optical link control enables the hiT 7300 to maximize reach and capacity under even the most challenging fiber conditions. The hiT 7300 also provides a wide range of options to cost effectively maximize network availability including 50 ms coherent protection and ASON/GMPLS restoration.



Key features:

- Flexi-rate interfaces with 100G/150G/200G lambdas and reach of 5,000 km+ terrestrial/12,000 km+ submarine
- Industry's most advanced optical link control for robust performance and maximum reach
- Flexible set of EDFA and Raman amplifiers enabling long spans and best end-to-end performance
- Wide range of ROADMs options including broadcast and select as well as route and select architectures, up to 16 degrees, flexi-grid, and colorless, colorless/directionless, and colorless/directionless/contentionless add/drop options
- Cost-effective high availability features including 1+1 OCh/OMS/OTS protection and ASON/GMPLS dynamic restoration

### Coriant® 7300 OLS – Purpose-Built Long Haul DCI

Built upon the industry-leading hiT 7300 Multi-Haul Transport Platform, Coriant's new DCI-optimized 7300 Open Line System (OLS) solution enables superior reach performance and stability for long haul open line system applications as demand for high-capacity connectivity between geographically dispersed data center sites continues to grow.

The new 7300 OLS solution leverages the best-in-class optical layer performance capabilities of the hiT 7300 while extending support for core data center equipment practices, including front-to-back airflow and AC power. In addition to a compact and custom-built shelf design that maximizes space utilization and power efficiency, the 7300 OLS solution enables simplified management and control in third-party SDN/NFV-managed networking environments via support for SDN integration enabled by the Coriant Transcend™ SDN Transport Controller.



## Coriant® mTera® Universal Transport Platform

The Coriant® mTera® Universal Transport Platform (UTP) offers up to 12 Tbps of universal switching including OTN, MPLS-TP, Carrier Ethernet, and SONET/SDH enabling unparalleled network adaptability and efficiency. As a cornerstone in the Coriant metro and long haul solutions portfolio, the mTera UTP provides two configuration options: the 4 Tbps mTera 8-slot shelf and the 7 Tbps mTera 14-slot shelf. Up to 12 Tbps is available by deploying a paired configuration of the 14-slot shelf. OTN, MPLS-TP, VPLS, VLAN cross-connects, and Ethernet Bridging can be defined on an interface and a virtual interface through software with the mTera UTP OSM modules, which support a wide range of client types including sub-10G, 10G, 40G, and 100G together with 10G, 100G, and flexi-rate line interfaces. Coriant CloudWave™ Optics enabled flexi-rate interfaces deliver maximum spectral efficiency with support for 100G, 150G, and 200G and reach of 5,000 km+ terrestrial/12,000 km+ submarine. The mTera UTP also supports compact route and select ROADM-on-a-blade with optional support for colorless, colorless/directionless, and colorless/directionless/contentionless add/drop enabling a converged packet optical solution.



### Key features:

- Up to 7 Tbps per shelf and up to 12 Tbps in a paired shelf configuration
- Define any interface or virtual interface for OTN, MPLS-TP, or Carrier Ethernet in software
- Up to 1.68 Tbps of SONET/SDH switching with OTN and packet interworking
- Coriant CloudWave™ Optics enabled flexi-rate interfaces: 100G/150G/200G; 5,000 km+/12,000 km+ reach
- Optional flexi-grid ROADM-on-a-blade with support for colorless, directionless, and contentionless add/drop options

## CORIAN CloudWave™ OPTICS

Leveraging advanced digital signal processing, embedded software, and photonic integration, Coriant CloudWave™ Optics is deployed across the Coriant packet optical portfolio, including the hiT 7300, mTera UTP, and Coriant Groove™ G30, delivering flexi-rate interfaces with support for 100G, 150G, and 200G wavelengths.

In addition to industry-leading density and power consumption, Coriant CloudWave™ Optics offers extended reach with unregenerated distances of over 5,000 km in terrestrial networks and over 12,000 km in submarine networks. It increases capacity and spectral efficiency with 150G (8QAM), 200G (16QAM), and super-channel support enabling up to 25.6 Tbps per fiber pair. Along with Coriant's advanced link control and EDFA/Raman amplification, Coriant CloudWave™ Optics delivers robust performance under even the most challenging fiber conditions including industry-leading lightning tolerance. In addition, Coriant CloudWave™ Optics provides 50 ms protection, comprehensive performance monitoring, low latency, and ODU payload encryption.

### Key features:

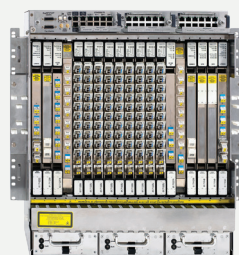
- 100G, 150G, and 200G wavelengths with up to 25.6 Tbps per fiber
- Extended reach: >5,000 km terrestrial and >12,000 km submarine
- Industry-leading power consumption and density
- Robust performance in challenging conditions including lightning strikes
- Comprehensive performance monitoring and fast protection

## Coriant® 7100 Packet Optical Transport Solutions

The Coriant® 7100 Packet Optical Transport Solutions provide flexible and future-proof platforms for metro-regional packet optical transport. The 7100 Series consists of four shelves: the 13RU 7100 OTS, 5RU 7100 Nano, 2RU 7100 Pico, and 1RU Passive Shelf. A wide range of intelligent services modules are supported, including high-density 10G and 100G transponders, muxponders, and ADMs. Integrated packet, OTN, and SONET/SDH switching is supported with fabricless switching in the 7100 Nano and 7100 Pico and with centralized fabrics in the 7100 OTS. Packet switching modules support MPLS-TP, VLAN cross-connects, Ethernet Bridging, GbE, 10GbE/OTU2, and 100GbE/OTU4 interfaces, enabling up to 1.2 Tbps of interface capacity in the 7100 Nano and 400 Gbps in the 7100 Pico. Optical layer options include single slot ROADM-on-a-blade with colorless and directionless add/drop options and the Coriant® Pluggable Optical Layer. As a converged packet optical solution, the 7100 Series can decrease CapEx by up to 25%, reduce footprint by over 30%, and lower power consumption by up to 40% relative to separate systems for switching and optical layers.

### Key features:

- Compact and highly integrated platforms that minimize space and power
- High-density 10G and 100G transparent transport and fabricless switching options for packet, OTN, and SONET/SDH
- Up to 1.2 Tbps of packet switching with MPLS-TP, VPLS VLAN cross-connects, and Ethernet Bridging defined in software
- A wide range of protection and restoration mechanisms including Y-cable and ASON/GMPLS
- Manageability features including automated power balancing and comprehensive multi-layer OAM



## CORIAN® PLUGGABLE OPTICAL LAYER

By shrinking optical layer functions including EDFA-based amplifiers, EVOAs, Optical Per Channel Power Monitoring (OCM), OSC, OTDR, OCh protection, and WSS to compact pluggables, the Coriant® Pluggable Optical Layer enables network planners to mix and match optical layer functions to optimally meet the requirements of their networks in the short term, with the ability to extend functionality over time as needs evolve. The Pluggable Optical Layer supports a wide range of applications including CWDM, fixed DWDM, and ROADM. The simplified architecture includes active compact pluggables (SFP, XFP, OFP2, OFP1), carrier cards (housing the active pluggables in Coriant shelves), and passive equipment (7100 Passive Shelf, filters, DCMs, etc.). The Pluggable Optical Layer is supported in the 7100 Series with relevant elements of the solution also supported in the Coriant Groove™ G30, mTera UTP, hiT 7300, and 8600 Smart Router Series.

### Key features:

- CapEx savings of up to 30% compared to traditional solutions
- Footprint reductions of up to 70% and power consumption savings of up to 50%
- Supports point-to-point, ring, and mesh topologies with spans of up to 140 km
- Simplified operations with options for automatic amplifier gain setting and channel equalization
- Future-proof solution with the ability to add functionality (OSC, OCM, OTDR, WSS, etc.) as required

## Coriant® 7090 Packet Transport Solutions

As bandwidth requirements continue to grow in all network domains, converting from static circuit-based metro edge networks (OTN, SONET/SDH) to a fully packet-based transport solution saves network operators significant amounts of CapEx and OpEx both in the transport network and in devices connected to the transport network. The 7090 Series provides scalable Carrier Ethernet and MPLS-TP technology and supports the delivery of Ethernet, PDH, and SONET/SDH services over an efficient, converged packet transport infrastructure. With support for all MEF CE 2.0 certified services and circuit emulation of legacy transport interfaces, the 7090 Series ensures a smooth migration from traditional SONET/SDH networks to a more efficient, scalable, and flexible packet transport network. The 7090 Series is integrated into Coriant's end-to-end transport networking portfolio supporting a wide range of applications from the edge to the core.



The 7090 Series provides a scalable Packet Transport Network (PTN) solution optimized for the explosive growth of IP traffic impacting carrier access and aggregation networks. Combining the best of TDM (OTN, SONET/SDH) and packet transport (MPLS-TP, Ethernet), the 7090 Series enables fixed line and mobile network operators to achieve significant efficiencies with packet-based multi-service support while ensuring connection-oriented Quality of Service (QoS). The 7090 Series consists of small 5-30G edge NIDs, 150G pizza boxes, 200G dual-slot chassis, and large scalable switching platforms with up to 320G of switching capacity. All platforms in the 7090 Series offer key features for OAM, reliable transport, and network-level protection options.

## Coriant® 7610 Service Edge Platform

With the expanding role of cloud computing data centers located across broad geographic regions, reliable connectivity and secure high speed communication are essential for the transmission of shared services and applications. Network design may require implementation of enhanced encryption at the transport layer to ensure the security of data transmissions. Encryption devices address security needs with a simple, state-of-the-art solution for payload transport and data center connection. The Coriant® 7610 Service Edge Platform offers advanced, all-in-one DWDM optical transport for 16G FC services through the 7610 SEP or for payload encryption of up to 16G FC services through the 7610 Crypto with a cost-effective and flexible mix of industry standard protocols.



### Key features:

- Payload encryption for various services including 1GbE/10GbE/40GbE and 4G/8G/10G/16G FC services
- Compact design and highest flexibility with integrated mux/demux, optical amplifiers, and a Dispersion Compensation Module (DCM)
- Seamless in-service expansion by adding pluggable optical interfaces (SFP/SFP+) or by stacking the chassis

## CORIANt AWARE™ TECHNOLOGY

Limitations in evolving 100G+ coherent optical networks can increase operational cost, slow new wavelength activation times, limit reach, and prevent the network from operating at its highest possible capacity. Coriant Aware™ Technology responds to these challenges by enabling more dynamic networks that can fully leverage next-generation coherent technology. Benefits of Coriant Aware™ Technology include faster and simpler wavelength provisioning, better reach and more capacity, higher availability, and the opportunity to monetize margin as extra capacity that can be sold to customers. With an awareness of real-time network data, Coriant Aware™ Technology offers network optimization and simplified operations designed for the hyperscale generation.

## INTELLIGENT NETWORK MANAGEMENT

### Coriant® Transport Network Management System (TNMS)

The Coriant® Transport Network Management System (TNMS) is an end-to-end management platform (FCAPS) that enables operators to easily and cost effectively manage multi-layer (PDH, SONET/SDH, IP/Ethernet, MPLS-TP, DWDM), multi-domain (access, metro, core), and multi-vendor networks. TNMS easily integrates into existing OSS environments and empowers a holistic approach to network and service management across a broad range of Coriant packet and optical transport and DCI solutions.

As a single management system for all equipment types and diverse technologies, TNMS offers supervision of services across all network elements and includes an integrated ASON Manager that simplifies the configuration and management of control plane enabled protection and restoration. With a feature set field proven around the world, TNMS combines clear network views and easy navigation with uniform fault, configuration, security, performance management, and alarm to service correlation functions. The scalable, pay-as-you-grow solution includes a standard and intuitive user interface to ensure straightforward operation and smooth integration into multi-vendor environments.

### Coriant® 8000 Intelligent Network Manager (INM)

The Coriant® 8000 Intelligent Network Manager (INM) offers service providers full end-to-end support for commissioning and monitoring services, initiating service changes, and troubleshooting for the 8600 Smart Router Series as well as third-party routing platforms. This single overarching management solution simplifies network management and supports extensive network automation capabilities to help improve profitability and competitiveness through operational efficiency. An advanced graphical user interface (GUI), automated wizards, and plug-and-play features guide users through tasks and shorten service provisioning time. The results are more reliable network operations and faster time to revenue.

## SOFTWARE DEFINED NETWORKING (SDN)

The Coriant Transcend™ SDN Solution unleashes the rich capabilities of SDN and NFV by delivering an open, programmable, and automated multi-layer application environment. The Coriant Transcend™ SDN Solution is a modular software suite that enables dynamic, end-to-end network automation and control to drive down OpEx costs, create new revenue sources, and deliver innovative services. Optimized for easy integration and adaption, the Coriant Transcend™ SDN Solution is comprised of the following components:



- The Coriant Transcend™ SDN Transport Controller and Coriant Transcend™ SDN Packet Controller for direct SDN control of optical transport, Ethernet, and IP/MPLS network elements
- The Coriant Transcend™ SDN Hierarchical Controller for orchestration of Coriant and third-party SDN Controllers
- The Coriant Transcend™ SDN Portal which serves as a web-based interface for both service provider operational staff and service provider customers
- SDN support of the Coriant product and services portfolio, including industry-leading metro-to-core packet optical transport (mTera UTP, 7100 OTS/Nano/Pico, hiT 7300, 7090 Series), 8600 Smart Router Series, and a selection of third-party network elements
- The Coriant Transcend™ SDN Solution is an open network control system that supports pre-integration with OpenDaylight-based control environments as well as third-party and customer specific orchestrators and applications



## IP/MPLS ROUTING SOLUTIONS

### Coriant® 8600 Smart Router Series

The Coriant® 8600 Smart Router Series provides an optimized, scalable, and versatile solution for service providers to efficiently meet the demands of mobile backhaul, wireline, and fixed mobile convergence. The 8600 Smart Router Series of scalable IP/MPLS routers supports fast-growing data services and low latency voice and video in a wide range of platform options for fully integrated, end-to-end solutions spanning core to access, enterprise, and cell site applications. Coriant edge router solutions boost network performance, reduce operating costs, and empower new carrier services through innovative design. The 8600 Smart Router Series includes the industry's smallest hardened cell site router, flexible and resilient 1G/10G aggregation, compact 10G/100G aggregation, and a terabit speed multi-slot chassis for head-end network termination to 100G trunks for mobile packet core networks. Advanced flexible and high performance network synchronization solutions deliver proven accuracy to support LTE-A, LTE-TDD, 5G, Small Cell, and other demanding timing applications. In conjunction with the 8000 INM and Coriant Transcend™ SDN Solution, Coriant routers can support dynamic integration with carrier applications, optimized network utilization, complete network management functions, and automated service delivery.



## MSPP SOLUTIONS

The Coriant® Multi-Service Provisioning Platform (MSPP) provides efficient aggregation, switching, and transport for a broad range of circuit and packet services. Designed for seamless evolution, Coriant MSPP solutions enable fixed line and mobile operators to support legacy PDH/SDH while offering a flexible migration path to packet-centric services (IP/Ethernet) including Metro Ethernet Forum (MEF) certified carrier-class Ethernet.

Coriant MSPP solutions include:

- hiT 70xx MSPP
- 6300 Managed MSPP/Transport Platform
- SN 9000 Multiservice Switch

## DIGITAL CROSS-CONNECT/TDM SOLUTIONS

Coriant offers a range of Digital Cross-Connect (DCS) and broadband DCS solutions proven in Tier 1 fixed line and mobile networks around the world, as well as government, enterprise, transport, and utility networks. Addressing both core and access applications, these field proven cross-connect solutions combine efficient aggregation, grooming, and switching with intelligent bandwidth management to help network operators reduce costs, simplify provisioning, and seamlessly migrate from circuit to packet-based service infrastructure.

The Coriant portfolio of DCS/BB-DCS solutions includes:

- 5000 Digital Cross-Connect Series
- SN 16000 BB-DCS/Optical Switch
- 8100 Managed Access System
- DNX Cross-Connect Platform

## INDUSTRY ASSOCIATIONS

Committed to open standards and innovative solutions that enable efficient interworking in multi-layer, multi-domain, and multi-vendor networking environments, Coriant proudly supports and participates in industry-recognized associations and research initiatives. Our industry affiliations include:

- Telecom Infra Project (TIP)
- Open Networking Foundation (ONF)
- OIF
- Open Network Automation Platform (ONAP)
- Open ROADM Multi-Source Agreement (MSA)
- MEF
- OSA
- IEEE
- Internet Engineering Task Force (IETF)
- FED
- MODE-GAP
- OpenDaylight
- TM Forum
- Telecommunication Technology Committee
- ITU
- Open Platform for NFV (OPNFV)

## ABOUT CORIANT

Coriant develops innovative and purpose-built networking solutions for a fast-changing and cloud-enabled business world. The Coriant portfolio of SDN-enabled, edge-to-core transport solutions enables network operators to reduce operational complexity, improve utilization of multi-layer network resources, and create new revenue-generating services optimized for the evolving demands of business and consumer applications, including video, hyperscale cloud, IoT, and mobile broadband.

Coriant serves leading network operators in over 100 countries, including mobile and fixed line service providers, content providers, cloud and data center operators, cable MSOs, large enterprises, government agencies, financial institutions, and utility companies. With hundreds of thousands of networking systems deployed worldwide, Coriant solutions serve as the resilient foundation for billions of dollars in end-user service revenue. Coriant was founded upon the powerful combination of Nokia Siemens Networks (NSN) Optical Networks, Tellabs, and Sycamore Networks – a distinguished heritage of over 35 years of technology innovation.

Now fully integrated and with seasoned executive leadership at the helm, Coriant is setting the pace of innovation from network access to the optical core with best-in-class networking solutions, including the Coriant Hyperscale Carrier Architecture™, Coriant Light IP™, Coriant CloudWave™ Optics, the Coriant Groove™ G30 DCI Platform, and the Coriant® Pluggable Optical Layer.

For more information about our products and solutions, please contact your Coriant Sales Representative.

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