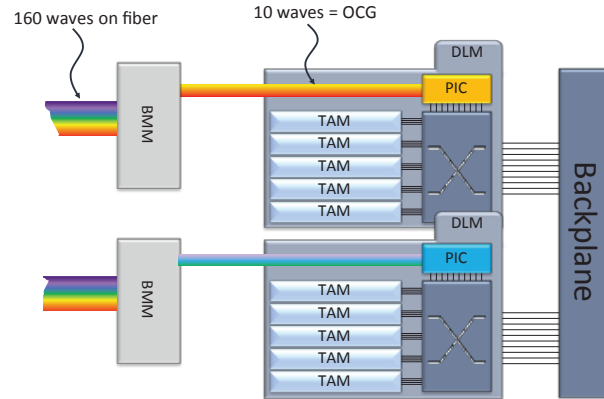


Band Mux Module (BMM)

- BMM interleaves line side waves into OCGs
- OSC insertion and extraction
- Supports Double Density™ 25GHz spacing



- Interfaces DTN Digital ROADM into Infinera Line System
 - Industry leading optical transport line system

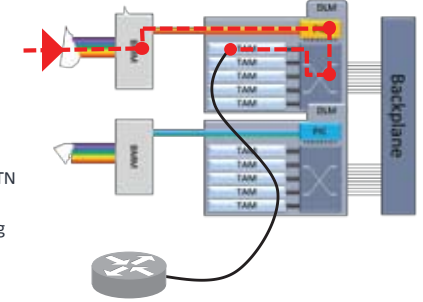


Infinera DTN Digital ROADM

Add/Drop

Traffic Flow Through DTN

1. The BMM separates the line side waves into OCGs
2. The PIC separated OCGs into wavelengths
3. The digital switch processes the OTN container
4. The TAM provides client interfacing and PM functions



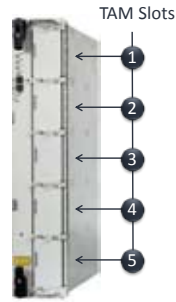
Digital Line Module (DLM)

- PICs generate and receive ten 10Gb/s waves
- Eliminates the need for transponders



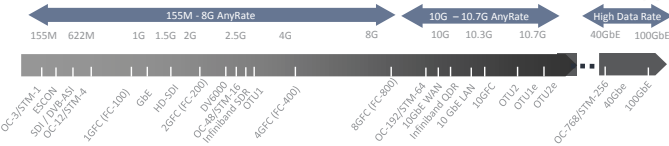
Infinera 100Gb/s PIC

- Each DLM houses:
 - A pair of PICs
 - A 100G OTN switch
 - Five TAM slots



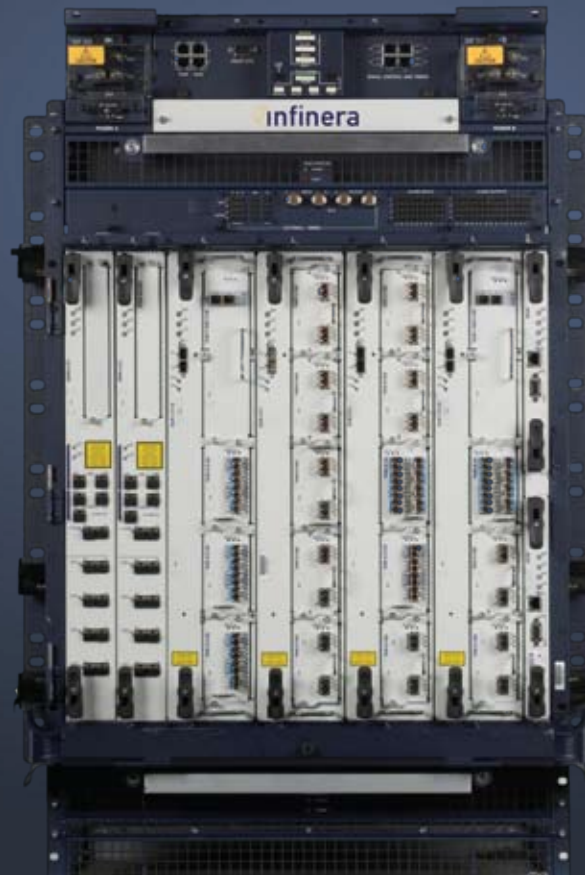
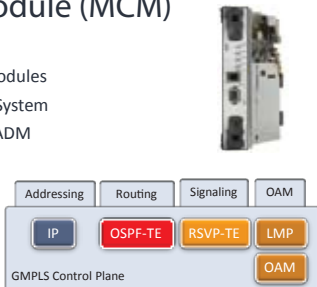
Tributary Adapter Module (TAM)

- Pluggable, multi-service interfaces for termination of client signals
- Digital device – shortest lead times in the industry



Management Control Module (MCM)

- Redundant warm standby management modules
- MCM runs Infinera IQ Network Operating System
- Controls local operation of DTN Digital ROADM
- Includes GMPLS Control Plane
- “Network is Master” Management Model
- Persistent storage for DTN software, firmware and network management information

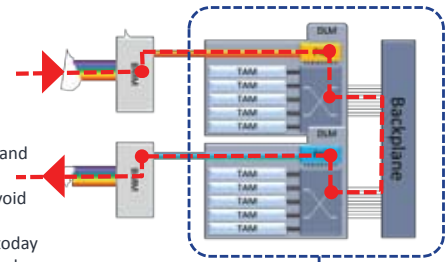


Digital Express

- Stages 1..3 as above
- The digital switch now processes express traffic

Key Benefits of Digital Express

- Provides digital provisioning, OAM and PM for express traffic
- Provides grooming in the core to avoid the Muxponder Tax
- Provides “CDC” ROADM functions today
- Enables digital service protection and restoration



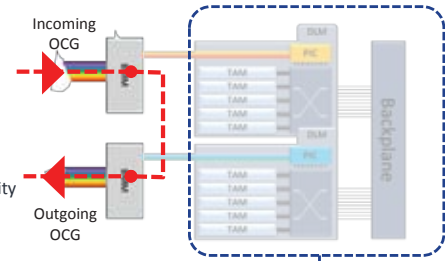
Full Digital Intelligence

Optical Express

- OCGs switched directly via BMMs
- Digital Processing is bypassed

Key Benefits of Optical Express

- Lowers initial network CapEx
- Allows management of bulk capacity
- Can be combined with Digital Express for optimum flexibility



Digital Processing is bypassed

The Anatomy of a Digital ROADM

Infinera®
what THE NETWORK will be