

IEEE 802.3 motion

IEEE 802 LMSC closing plenary meeting
Friday 15 November 2024

5.012 ME: IEEE 802.3 Channel Operating Margin (COM) Open Source Project Request

IEEE 802.3 Channel Operating Margin (COM) Open Source Project Request

Background

IEEE Std 802.3 and amendments normatively specify Channel Operating Margin (COM) via equations and methods in Annex 93A and 178A. Software code implementations of these equations and methods have been and continue to be contributed and are widely used by participants. The COM code is not normatively or informatively included nor referenced as part of the text of the IEEE Std 802.3 or its amendments. Ensuring that the MATLAB-based example code implementation is revision-controlled, peer-reviewed, cross-checked, bug-free, and maintained over time is increasingly important. This proposal would not impact the continued normative specification of COM through equations and methods in Annex 93A and 178A.

IEEE 802.3 Channel Operating Margin (COM) Open Source Project Request

<https://mentor.ieee.org/802-ec/dcn/24/ec-24-0280-00-00EC-com-open-source-proposal-open-source-project-request.pdf>

IEEE 802.3 Channel Operating Margin (COM) Open Source Project Request

Motion:

Approve forwarding the IEEE 802.3 Channel Operating Margin (COM) Open Source Project Request in slides 5 to 10 of <<https://mentor.ieee.org/802-ec/dcn/24/ec-24-0280-00-00EC-com-open-source-proposal-open-source-project-request.pdf>> to OSCom

M: Law S: D'Ambrosia

Y: ??, N: ??, A: ??

Working Group vote

Y: 86, N: 0, A: 5

5.013 ME: IEEE 802.3 New Ethernet Applications ICAID renewal request

IEEE 802.3 New Ethernet Applications ICAID renewal request

Summary of changes in the ICAID renewal:

[1] Item 3.1 'Motivation and Goal': Updated to reflect recent IEEE 802.3 activities initiated in IEEE 802.3 NEA in the sentence that starts 'Recent examples of Ethernet standardization activities that originated in the current New Ethernet Applications Industry Connections ICAID ...'.

[2] Item 4 'Estimated Timeframe': Updated to reflect renewal for another two years.

[3] Item 7.1 'Activity Oversight Committee': Updated IEEE 802 LMSC contact from Paul Nikolich to James Gilb.

IEEE 802.3 New Ethernet Applications ICAID renewal request

Clean:

<https://mentor.ieee.org/802-ec/dcn/24/ec-24-0276-00-00EC-ieee-802-3-new-ethernet-applications-icaid-renewal-request.pdf>

Compare:

<https://mentor.ieee.org/802-ec/dcn/24/ec-24-0276-01-00EC-ieee-802-3-new-ethernet-applications-icaid-renewal-request.pdf>

IEEE 802.3 New Ethernet Applications ICAID renewal request

Motion:

Approve the IEEE 802.3 New Ethernet Applications ICAID renewal request at <https://mentor.ieee.org/802-ec/dcn/24/ec-24-0276-00-00EC-ieee-802-3-new-ethernet-applications-icaid-renewal-request.pdf>.

M: Law S: D'Ambrosia

Y: ??, N: ??, A: ??

Working Group vote

Y: 84, N: 0, A: 6

6.052 MI: IEEE 802.3 Pin Optimized PHY Interface Study Group

IEEE 802.3 Pin Optimized PHY Interface Study Group

MII Optimized for an Exposed Interconnect call for interest

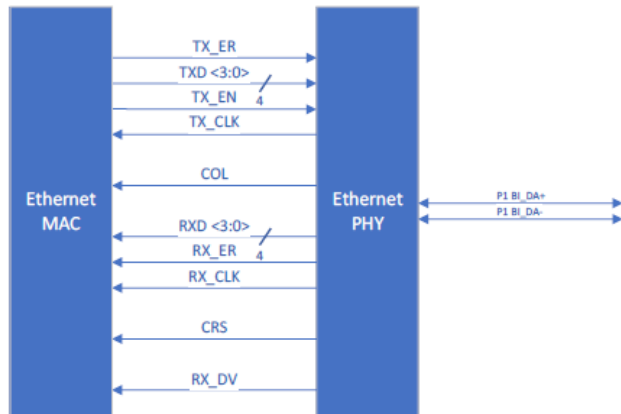
This is a call for interest to initiate a Study Group to develop a PAR and CSD for an Ethernet Media Independent Interface (MII) optimized for an exposed interconnect, e.g., chip-to-chip. The growing body of IEEE 802.3 Copper PHY standards that operate at lower speeds has intensified the demand for a modern, optimized MII. Application of PHYs such as 10BASE-T1L, 10BASE-T1S, proposed 100BASE-T1L, proposed 10BASE-T1M, and potentially future PHYs would see benefit in both single and multi-port implementations. Such an effort may afford reduced pin count and implementation complexity while enabling data for multiple ports on a single interface and support for features such as PHY-Level Collision Avoidance (PLCA). Most importantly, it could provide a modern alternative interface for PHYs that would otherwise use various industry specifications not currently in IEEE Std 802.3.

Call for interest consensus building meeting

Presentation: https://www.ieee802.org/3/cfi/1124_1/CFI_01_1124.pdf

What are we talking about?

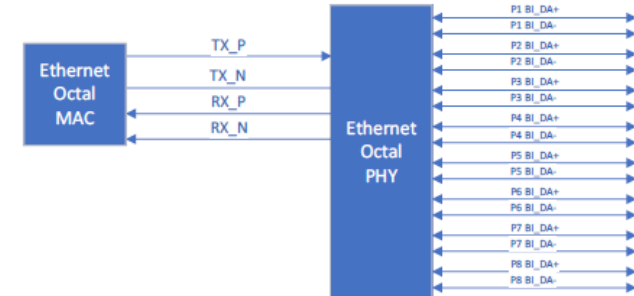
IEEE 802.3 MII MII:MDI Ratio = 8:1



Potential Single-Port MII MII:MDI Ratio = 2:1



Potential Multi-Port MII MII:MDI Ratio = 1:4



Goal: Enable efficient, adoptable SPE implementations

A reduced pin count chip-to-chip MII provides more value per IC package pin than an MII-based solution, reducing implementation complexity and encouraging adoption

IEEE 802.3 Pin Optimized PHY Interface Study Group

Motion:

Approve the formation of an IEEE 802.3 Study Group to develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for an Ethernet Media Independent Interface (MII) optimized for an exposed interconnect.

M: Law S: D'Ambrosia

Y: ??, N: ??, A: ??

Working Group vote

Y: 84, N: 0, A: 11