



# Key Goals for Camera Link Project

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# Introduction

- This presentation identifies key items for a successful, optimized camera link
  - They may not be everything, but they are core characteristics needed for a competitive camera link solution
- This is a collection of items that came up related to the CFI discussion in July 2023
- We hope that the study group will agree in principle that these are the key items to be addressed by the task force

# Data Rates

- Required:
  - Support downstream speeds of 2.5Gbps, 5Gbps, and 10Gbps
  - Support upstream speeds up to 100Mbps
- Desirable:
  - Be extensible to support 25Gbps Downstream
- Consider:
  - Support 1Gbps downstream
  - What other rates?

# Competitiveness

- Economic feasibility:
  - Be cost competitive with incumbent solution
  - Have competitive power consumption
  - Cost efficient power delivery to camera module
- Broad Market Potential, Technical Feasibility:
  - Support both Shielded Balanced Pair and Coax
  - Fast link up time

# Ethernet: Compatibility CSD

- Compatibility with existing MAC specification
  - Support the full-duplex clause 4 MAC
    - Does **not** mean that the PHY can't duplex FDD, TDD, or otherwise...
  - Support 802 architecture
  - Support 802.1 specifications (802.1AC, 802.1Q)
    - Ability to support other protocols defined for use with Ethernet, e.g., 1722, PTP, MACsec, TSN, etc.



# Discussion

What is missing?

Is anything controversial in this presentation?

What needs more presentations?