Next Generation 40Gb/s and 100Gb/s
Ethernet Optics Study Group
IEEE 802.3 Interim Session
Minneapolis, MN
15-16 May 2012

John Abbott, Corning Chris Cole, Finisar Doug Coleman, Corning Paul Kolesar, CommScope Steve Swanson, Corning

- Relative costs are averages of fiber connection ratios computed by complex modeling tools from Doug Coleman and Paul Kolesar
- Relative costs are per circuit averages relative to 2f OS2 100m SMF averages
- Assumptions:
 - No transceivers
 - End to end cabled fiber connection relative costs only
 - 24f cabled fiber trunk cables
 - 1x12f MPO connectors
 - Single-link (SL) and double-link (DL) channels as discussed in <u>kolesar_02_0911</u> and <u>kipp_01_0112</u>

Single-link channel (SL CH)

Fiber Type	100m	300m	500m
8f OM4 MMF	5	9	13
8f OM3 MMF	4	7	10
8f OS2 SMF	4	6	8
2f OS2 SMF	1	1.5	2

Double-link channel (DL CH)

Fiber Type	100m	300m	500m
8f OM4 MMF	7	11	15
8f OM3 MMF	6	9	12
8f OS2 SMF	6	8	10
2f OS2 SMF	1.5	2	2.5

DL 100m 2f OS2 SMF cost = 1.5 * 100m SL 2f OS2 SMF cost