

## Viability PMDs for 10 G Ethernet

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## Rationale for Multiple PMDs

- Serial 10Gig @ 1300 nm on SMF
  - long distance capability: campus and WAN
- 4  $\lambda$  WDM @ 1300 nm on MMF
  - solution for installed fiber base in buildings
- Serial 10Gig @ 850 nm on advanced MMF
  - lowest cost upgrade for building backbones
- Serial 10Gig @ 1300 nm on advanced MMF
  - uniform wavelength by re-using SMF devices

## Serial 10 G on MMF Is Possible

- Major manufacturers offering advanced MMF
  - Alcatel, Corning, Lucent, others
  - Extending distances and eliminating special cords
- More advancements to come
- Modeling and experiments show MMF can support hundreds of meters @ 850 or 1300 nm

## Why Next Generation MMF?

- Next Generation MMF will support all IEEE 802 applications from 10M to 10G
- Will provide low-cost migration path for users
- Technology advancing rapidly on both fiber and low-cost laser sources

Emerging advancements  
in multimode solutions  
should be seriously considered  
for 10 Gig Ethernet