About Interface Masters Technologies

- leading innovator of monitoring and networking equipment for the past Sixteen Years
- Based in San Jose, California with sales and support offices in Europe & Hong Kong
Interface Masters Technologies & OCP

- Joined with Broadcom to author the OCP Switch specification Rev 1.0 in early 2013
- In the process of developing rev 1.1 of the OCP Spec for TOR and Spine switch
- Introduced Niagara2948-12XLM a modular TOR switch in September, 2013
- Today is introducing Niagara2632XL a spine switch
- Will introduce Niagara2948-6XL the 2nd TOR switch by the end of March
Niagara 2948-12XLM-OCP

- 1U switch based on Broadcom StrataXGS® Trident 2
  - 1.28 Tbps of Bandwidth
- Choice of X86, PPC, MIPs or ARM Control Processor
- Optional Data Plane off-load module
- Modular IO configuration
  - Up to 96 x 10Gb ports
  - Up to 12 x 40Gb ports
- Support data center configurations
Niagara 2948-12XL-OCP – Internal
Control CPU

- Flexible control CPU board:
  - CPU architecture
    - X86 – AMD embedded G-series SOC
    - Power PC – Freescale multi core PPC
    - MIPS – Broadcom Multi Core MIPS
    - ARM
  - CPU Power
    - single core or multi core
    - Speed configuration
  - Memory
  - Storage
Data Plane Processor (DPP)

- Acceleration for data plane functions
  - Encryption and decryption
  - Deep Packet inspection function
- 40Gbps interface to the data plane
- Supports:
  - Multi core MIPs CPU – XLP432
  - FPGA design
Flexible IO module in a 1U

- Support different application
  - TOP – Leaf switch
    - 48 x 10Gb + 12 x 40Gb
    - 48 x 10Gb + 6 x 40Gb
    - 72 x 10Gb
  - Aggregation – Spine switch
    - 32 x 40Gb
Niagara 2948-12XL-OCP – Front and Back

- Supports dual redundant power supplies
- Hot Pluggable fans - back to front and front to back
- Factory configurable
Niagara 2632XL-OCP

- IU switch based on Broadcom StrataXGS® Trident 2
  - 128 Tbps of Bandwidth
- Choice of X86, PPC, MIPs or ARM Control Processor
- 32 ports of 40Gb
- Support data center configurations
Niagara 2632XL-OCP
Niagara 2632XL-OCP – Front and Back

- Supports dual redundant power supplies
- Hot Pluggable fans - back to front and front to back factory configurable
Software Foundation

- Boot loader
  - GRUB 2 for X86
  - U-Boot and X-Loader for MIPS
- Open Network Install Environment (ONIE)
- Linux BSP
  - Debian or Ubuntu Distribution
- Interface Masters Boardkeeper
  - Drivers and interfaces to boards, buses and protocols
  - Hardware auto-configuration
- Broadcom SDK – 6.3.2
Switching Software

- Switch can be delivered with the following configurations
  - Hardware only
  - Hardware + OpenFlow 1.3.1
  - Hardware + L2-L3 switching software

- ONEI: enables ecosystem of operating systems
- Optional 3rd party Independent Software Vendors