

# Title: Reduced Pair Ethernet – Adjacent Markets

Subject: IEEE Reduced Twisted Pair Gigabit Ethernet PHY Study Group



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# Presentation Overview

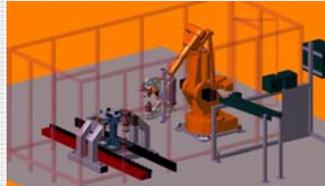


- In the CFI consensus building presentation other market/applications were mentioned in addition to automotive
  - See: [http://www.ieee802.org/3/RTPGE/public/mar12/CFI\\_01\\_0312.pdf#Page=8](http://www.ieee802.org/3/RTPGE/public/mar12/CFI_01_0312.pdf#Page=8) (Page 8)
- This presentation lists potential markets to start the discussion and gauge interest

# Potential Applications for Reduced Pair Ethernet



**Industrial Automation**



**Enterprise VoIP**



**MDU/MTU  
Access**



**Locomotive**



**Reduced Pair Ethernet**

**Media Converter**



**Security Camera**



# Potential Applications – Reduced Pair Ethernet



- **MTU/MDU Access**
  - Increased Broadband data rates to the Apartment/home over existing wiring infrastructure
  - Covering Wireless Access Points over multiple floors without repeaters
- **Industrial Automation & Control**
  - Higher data rates to support condition monitoring
  - Continuous communication infrastructure (ease of use for configuration, maintenance, tooling)
- **Enterprise/Carrier VoIP**
  - Upgrading from Analog phones to VoIP by leveraging existing wiring infrastructure
- **Security Cameras**
  - Ability to extend reach beyond 100m and manage multiple systems from centralized location
- **Modules/Media Converters**
  - Interim step to convert from standard Ethernet to reduced pair Ethernet without having to change design
- **Locomotive**
  - Train Backbone network and Carriage network for controlling Lights, HVAC systems, Doors etc.,
  - Ability to cover multiple carriages in excess of 300m without repeater networks

# Study Group - Points to Consider



- Should we consider additional applications beyond automotive?
- What are the requirements for additional applications?
- Are the requirements different from automotive?