

# IEEE 802.3 motions for consent agenda

Closing IEEE 802 EC  
Friday 15<sup>th</sup> November 2019

**\*ME X.XXX: IEEE P802.3ca 25 Gb/s and 50 Gb/s  
Passive Optical Networks to Standards  
Association ballot**

# IEEE P802.3ca 25 Gb/s and 50 Gb/s Passive Optical Networks to Standards Association ballot

## Date the ballot closed

The 2<sup>nd</sup> Working Group recirculation ballot on IEEE P802.3ca draft D2.2 closed on 2<sup>nd</sup> October 2019 at 23:59 AoE

## Vote tally

	Initial Draft D2.0			1 <sup>st</sup> Recirculation Draft D2.1			2 <sup>nd</sup> Recirculation Draft D2.2			Req %
	#	%	Status	#	%	Status	#	%	Status	
Abstain	26	19	PASS	27	18	PASS	27	18	PASS	< 30
Dis with comment	15	-	-	9	-	-	3	-	-	-
Dis w/o comment	0	-	-	0	-	-	0	-	-	-
Approve	93	86	PASS	109	92	PASS	120	97	PASS	≥ 75
Ballots returned	134	57	PASS	145	61	PASS	150	63	PASS	> 50
Voters	235	-	-	235	-	-	235	-	-	-
Comments	497	-	-	100	-	-	0	-	-	-

# IEEE P802.3ca 25 Gb/s and 50 Gb/s Passive Optical Networks to Standards Association ballot

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Comments that support the remaining disapprove votes and WG responses

9 unsatisfied TR comments and 3 unsatisfied ER comments from 3 commenters

All comments remain from D2.0 circulation

See <[http://ieee802.org/3/ca/comments/802d3ca\\_D2\\_all\\_unsatisfied\\_20191112.pdf](http://ieee802.org/3/ca/comments/802d3ca_D2_all_unsatisfied_20191112.pdf)>

Comment summary

ER: #98 Redraw figures in FrameMaker - Accept

ER: #459, #460 “Envelope” term confusing - Reject

TR: #378 Meaning of “nominal MAC rate” - Reject

TR: #416 Relax min extinction ratio - Reject

TR: #417 New transmit mask - AIP

TR: #418 Change stressed receiver sensitivity - Reject

TR: #379, #382 Clarification on “interleaver” - AIP

TR: #385 PMA summary - AIP

TR: #387 Definition of “differential encoding” - AIP

TR: #464 Clause 144 is out of scope - Reject

Clause 11 ‘Procedure for conditional approval to forward a draft standard’ of IEEE 802 LMSC Operations Manual includes the text ‘Where a voter has accepted some comment resolutions and rejected others, only the comments of which the voter has not accepted resolution should be presented.’.

# IEEE P802.3ca 25 Gb/s and 50 Gb/s Passive Optical Networks to Standards Association ballot

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## Changes to draft prior to Standards Association Ballot

- Change the draft number to 3.0

- Change the front matter to reference that the draft is for initial Standards Association ballot

# IEEE P802.3ca 25 Gb/s and 50 Gb/s Passive Optical Networks to Standards Association ballot

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## Motion

Approve sending IEEE P802.3ca 25 Gb/s and 50 Gb/s Passive Optical Networks to Standards Association ballot

Confirm the CSD for IEEE P802.3ca in <<https://mentor.ieee.org/802-ec/dcn/18/ec-18-0247-00-ACSD-p802-3ca.pdf>>

M: Law S: D'Ambrosia

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

Working Group vote

Y: 69, N: 2, A: 15

**\*ME X.XXX: IEEE P802.3ch Multi-Gig Automotive Ethernet PHY to Standards Association ballot**

# IEEE P802.3ch Multi-Gig Automotive Ethernet PHY to Standards Association ballot

## Date the ballot closed

The 3<sup>rd</sup> Working Group recirculation ballot on IEEE P802.3ch draft D2.3.1 closed on 6<sup>th</sup> November 2019 at 23:59 AoE

## Vote tally

	Initial Draft D2.0			1 <sup>st</sup> Recirculation Draft D2.1			2 <sup>nd</sup> Recirculation Draft D2.2			3 <sup>rd</sup> Recirculation Draft D2.3.1			Req %
	#	%	Status	#	%	Status	#	%	Status	#	%	Status	
Abstain	13	16	PASS	21	15	PASS	22	15	PASS	22	15	PASS	< 30
Dis with comment	13	-	-	9	-	-	1	-	-	1	-	-	-
Dis w/o comment	0	-	-	0	-	-	0	-	-	0	-	-	-
Approve	86	86	PASS	103	91	PASS	115	98	PASS	120	99	PASS	≥ 75
Ballots returned	119	51	PASS	133	56	PASS	138	58	PASS	143	60	PASS	> 50
Voters	235	-	-	235	-	-	235	-	-	235	-	-	-
Comments	284	-	-	168	-	-	23	-	-	0	-	-	-



# IEEE P802.3ch Multi-Gig Automotive Ethernet PHY to Standards Association ballot

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Comments that support the remaining disapprove votes and WG responses

5 unsatisfied TR comments from 1 commenter

See <[http://grouper.ieee.org/groups/802/3/ch/comments/P8023ch\\_D2p0\\_comments\\_by\\_required\\_unsatisfied\\_20191010.pdf](http://grouper.ieee.org/groups/802/3/ch/comments/P8023ch_D2p0_comments_by_required_unsatisfied_20191010.pdf)>

Summary:

TR: #196 SNR margin reporting – REJECT

TR: #200 PAM4 test patterns – AIP

TR: #208 Resistor tolerance – AIP

TR: #207 Link segment environmental test specification – REJECT

TR: #199 Annex purpose statement – AIP

Clause 11 'Procedure for conditional approval to forward a draft standard' of IEEE 802 LMSC Operations Manual includes the text 'Where a voter has accepted some comment resolutions and rejected others, only the comments of which the voter has not accepted resolution should be presented.'

# IEEE P802.3ch Multi-Gig Automotive Ethernet PHY to Standards Association ballot

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## Changes to draft prior to Standards Association Ballot

Change the draft number to 3.0 and update the draft date

Change the front matter to reference that the draft is for Standards Association ballot

Correct the copyright year from 201x to 2019 in the copyright footer in Annex 149C

Removed highlighting on FM on 20xx for missing publication dates

Changed PM from Jonathan Goldberg to Jodi Haasz

Changed the paragraph spacing on the first page to move the IEEE address to the first page and have the abstract on the second page

# IEEE P802.3ch Multi-Gig Automotive Ethernet PHY to Standards Association ballot

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## Motion

Approve sending IEEE P802.3ch Multi-Gig Automotive Ethernet PHY to Standards Association ballot

Confirm the CSD for IEEE P802.3ch in <<https://mentor.ieee.org/802-ec/dcn/17/ec-17-0069-00-ACSD-802-3ch.pdf>>

M: Law S: D'Ambrosia

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

Working Group vote

Y: 89, N: 0, A: 3

**\*ME .??.?: IEEE P802.3cm 400 Gb/s over  
Multimode Fiber to RevCom**

# IEEE P802.3cm 400 Gb/s over Multimode Fiber to RevCom

## Item 1: Date the ballot closed

The 1<sup>st</sup> Standards Association recirculation ballot on IEEE P802.3cm 400 Gb/s over Multimode Fiber draft D3.1 closed on 11<sup>th</sup> October 2019 at 23:59 ET

## Item 2: Vote tally

	Initial Draft D3.0			1 <sup>st</sup> Recirculation Draft D3.1			Req %
	#	%	Status	#	%	Status	
Abstain	3	3	PASS	3	3	PASS	< 30
Dis with comment	3	-	-	2	-	-	-
Dis w/o comment	0	-	-	0	-	-	-
Approve	88	96	PASS	91	97	PASS	≥ 75
Ballots returned	94	91	PASS	96	93	PASS	≥ 75
Voters	103	-	-	103	-	-	-
Comments	35	-	-	1	-	-	-
Public comments	0	-	-				

# IEEE P802.3cm 400 Gb/s over Multimode Fiber to RevCom

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Comments that support the remaining disapprove votes and WG responses

5 unsatisfied TR comments and 1 unsatisfied GR comment from 2 commenters

See <[http://www.ieee802.org/3/cm/comments/P802d3cm\\_D3p1\\_to\\_D3p0\\_unsatisfied\\_by\\_ID.pdf](http://www.ieee802.org/3/cm/comments/P802d3cm_D3p1_to_D3p0_unsatisfied_by_ID.pdf)>

Of the above, 4 unsatisfied TR comments are associated with the two optical PMD clauses:

Clause 138: Single-wavelength PAM4-based MMF PMDs (50GBASE-SR, 100GBASE-SR2, 200GBASE-SR4 and 400GBASE-SR8)

Clause 150: Two-wavelength PAM4-based MMF PMD (400GBASE-SR4.2)

These 4 unsatisfied TR comments relate to the optical TDECQ (Transmitter and Dispersion Eye Closure - quaternary) measurement methodology and associated link budget

The TDECQ methodology specified in P802.3cm D3.1 is consistent with that in IEEE Std 802.3cd-2018, in particular Clause 138

The unsatisfied TR comment on D3.1 is a restatement of an unsatisfied TR comment on D3.0

The remaining 1 unsatisfied TR comment and 1 unsatisfied GR comment relate to “Clause 9”, which does not exist in the draft.

Clause 11 ‘Procedure for conditional approval to forward a draft standard’ of IEEE 802 LMSC Operations Manual includes the text ‘Where a voter has accepted some comment resolutions and rejected others, only the comments of which the voter has not accepted resolution should be presented.’.

# IEEE P802.3cm 400 Gb/s over Multimode Fiber to RevCom

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## Motion

Approve sending IEEE P802.3cm 400 Gb/s over Multimode Fiber to RevCom.

Approve CSD documentation in <<https://mentor.ieee.org/802-ec/dcn/18/ec-18-0078-00-ACSD-802-3cm.pdf>>

M: Law S: D'Ambrosia

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

Working Group vote

Y: 93, N: 0, A: 2

**\*ME ?..??? Division of IEEE P802.3ct 100Gb/s  
and 400Gb/s over DWDM systems project**



# Division of IEEE P802.3ct 100Gb/s and 400Gb/s over DWDM systems project

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## Rationale

It has become apparent that the market demands and the state of technology for 100 Gb/s Ethernet and 400 Gb/s Ethernet over DWDM systems are different, and that a faster timeline for the 100Gb/s Ethernet portion of the IEEE P802.3ct project could be achievable. As a result an IEEE P802.3ct PAR modification request, and a new IEEE P802.3cw PAR, are proposed to remove the 400 Gb/s Operation over DWDM Systems portion of the project from the IEEE P802.3ct PAR and place it in the new IEEE P802.3cw PAR.

## Title

### IEEE P802.3ct PAR modification request

Standard for Ethernet Amendment: Physical Layers and Management Parameters for 100 Gb/s ~~and 400 Gb/s~~ Operation over DWDM (dense wavelength division multiplexing) systems

### IEEE P802.3cw PAR

Standard for Ethernet Amendment: Physical Layers and Management Parameters for 400 Gb/s Operation over DWDM (dense wavelength division multiplexing) systems

# Division of IEEE P802.3ct 100Gb/s and 400Gb/s over DWDM systems project

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## Scope

### IEEE P802.3ct PAR modification request

Define physical layer specifications and management parameters for the transfer of Ethernet format frames at 100 Gb/s ~~and 400 Gb/s~~ at reaches greater than 10 km over DWDM systems.

### IEEE P802.3cw PAR

Define physical layer specifications and management parameters for the transfer of Ethernet format frames at 400 Gb/s at reaches greater than 10 km over DWDM systems.

## Need for the Project

### IEEE P802.3ct PAR modification request

Optical solutions targeting ~~greater than 100 Gb/s operation at reaches in excess of~~ 10 km over a DWDM system will address the bandwidth growth and reach requirements of Cable/MSO (multiple system operator) distribution networks, and mobile backhaul networks, ~~and interconnect for distributed data centers~~ where reaches greater than 10 km are required, or where fiber availability drives the need for multiple instances of Ethernet over a DWDM system.

### IEEE P802.3cw PAR

Optical solutions targeting 400 Gb/s operation at reaches in excess of 10 km over a DWDM system will address the bandwidth growth and reach requirements of interconnect for distributed data centers where reaches greater than 10 km are required, or where fiber availability drives the need for multiple instances of Ethernet over a DWDM system.

# Division of IEEE P802.3ct 100Gb/s and 400Gb/s over DWDM systems project

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## Motion

Approve forwarding IEEE P802.3ct PAR modification documentation in <https://mentor.ieee.org/802-ec/dcn/19/ec-19-0149-01-00EC-ieee-p802-3ct-draft-par-response.pdf> to NesCom

Approve IEEE P802.3ct CSD modification documentation in <https://mentor.ieee.org/802-ec/dcn/19/ec-19-0147-00-00EC-ieee-p802-3ct-draft-csd.pdf>

Approve forwarding IEEE P802.3cw PAR documentation in <https://mentor.ieee.org/802-ec/dcn/19/ec-19-0150-00-00EC-ieee-p802-3cw-draft-par-response.pdf> to NesCom

Approve IEEE P802.3cw CSD documentation in <https://mentor.ieee.org/802-ec/dcn/19/ec-19-0148-00-00EC-ieee-p802-3cw-draft-csd.pdf>

M: Law, S: D'Ambrosia

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

Working Group vote:

Y: 83, N: 0, A: 1

**\*ME ?.??? New PAR: IEEE P802.3cx Improved Precision Time Protocol (PTP) timestamping accuracy**

# IEEE P802.3cx Improved Precision Time Protocol (PTP) timestamping accuracy

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## Title

Standard for Ethernet Amendment: Media Access Control (MAC) service interface and management parameters to support improved Precision Time Protocol (PTP) timestamping accuracy

## Scope of project

Define optional enhancements to Ethernet support for time synchronization protocols to provide improved timestamp accuracy in support of ITU-T Recommendation G.8273.2 'Class C' and 'Class D' system time error performance requirements.

## Need

Ethernet can be applied in important new applications if implementations can interwork to meet more stringent time synchronization. Potential new applications include use in the 5G radio access network (RAN) infrastructure, high-speed telecommunications, industrial control and SmartGrid. For example, there is a strong desire to be able to use Ethernet for 5G RAN, which is expected to have significant volume.

# IEEE P802.3cx Improved Precision Time Protocol (PTP) timestamping accuracy

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## Motion

Approve forwarding IEEE P802.3cx PAR documentation in <https://mentor.ieee.org/802-ec/dcn/19/ec-19-0160-01-00EC-ieee-p802-3cx-draft-par-response.pdf> to NesCom

Approve CSD documentation in <https://mentor.ieee.org/802-ec/dcn/19/ec-19-0161-01-00EC-ieee-p802-3cx-draft-csd-response.pdf>

M: Law, S: D'Ambrosia

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

## Working Group vote

PAR: Y: 84, N: 0, A: 2

CSD: Y: 82, N: 0, A: 1

**\*ME X.XXX: IEEE 802.3 drafts to ISO/IEC  
JTC1/SC6 for information**

# IEEE 802.3 drafts to ISO/IEC JTC1/SC6 for information

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Approve liaison of the following drafts to ISO/IEC JTC1/SC6 for information under the PSDO agreement:

- IEEE P802.3ca draft D3.0
- IEEE P802.3cg draft D3.4
- IEEE P802.3ch draft D3.0
- IEEE P802.3cn draft D3.1
- IEEE P802.3cm draft D3.1
- IEEE P802.3cq draft D3.1

M: Law S: D'Ambrosia

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

Working Group vote

Y: 95, N: 0, A: 1



**\*MI X.XXX: IEEE 802.3 Improving PTP  
Timestamping Accuracy Study Group (first  
rechartering)**

# IEEE 802.3 Improving PTP Timestamping Accuracy Study Group (first rechartering)

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## Motion

Grant the 1st rechartering of the IEEE 802.3 Improving PTP Timestamping Accuracy Study Group

M: Law S: D'Ambrosia

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

Working Group vote

Y: 84, N: 0, A: 1

**\*MI X.XXX: IEEE 802.3 10Mb/s Single Pair Ethernet Multidrop Enhancements Study Group (first rechartering)**

# IEEE 802.3 10Mb/s Single Pair Ethernet Multidrop Enhancements Study Group (first rechartering)

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## Motion

Grant the 1st rechartering of the IEEE 802.3 10Mb/s Single Pair Ethernet Multidrop Enhancements Study Group

M: Law S: D'Ambrosia

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

Working Group vote

Y: 83, N: 1, A: 1