

Proposed Responses to PAR Questions

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May, 2011

PAR item 2.1 – Project title

Project title: Standard for Ethernet Amendment:

Physical Layer specifications and Management parameters for 100 Gb/s operation over Backplanes and Copper Cables

PAR item 5.1 – Project participation

5.1 Approximate number of people expected to be actively involved in the development of this project:

65

PAR item 5.2 – Project scope

5.2 Enter the Scope of the Proposed changes (What?):

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The scope of this project is to specify additions to and appropriate modifications of IEEE Std 802.3 to add 100 Gb/s 4 lane Physical Layer (PHY) specifications and management parameters for operation on backplanes and twinaxial copper cables.

PAR item 5.3 – Project contingency

5.3 Is the completion of this standard contingent upon the completion of another standard (Yes or No)? If **yes**, please explain below:

No.

PAR item 5.4 – Project purpose

5.4 Enter the Purpose of the Proposed changes (Why?):

The purpose of this project is to extend the IEEE Std 802.3 Ethernet protocol to operating speeds of 100 Gb/s on 4 lane backplane and cost-effective twinaxial copper cable media in order to provide a significant increase in bandwidth while satisfying the distance requirements of the intended applications.

Online PAR Form no longer requires a purpose statement when the draft will not include a purpose clause.

PAR item 5.5 – Project need

5.5 Need for the Project:

Rapid growth of server, network, and internet traffic is driving the need for higher data rates over backplanes and high density, low cost twinaxial copper cables.

- IEEE Std 802.3 does not currently support 100Gb/s operation on backplane media.
- There is a market need for a lower cost, lower power, and higher density solution for twinaxial copper cables than 100GBASE-CR10.

PAR item 5.6 – Stakeholders

5.6 Stakeholders for the Standard:

Stakeholders identified to date includes but are not limited to: users and producers of systems and components for servers, network storage, networking systems, data centers, high performance computing, and telecommunications carriers.