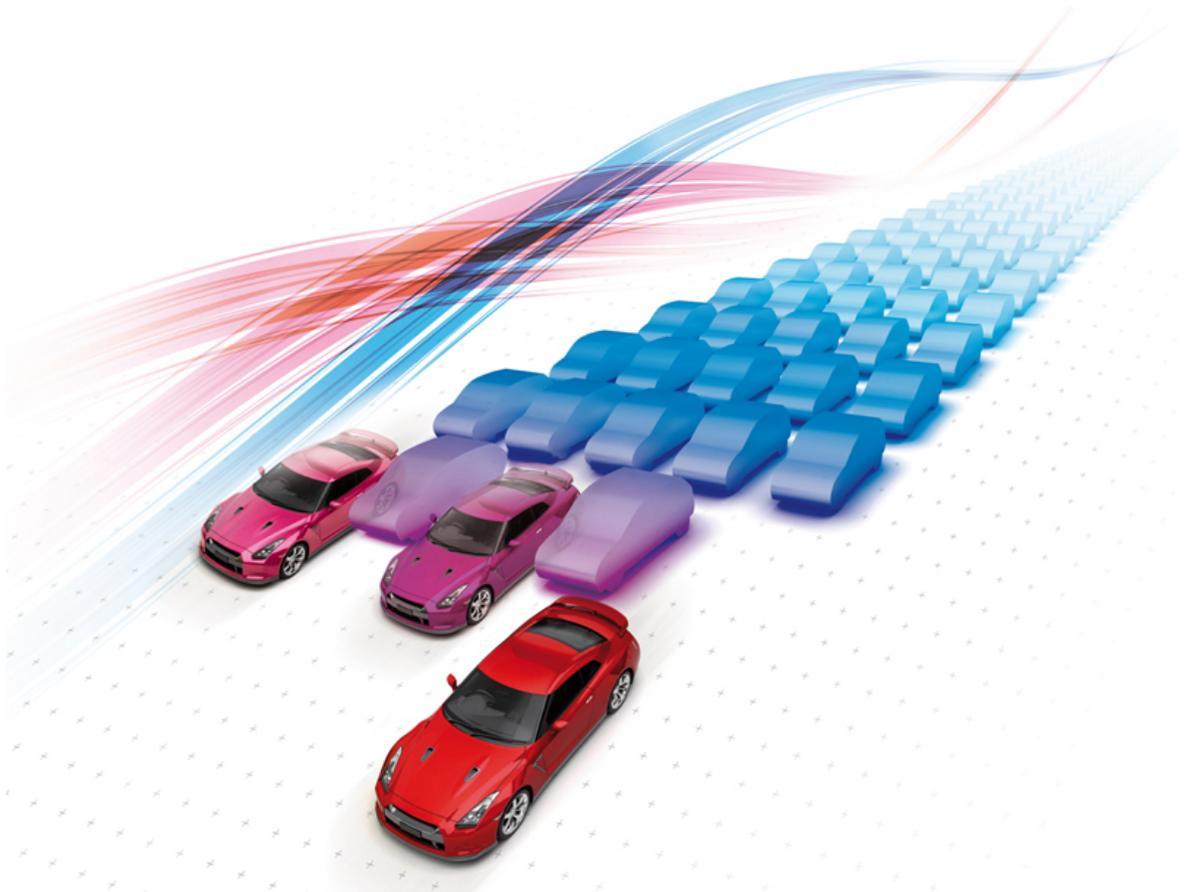


Interfacing to the MOST Ethernet Channel

IEEE 802.1 Interim Meeting

May 15, 2013
Victoria, BC
Canada



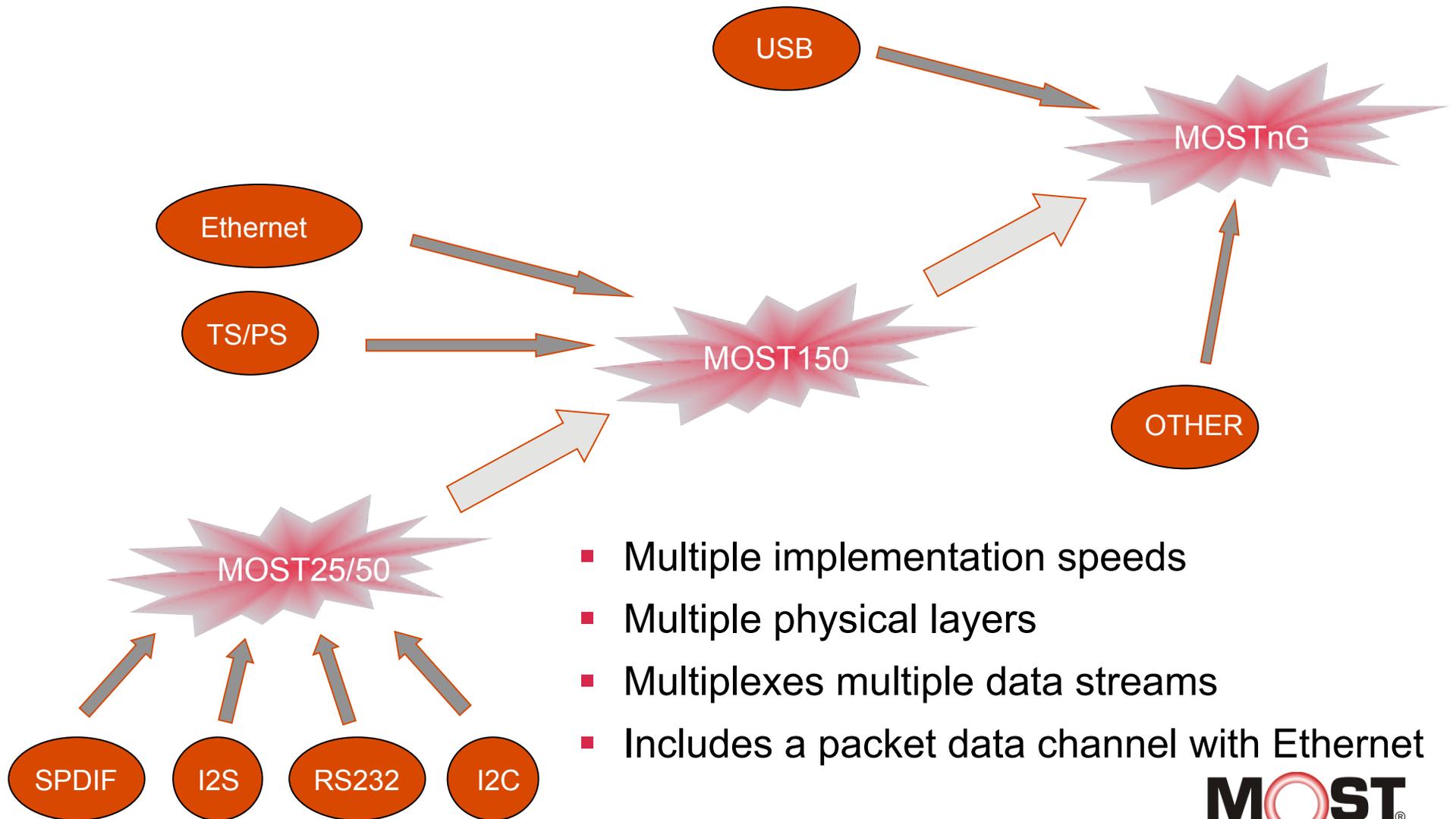
Agenda

- Progress Made
- Data Multiplexing and Distribution
- Specifying the MOST media type
- MediaLB – Public High Speed Interface
- Summary: MOST in 802.1 Specifications
- Q & A

Progress Made

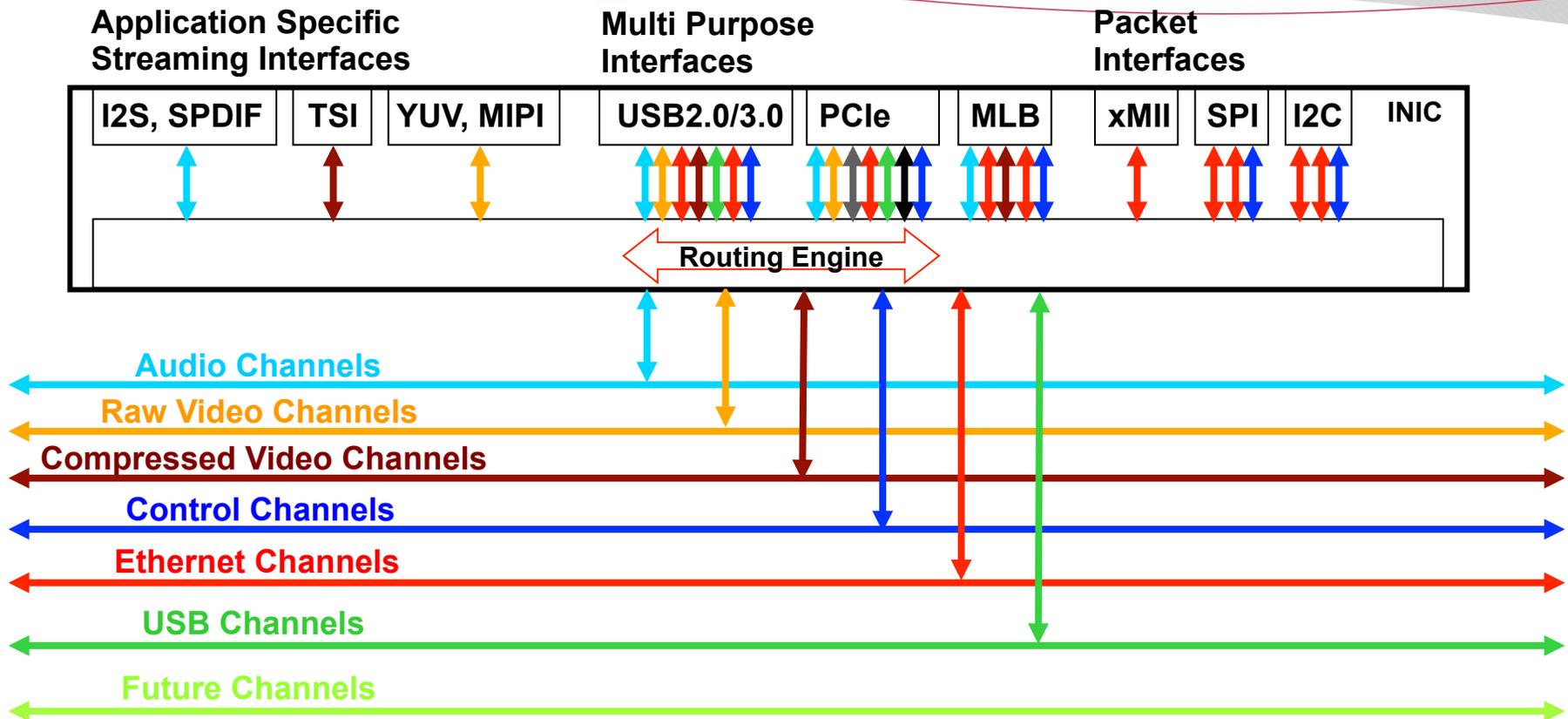
- MOSTCO will open physical layer specifications if 802.1AC includes the MOST Ethernet Channel in its media types.
- The automotive industry represented in the MOST Cooperation is still interested in bridging to 802 technologies.
- Automotive industry feels a coordinated effort with IEEE is the best way to meet IEEE 802.1 bridging requirements.
- There already exists an interface to the MOST Ethernet Channel that is available under RAND licensing terms - MediaLB. The spec is royalty free and publicly available.

MOST – A Multiplexed Network



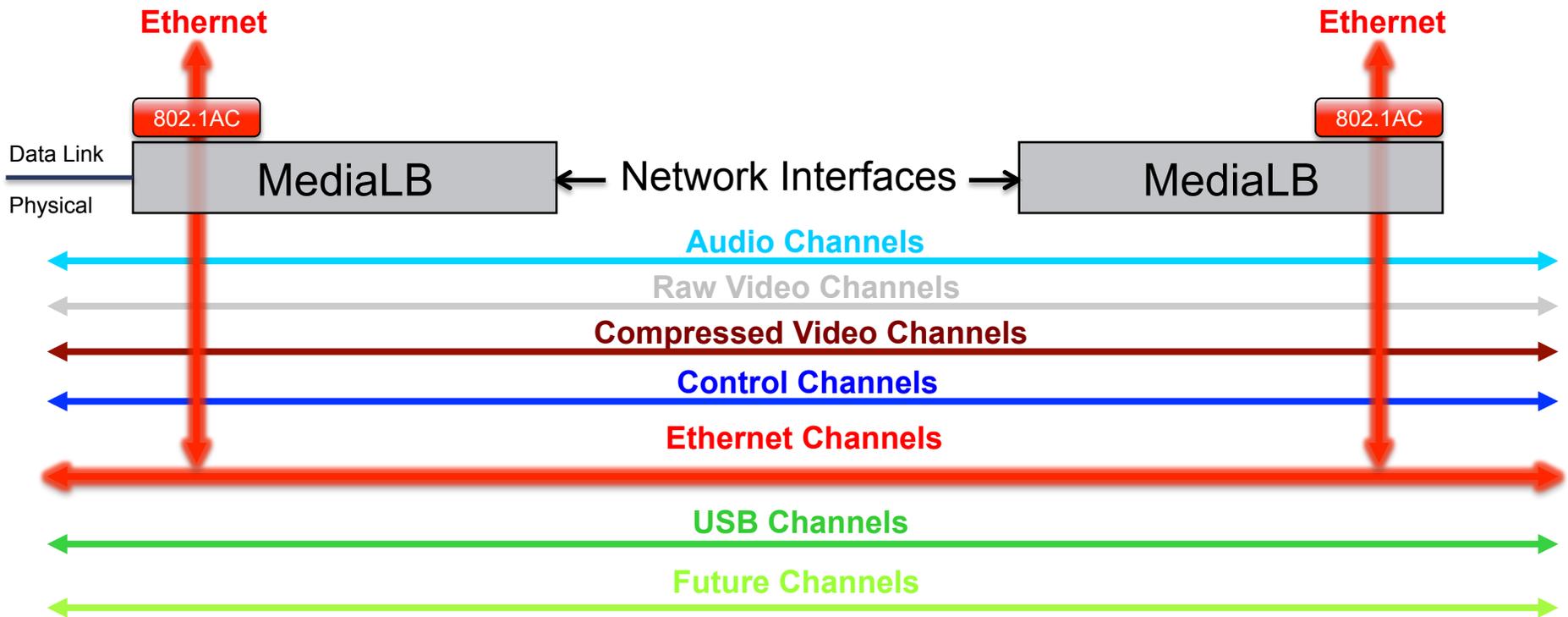
- Multiple implementation speeds
- Multiple physical layers
- Multiplexes multiple data streams
- Includes a packet data channel with Ethernet

MOST: Data Multiplexing And Distribution



- Multiple possibilities of interfacing of data channels for applications
 - Multi purpose interfaces can interface to all data channels
 - Packet and streaming interfaces restricted to some data channels
- Routing not only from Network to interface and vice versa but also from interface to interface
- MediaLB used by all existing network interface controllers

Specifying the MOST Media Type: Layer View



- Different types of channels transport different types of data
- Can provide specific/typical interfaces for each protocol (SPI, RGB, CAN, USB, MediaLB ...)
- Could add future protocol channels
- Would like to define Ethernet bridging jointly with IEEE 802 group

MediaLB



TOSHIBA



MediaLB



HYUNDAI



OKI



STMicroelectronics

- MediaLB is the common interface to access the MOST50 and MOST150 INICs
- MediaLB Device Interface IP is offered through a royalty free license agreement
- Details public at www.smcs.com/Products/Automotive/MediaLB



Summary: MOST in 802.1 Specifications

- It is not possible to access the MOST Ethernet Channel at the physical layer, without implementing a complete MOST interface.
- MOST bridging is only the mapping of the ISS to the MOST Ethernet Channel, not bridging of all MOST data streams.
- There already exists an interface to the MOST Ethernet Channel that is widely used and available under RAND licensing terms - MediaLB. The basic spec is public and royalty free.
- MediaLB is a logical interface for implementation of a bridge.
- Simple additions (less than 2 pages) could easily be done as part of the 802.1AC revision project.

Q & A

- Questions?

Thank You for Your Attention!!!