IEEE 802.3 motions for consent agenda

IEEE 802 EC

Friday 15 July 2022

X.XXX ME*: IEEE P802.3ck 100 Gb/s, 200 Gb/s, and 400 Gb/s Electrical Interfaces to RevCom

IEEE P802.3ck 100 Gb/s, 200 Gb/s, and 400 Gb/s Electrical Interfaces to RevCom

Date ballot closed:

The 3rd Standards Association recirculation ballot on IEEE P802.3ck 100 Gb/s, 200 Gb/s, and 400 Gb/s Electrical Interfaces closed on 25th June 2022 at 23:59 UTC-12

Vote tally:

	Initial Draft D3.0			1st Recirculation Draft D3.1			2nd Recirculation Draft D3.2			3rd Recirculation Draft D3.3			Req %
	#	%	Status	#	%	Status	#	%	Status	#	%	Status	
Abstain	1	1	PASS	1	1	PASS	2	1	PASS	2	1	PASS	< 30
Dis with comment	6	-	-	7	-	-	4	-	-	1	-	-	-
Dis w/o comment	0	-	-	0	-	-	0	-	-	0	-	-	-
Approve	93	93	PASS	95	93	PASS	101	96	PASS	105	99	PASS	≥ 75
Ballots returned	100	84	PASS	103	87	PASS	107	90	PASS	108	91	PASS	≥ 75
Voters	118	-	-	118	-	-	118	-	-	118	-	-	-
Comments	238	-	-	60	-	-	21	-	-	14	-	-	-
Public comments	0	-	-										

IEEE P802.3ck 100 Gb/s, 200 Gb/s, and 400 Gb/s Electrical Interfaces to RevCom

Comments that support the remaining disapprove votes and responses:

10 unsatisfied TR comments from 1 disapprove voter

See <https://mentor.ieee.org/802-ec/dcn/22/ec-22-0147-00-00EC-ieee-p802-3ck-unsatisfied-comments.pdf>

Summary:

5 unsatisfied TR comments (3 are restatements) request a different eye-opening measurement methodology and associated limits

No consensus to make the proposed change

5 unsatisfied TR comments (1 is a restatement) request different continuous time linear equalizer (CTLE) settings for the eye-opening measurements

Much of the development was based upon these draft limits. Comments did not provide sufficient justification or analysis to make the proposed changes

Clause 12 ‘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 P802.3ck 100 Gb/s, 200 Gb/s, and 400 Gb/s Electrical Interfaces to RevCom

Motion:

Approve sending IEEE P802.3ck draft D3.3 to RevCom

Confirm the CSD for IEEE P802.3ck in <https://mentor.ieee.org/802-ec/dcn/18/ec-18-0077-00-ACSD-802-3ck.pdf>

M: Law S: D'Ambrosia

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

Working Group vote

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

X.XXX ME*: IEEE P802.3cs Increased-reach Ethernet optical subscriber access (Super-PON) to RevCom

IEEE P802.3cs Increased-reach Ethernet optical subscriber access (Super-PON) to RevCom

Date ballot closed:

The 4th Standards Association recirculation ballot on IEEE P802.3cs Increased-reach Ethernet optical subscriber access (Super-PON) closed on 9th June 2022 at 23:59 UTC-12

Vote tally:

	Initial Draft D3.0			1st Recirculation Draft D3.1			2nd Recirculation Draft D3.2			3rd Recirculation Draft D3.3			4th Recirculation Draft D3.4			Req %
	#	%	Status	#	%	Status	#	%	Status	#	%	Status	#	%	Status	
Abstain	3	3	PASS	3	3	PASS	2	2	PASS	2	2	PASS	3	3	PASS	< 30
Dis with comment	1	-	-	0	-	-	1	-	-	0	-	-	0	-	-	-
Dis w/o comment	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	-
Approve	72	98	PASS	77	100	PASS	78	98	PASS	82	100	PASS	83	100	PASS	≥ 75
Ballots returned	76	82	PASS	80	86	PASS	81	88	PASS	84	91	PASS	86	93	PASS	≥ 75
Voters	92	-	-	92	-	-	92	-	-	92	-	-	92	-	-	-
Comments	35	-	-	6	-	-	13	-	-	15	-	-	7	-	-	-
Public comments	0	-	-													

IEEE P802.3cs Increased-reach Ethernet optical subscriber access (Super-PON) to RevCom

Comments that support the remaining disapprove votes and responses:

None, the draft has 100% approval

Clause 12 ‘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 P802.3cs Increased-reach Ethernet optical subscriber access (Super-PON) to RevCom

Motion

Approve sending IEEE P802.3cs draft D3.4 to RevCom

Confirm the CSD for IEEE P802.3cs in <https://mentor.ieee.org/802-ec/dcn/18/ec-18-0246-00-ACSD-p802-3cs.pdf>

M: Law S: D'Ambrosia

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

Working Group vote

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

X.XXX MI*: IEEE P802.3cx Improved PTP timestamping accuracy to Standards Association ballot

IEEE P802.3cx Improved PTP timestamping accuracy to Standards Association ballot

Date ballot closed:

The 5th Working Group recirculation ballot on IEEE P802.3cx Improved PTP timestamping accuracy closed on 1st July 2022 at 23:59 UTC-12

Vote tally:

	Initial Draft D2.0			1st Recirculation Draft D2.1			2nd Recirculation Draft D2.2			3rd Recirculation Draft D2.3			4th Recirculation Draft D2.4			5th Recirculation Draft D2.5			Req %
	#	%	Status	#	%	Status	#	%	Status	#	%	Status	#	%	Status	#	%	Status	
Abstain	22	16	PASS	24	15	PASS	26	16	PASS	26	15	PASS	32	18	PASS	31	17	PASS	< 30
Dis with comment	8	-	-	5	-	-	3	-	-	4	-	-	3	-	-	3	-	-	-
Dis w/o comment	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	-	-
Approve	105	92	PASS	125	96	PASS	132	97	PASS	135	97	PASS	135	97	PASS	139	97	PASS	≥ 75
Ballots returned	135	60	PASS	154	68	PASS	161	71	PASS	165	73	PASS	170	75	PASS	173	76	PASS	>50
Voters	225	-	-	225	-	-	225	-	-	225	-	-	225	-	-	225	-	-	-
Comments	143	-	-	181	-	-	44	-	-	93	-	-	18	-	-	1	-	-	-

IEEE P802.3cx Improved PTP timestamping accuracy to Standards Association ballot

Comments that support the remaining disapprove votes and responses:

5 unsatisfied TR comments from 2 disapprove voters

See <https://mentor.ieee.org/802-ec/dcn/22/ec-22-0063-01-00EC-ieee-p802-3cx-unresolved-comments.pdf>

Summary:

#179: Make TX_num_unit_change definition more explicit. Rejected based on consensus to keep definition as generic as possible to avoid the need for future revisions.

#167: TS_SFD_Detect_TX function definition changes were proposed, but unsatisfactory to commenter.

#170: New feature request: Add a method (e.g, via Link Layer Discovery Protocol) to pass the state of the Message TimeStamp Point (register 3.1813.13) to the far end. No consensus to work on such feature, no technical proposal made.

#175: Add a note talking about how a Physical Coding Sublayer (PCS) separated by an Extender Sublayer (XS) from the Reconciliation Sublayer (RS) needs to not modify the Alignment Marker/Codeword Marker (CWM) locations or do any rate compensation to minimize any time accuracy error. No specific text was provided at the time.

#235: Updates to informative table in Annex 90A were made per consensus, but unsatisfactory to commenter.

IEEE P802.3cx Improved PTP timestamping accuracy to Standards Association ballot

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 Standards Association ballot
- Delete then editorial instruction "Change the second paragraph in 90.1 as shown below:" and subclause 90.1
  - The text in subclause 90.1 is unchanged from the base standard IEEE Std 802.3-2022

IEEE P802.3cx Improved PTP timestamping accuracy to Standards Association ballot

Motion

Approve sending IEEE P802.3cx to Standards Association ballot

Confirm the CSD for IEEE P802.3cx in <https://mentor.ieee.org/802-ec/dcn/19/ec-19-0220-01-ACSD-p802-3cx.pdf>

M: Law S: D'Ambrosia

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

Working Group vote

Y: ?, N: ?, A: ?

X.XXX MI*: IEEE P802.3cz Multi-Gigabit Optical Automotive Ethernet to Standards Association ballot (Conditional)

IEEE P802.3cz Multi-Gigabit Optical Automotive Ethernet to Standards Association ballot (Conditional)

Date ballot closed:

The 1st Working Group recirculation ballot on IEEE P802.3cz IEEE P802.3cz Multi-Gigabit Optical Automotive Ethernet closed on 24th June 2022 at 23:59 UTC-12

Vote tally:

	Initial Draft D2.0			1st Recirculation Draft D2.1			Req %
	#	%	Status	#	%	Status	
Abstain	15	10	PASS	16	10	PASS	< 30
Dis with comment	5	-	-	2	-	-	-
Dis w/o comment	0	-	-	0	-	-	-
Approve	127	96	PASS	136	98	PASS	≥ 75
Ballots returned	147	70	PASS	154	73	PASS	>50
Voters	209	-	-	209	-	-	-
Comments	287	-	-	59	-	-	-

IEEE P802.3cz Multi-Gigabit Optical Automotive Ethernet to Standards Association ballot (Conditional)

Comments that support the remaining disapprove votes and responses:

3 unsatisfied TR comments from 2 disapprove voters

See <https://mentor.ieee.org/802-ec/dcn/22/ec-22-0149-00-00EC-ieee-p802-3cz-unsatisfied-comment.pdf>

Summary:

#242 and #243	BASE-U Energy Efficient Ethernet (EEE) and Operation, Administration, and Management (OAM) status fields in Clause 45 Management Data Input/Output (MDIO) Interface registers, and their behaviour with respect to pma_reset.
#32	Increase of the centre wavelength range from 970 - 990 nm to 840 - 990 nm.

IEEE P802.3cz Multi-Gigabit Optical Automotive Ethernet to Standards Association ballot (Conditional)

Item 4: meeting schedule

2nd Working Group recirculation ballot day one	25 July 2022
2nd Working Group recirculation ballot close	9 August 2022
IEEE P802.3cz comment resolution meeting	11-12 August 2022
3rd Working Group recirculation ballot day one	15 August 2022
3rd Working Group recirculation ballot close	30 August 2022
IEEE P802.3cz comment resolution meeting	7-8 September 2022

Note: 3rd Working Group recirculation ballot only if required

IEEE P802.3cz Multi-Gigabit Optical Automotive Ethernet to Standards Association ballot (Conditional)

Motion

Conditionally approve sending IEEE P802.3cz to Standards Association ballot

Confirm the CSD for IEEE P802.3cz in <https://mentor.ieee.org/802-ec/dcn/22/ec-22-0084-00-ACSD-p802-3cz.pdf>

M: Law S: D'Ambrosia

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

Working Group vote

Y: ?, N: ?, A: ?

X.XXX ME*: IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber to RevCom (Conditional)

IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber to RevCom (Conditional)

Date ballot closed:

The 1st Standards Association recirculation ballot on IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber closed on 21st June 2022 at 23:59 UTC-12

Vote tally:

	Initial Draft D3.0			1st Recirculation Draft D3.1			Req %
	#	%	Status	#	%	Status	
Abstain	3	3	PASS	3	3	PASS	< 30
Dis with comment	8	-	-	2	-	-	-
Dis w/o comment	0	-	-	0	-	-	-
Approve	69	89	PASS	82	97	PASS	≥ 75
Ballots returned	80	84	PASS	87	91	PASS	≥ 75
Voters	95	-	-	95	-	-	-
Comments	35	-	-	12	-	-	-
Public comments	0	-	-				

IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber to RevCom (Conditional)

Comments that support the remaining disapprove votes and responses:

2 unsatisfied TR comments from 1 disapprove voter

See <https://mentor.ieee.org/802-ec/dcn/22/ec-22-0136-00-00EC-ieee-p802-3db-unsatisfied-comments.pdf>

Summary:

#R1-11: Request to add a specification for K' to the transmit characteristics, Table 167 7, where K' is a metric intended to quantify the non equalizable component of a signal at the receiver.

#I-36: Request to modify the T(D)ECQ (Transmitter (and Dispersion) Eye Closure – quaternary), a transmitter quality metric, by adding another link test (OMA – T(D)ECQ) for the situation where receiver sensitivity is better than worst case.

Clause 12 ‘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 P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber to RevCom (Conditional)

Meeting schedule:

2nd Standards Association recirculation ballot day one	5 July 2022
2nd Standards Association recirculation ballot close	20 July 2022
IEEE P802.3db comment resolution meeting	21 July 2022
3rd Standards Association recirculation ballot day one	29 July 2022
RevCom submittal deadline	11 August 2022
3rd Standards Association recirculation ballot close	14 August 2022
IEEE P802.3db comment resolution meeting	17 August 2022
RevCom meeting	20 September 2022
IEEE-SA Standards Board teleconference meeting	22 September 2022

Note: 3rd Standards Association recirculation ballot only if required

IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber to RevCom (Conditional)

Motion:

Conditionally approve sending IEEE P802.3db to RevCom

Confirm the CSD for IEEE P802.3db in <https://mentor.ieee.org/802-ec/dcn/20/ec-20-0097-01-ACSD-p802-3db.pdf>

M: Law S: D'Ambrosia

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

Working Group vote

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

X.XXX ME*: IEEE P802.3de Time Synchronization for Point-to-Point Single Pair Ethernet to RevCom

IEEE P802.3de Time Synchronization for Point-to-Point Single Pair Ethernet to RevCom

Date ballot closed:

The 2nd Standards Association recirculation ballot on IEEE P802.3de Time Synchronization for Point-to-Point Single Pair Ethernet closed on 1st July 2022 at 23:59 UTC-12

Vote tally:

	Initial Draft D3.0			1st Recirculation Draft D3.1			Req %
	#	%	Status	#	%	Status	
Abstain	1	1	PASS	2	2	PASS	< 30
Dis with comment	1	-	-	1	-	-	-
Dis w/o comment	0	-	-	0	-	-	-
Approve	69	98	PASS	73	98	PASS	≥ 75
Ballots returned	71	76	PASS	76	81	PASS	≥ 75
Voters	93	-	-	93	-	-	-
Comments	11	-	-	0	-	-	-
Public comments	0	-	-				

IEEE P802.3de Time Synchronization for Point-to-Point Single Pair Ethernet to RevCom

Comments that support the remaining disapprove votes and responses:

1 unsatisfied TR comment from 1 disapprove voters

See <https://mentor.ieee.org/802-ec/dcn/22/ec-22-0148-00-00EC-ieee-p802-3de-unsatisfied-comment.pdf>

Summary:

#I-11 Requests the draft disallow half-duplex operation with Time Synchronization Service Interface (TSSI), arguing that including TSSI with half duplex destroys deterministic traffic.

CRG disagrees, states that defining the behavior of TSSI with half-duplex does not in itself alter or destroy determinism, but rather furthers interoperability by defining the expected behavior.

Clause 12 ‘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 P802.3de Time Synchronization for Point-to-Point Single Pair Ethernet to RevCom

Motion

Approve sending IEEE P802.3de draft D3.1 to RevCom

Confirm the CSD for IEEE P802.3de in <https://mentor.ieee.org/802-ec/dcn/21/ec-21-0197-00-ACSD-p802-3de.pdf>

M: Law S: D'Ambrosia

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

Working Group vote

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

X.XXX *ME: IEEE 802.3 New Ethernet Application ICAID renewal to ICCom

IEEE 802.3 New Ethernet Application ICAID renewal to ICCom

Title

New Ethernet Applications Industry Connections Activity Initiation Document (ICAID)

Explanatory background material

The growing diversity of applications for Ethernet, including new application areas, is driving the development of a multitude of new standards to be developed. Recent examples of Ethernet standardization activities that originated in the New Ethernet Applications Industry Connections ICAID include: 1) Lower cost, short reach, optical interconnects based on 100 Gb/s wavelengths; 2) Precision Time Protocol (PTP) Timestamping clarifications; 3) Automotive Optical Multigig; 4) Next steps in SinglePair ecosystem; 5) 100 Gb/s over Dense Wavelength Division Multiplexing (DWDM) systems; 6) 400 Gb/s over DWDM systems; 7) Automotive 10G+ Copper; and 8) 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet.

Additional activities leveraging the NEA Industry Connections activity include joint meetings with IEEE 802.1 “Nendica” Industry Connections Activity regarding “Cut-through Forwarding”, and consensus meetings on 1) “High-speed bi-directional optics” and 2) “Ethernet Enhancements for High Performance Computing and Storage Systems”.

The goal of these activities is to assess requirements for new Ethernet-based applications, identify gaps not currently addressed by IEEE 802.3 standards, and facilitate building industry consensus towards proposals to initiate new standards development efforts.

IEEE 802 New Ethernet Application ICAID renewal to ICCom

Motion:

Approve forwarding IEEE 802.3 ICAID documentation and cover letter in < https://mentor.ieee.org/802-ec/dcn/22/ec-22-0122-01-00EC-802-endorsement-letter-and-icaid-new-ethernet-applications.pdf> to ICCom

M: Law S: D'Ambrosia

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

Working Group vote

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