Minutes Multi-Gigabit Optical Automotive Ethernet (OMEGA) Task Force Interim 17-18-24-25 May 2022

Attendance list as recorded in Webex participant list

Last Name	First Name	Employer	Affiliations	May 17th	May 18th	May 24th	May 25th
Abbott	John	Corning	Corning	Х	Х	Х	Х
Amamiya	Yasushi	MegaChips	MegaChips				
Andrae	Stefan	SEI Antech-Europe GmbH	SEI Antech-Europe GmbH				
Aono	Michikazu	Yazaki	Yazaki	Х		Х	Х
Akin	Sami	VW AG	VW AG			Х	Х
Araki	Nobuyasu	Yazaki	Yazaki	Х	Х	Х	Х
Beaudoin	Denis	TI	ТІ				
Bergner	Bert	TE Connectivity	TE Connectivity				
Boyer	Rich	APTIV	APTIV		Х		
Barbero	Fernando	KDPOF	KDPOF				
Ben Artsi	Liav	Marvell	Marvell				
Bordogna	Mark	Intel	Intel			Х	
Borda	Jamila	BMW	BMW	Х	Х	Х	
Brooks	Paul	Viavi Solutions	Viavi Solutions		Х		Х
Brown	Blake	UNH-IOL	UNH-IOL				
Bruckman	Leon	Huawei	Huawei				
Brychta	Michal	Analog Devices	Analog Devices				Х
Calvin	John	Keysight	Keysight				
Carlson	Steve	HSD, Bosch, Ethernovia					
Carty	Clark	Cisco	Cisco	Х	Х	Х	
Castrillon	Alejandro	Marvell	Marvell				
Castro	Jose	Panduit	Panduit				
Chang	Ayla						
Chang	Jae-yong	Keysight	Keysight	Х		Х	Х
Cheng	Ling	Huawei	, ,				
Choudhury	Mabud	OFS	OFS	Х			
Chuang	Keng Hua	HPE	HPE				
Connaughton	Mike	Leviton	Leviton				
Cuesta	Emilio	TE Connectivity	TE Connectivity	Х	Х	Х	
DAmbrosia	John	Futurewei	Futurewei				
Dawson	Fred	Ch					
DeAndrea	John	II-VI/Finisar	II-VI/Finisar	Х	Х		
DiBiaso	Eric	TE Connectivity	TE Connectivity				
Diminico	Chris	,	,				
Dittmann	Markus	KDPOF	KDPOF				
Donthu	Suresh	Corning	Corning	Х	Х	Х	Х
Dube	Kae	UNH-IOL	UNH-IOL				
Eek	Magnus	Volvo Cars	Volvo Cars				
Felgenhauer	Alexander	Yazaki	Yazaki		1		
Fellhauer	Felix	Bosch	Bosch		1		1
Ferretti	Vincent	Corning	Corning	Х	Х	Х	Х
Feyh	German	Broadcom	Broadcom		1	X	X
Fortusini	David	Corning	Corning				
Fritsche	Matthias	Harting	Harting				
Fukuoka	Takashi	AutoNetworks Technologies Ltd.	AutoNetworks Technologies Ltd.; Sumitomo Electric Industries, Ltd.				
Gao	Xiangong	Huawei	Huawei		1		1
Gao	Sharon	Huawei	Huawei		1		1
Gharba	Ahmed	Volvo Car Corp.	Volvo Car Corp.		1		1
Giovanne	Laura	Broadcom	Broadcom		1		+
Glanzner	Martin	SEI Antech-Europe	SEI Antech-Europe GmbH	Х	1	х	Х
		GmbH		,		,	

Gomez	Chisato	Nitto Denko	Nitto Denko Corporation		Х	Х	Х
Gorriez	Cilisato	Corporation	Nitto Deliko Corporation		^	^	^
Goto	Hideki	Toyota Motor	Toyota Motor Corporation	Х	Х	Х	Х
6	D. l t	Corporation	DAG Constitute KDDG5	· · · · · ·			
Grow	Robert	Robert M. Grow Consulting	RMG Consulting, KDPOF	Х	Х	Х	Х
Guangcan	Mi	Huawei	Huawei				
Haasz	Jodi	IEEE-SA	IEEE-SA	X	X		Х
Hajduczenia	Marek	Charter Communications	Charter Communications				
Harshbarger	Douglas	Corning Incorporated	Corning Incorporated	Х	Х	Х	Х
Hartmann	Stephan	Siliconally GmbH	Siliconally GmbH		1		
Hayashi	Takehiro	HAT Labs	HAT Labs	Х	Х	Х	Х
Не	Long	Intel	Intel				
He	Xiang	Huawei	Huawei				
HIRASE	Hidenari	AGC	AGC			Х	Х
Horrmeyer	Bernd	Phoenix Contact	Phoenix Contact				
Huang	David	Broadcom	Broadcom				
Huang	Shaowu	Marvell	Marvell				
Hyakudai	Toshihisa	Sony	Sony				
Hyakutake	Yasuhiro	Adamant Namiki Precision Jewel	Adamant Namiki Precision Jewel	Х	Х	Х	Х
Ikeda	Teppei	Denso	Denso	1	1		
Ingham	Jonathan	Huawei	Huawei	1	1		
Isono	Hideki	FOC	FOC	Х	1		Х
Jackson	Ken	Sumitomo	Sumitomo	, A	1		
Jiménez	Andy	WESCO	WESCO	1	1		
Jonsson	Ragnar	Marvell	Marvell		1		
301133011	ragnar	Ford Motor	- Warten	Х		Х	Х
Kadry	Haysam	Company	Ford Motor Company				
KAGAMI	Manabu	NI Tech	NI Tech	Х		Х	Х
Kazuhiko	Ishibe	Anritsu	Anritsu				
Kamino	John	OFS	OFS		1		
Kawahara	Keisuke	Furukawa Electric	Furukawa Electric	Х	Х	Х	Х
Kawatsu	Yasuaki	APRESIA Systems	APRESIA Systems				
KIKUTA	Tomohiro	Adamant Namiki Precision Jewel	Adamant Namiki Precision Jewel	Х	Х	Х	Х
Kim	Joshua	Hirose USA	Hirose USA	1	1		
King	Roger	TRUMPF Photonic Components	TRUMPF Photonic Components				
Kinningham	Alan	I-PEX	I-PEX	1	†		1
Kobayashi	Shigeru	AIO Core	AIO Core	1	†		
Koeppendoerfer	Erwin	Leoni	Leoni	Х	Х	Х	Х
Kondo	Taiji	MegaChips	MegaChips	<u> </u>	1 1		<u> </u>
Kota	Kishore	Marvell	Marvell	1	†		
Kubota	Masaki	AGC	AGC	1	†	Х	Х
Kumadayazaki	Taketo			1			<u> </u>
Kurashima	Kazuyoshi	AGC	AGC	Х	Х	Х	Х
Lackner	Hans	QoSCom GmbH	QoSCom GmbH	X	 ^ 		<u> </u>
Lambert	Angie	Corning	Corning	† 	Х	Х	Х
Laubach	Mark	Tibit Communications	Tibit Communications	Х	X		
Law	David	HPE	HPE	Х	†		
Lewis	David	Lumentum	Lumentum	1	†		
LI	Tobey	MediaTek	MediaTek	1	†		
Liu	Karen	Lightwave	Lightwave	1			1
Lee	Bernard	Senko	Senko	1	†		1
Lee	Sylvanus	Leviton	Leviton	1	†		
Lingle	Robert	OFS	OFS	Х			
Lennartsson	Kent	Kvaser AB	Kvaser AB	^			
Maguire	Valerie	Siemon	Siemon	†			
Mahlich	Matthias	Robert Bosch GmbH	Robert Bosch GmbH	Х	Х		
	macanas	obere bosch Gillbill		^	_ ^		1

Malicoat	David	Malicoat	Senko Advanced Components	Х		Х	Х
		Networking					
		Solutions					
Mark	Simon	Wurth	Wurth				
Martino	Kjersti	Inneos	Inneos	Х	Х	Х	Х
Marris	Arthur	Cadence	Cadence				
Marques	Flavio	Furukawa electric	Furukawa Electric				
Masuda	Takeo	OITDA/PETRA	OITDA/PETRA				
Matheus	Kirsten	BMW	BMW				
Mahlich	Mattthias	Bosch	Bosch			Х	Х
Mandel	Juergen						
Mark	Simon	Würth Elektronik	Würth Elektronik				
McMillan	Larry	Western Digital	Western Digital	+			
Mueller	Harald	Endress + Hauser	Endress + Hauser			Х	
						X	Х
Mueller	Thomas	Rosenberger	Rosenberger			Х	Χ
Murty	Ramana	Broadcom	Broadcom		1		
Nakagawa	Hideki	AGC	AGC				
Neulinger	Christian	MD Elektronik	MD Elektronik				
Nering	Ray	Cisco	Cisco			X	
New	Anthony	Prysmian Group	Prysmian Group				
Nicholl	Gary	Cisco	Cisco				Х
Nikolich	Paul	802 Chairman	802 Chairman				
Niihara	Yoshihiro	Fujikura	Fujikura	Х	Х	Х	Х
Ogura	Ichiro	Petra	Petra				
Oi	Shigehiro	AGC	AGC			Х	Х
Omori	Kumi	NEC	NEC				
Ortiz	David	KDPOF	KDPOF				
Pandey	Sujan	Huawei	Huawei		Х		
Pankert		TRUMPF Photonic	TRUMPF Photonic Components		^		
Pankert	Joseph		TROWPF Photonic Components				
D l .	Codo	Components	KDDOE		. ,		
Pardo	Carlos	KDPOF	KDPOF	X	Х	Х	Х
Parsons	Earl	Commscope	Commscope				
Peng	Semmy	Huawei	Huawei	Х		X	
Pérez-Aranda	Rubén	KDPOF	KDPOF	Х	Х	X	Х
Peteranderl	Ralf	Rosenberger	Rosenberger				
Petrarca	Ryan	TDK	TDK				
Pham	Phong	EastPoint	EastPoint				
Piehler	David	Dell	Dell				
Pimpinella	Rick	Panduit	Panduit				
Pinzón	Plinio	KDPOF	KDPOF				
Pitwon	Richard	Resolute Photonics	Resolute Photonics			Х	
Powell	William	Independent	Independent				
Preis	Roland	MD Elektronik	MD Elektronik				
Pritz	Helmut	MD Elektronik	MD Elektronik	+		Х	Х
	Alon	Keysight	Keysight		+	۸	^
Regev	AIUII	SEI Antech-Europe	regaignt		+	X	
Dainhard	Michael	·	CELAntoch Furner - Carbill			٨	
Reinhard	Michael	GmbH	SEI Antech-Europe GmbH	+	+		
Ren	Нао	Huawei	Huawei	-	1	.,	
5	_,	Beckhoff	D 11 (64)			Х	
Retting	Thomas	Automation	Beckhoff Automation				
Rodes	Roberto	II-VI	II-VI				Х
Rush	Joshua	UNH-IOL	UNH-IOL				Х
Sambasivan	Sam	AT&T	AT&T				Х
Sakai	Toshiaki	Socionext	Socionext				
		Hubbell				·	
Savi	Olindo	Incorporated	Hubbell Incorporated				
Sawano	Hiroshi	OITDA			Х	Х	Х
Sayre	Edward	Samtec	Samtec				
Schwaerzler	Sebastian	ZF	ZF	Х	Х	Х	Х
Schmalzigaug	Thomas	HUBER+SUHNER	HUBER+SUHNER				^
Shukla	Priyank	Synopsys	Synopsys	+	+		
JIIUNIA	TTIYATIK	 			1		
Shigamatou	Macavuki	Sumitama Flactria	Sumitomo Electric	V	V	y	
Shigematsu Shiino	Masayuki Masato	Sumitomo Electric Furukawa Electric	Sumitomo Electric Furukawa Electric	X	X	X	X

Shubochkin	Roman	OFS	OFS				Х
Schreiner	Stephan	Rosemberger	Rosemberger	X		Χ	
Shukla	Priyank	Synopsys	Synopsys				
Silvano de Sousa	Jonathan	GG-Group	GG-Group	X			
Simms	Bill	NVIDIA	NVIDIA	X	Х	Х	Х
Sommers	Scott	Molex	Molex				
Su	Charles	Huawei	Huawei				
Sun	Wensheng	Marvell	Marvell	X	X	Χ	Х
Sun	Yi	OFS	OFS	X		Χ	
Sugihara	Okihiro	Utsunomiya University	Utsunomiya University			Х	Х
Suzuki	Yasuo	KDPOF Japan	KDPOF				
Swanson	Steve	Corning Inc.	Corning Inc.				
Takahashi	Ryutaro	Senko	Senko				
Takahashi	Satoshi	POF Promotion	POF Promotion	Х	Х	Х	
Takahashi	Tadashi	Nitto Denko Corporation	Nitto Denko Corporation	Х	Х	Х	Х
Takayama	Kazuya	Nitto Denko Corporation	Nitto Denko Corporation	Х	Х	Х	Х
Tazebay	Mehmet	Corporation	<u> </u>				
Tan	I-Hsing	Broadcom	Broadcom				
Tamada	Tomohiko	JAE	JAE				+
Tazebay	Mehmet	Broadcom	Broadcom				+
Theuerkom	Thomas	Corning	Corning				+
Theodoras	James	HG Genuine	HG Genuine				+
Thompson	Geoff	GraCaSi	nd deliulile				+
	Pirooz	Cisco	Ciana				-
Tooyserkani			Cisco	V	V	X	- V
Torres	Luisma	KDPOF	KDPOF	X	X	X	X
Tsujita	Yuichi	Nitto Denko Corporation	Nitto Denko Corporation			Х	Х
Tsuzaki	Nozomi	Independent	Independent	X	Х	X	Х
Ueno	Yuto	Sumitomo	Sumitomo	Х	Х	X	Х
Vanderlaan	Paul	UL LLC	UL LLC	X			
Von Vangerow	Christian	TE	TE				
Voss	Bob	Panduit	Panduit				
Walsh	Thomas	KDPOF	KDPOF				
Wang	Ruxou	Huawei	Huawei				
Wang	Haojie	CMCC	CMCC				
WATANABE	Yuji	AGC	AGC	Х	Х		Х
Wendt	Mattias	Signify	Signify				
Wienckowski	Natalie	General Motors	General Motors	Х	Х	Х	Х
Withey	James	Fluke	Fluke			Х	
Wiesner	Michael	Trumpf	Trumpf				
Xu	Dayin	Rockwell Automation	Rockwell Automation	Х			
Xu	Xing	Huawei	Huawei				†
Yamada	Osamu	Yazaki	Yazaki		†		†
Yang	Zhiping	Waymo	Waymo				+
Yang	Yumeng	Huawei	Huawei				+
Yasui	Hideshi	AGC	AGC			Х	Х
Yonemura	Masatoshi	NITech	NITech			^	^
Yonezawa	Kenji	AGC	AGC				+
		1	Commscope	+	+ -		+
Young Yurtin	James John	Commscope APTIV	APTIV	+	+ -	Х	+
						^	+
Zhang	Sen	Huawei	Huawei				+
Zhang	Tingting	Huawei	Huawei		-		+
Zhiwei	Yang	ZTE	ZTE				+
Zhong	Qiwen	Huawei	Huawei				1
Zhu	Liang	Marvell	Marvell				1
Zhuang	Yan	Huawei	Huawei	1			

The meeting was called to order at approximately 12:01 UTC Tuesday 17th May 2022 Chaired by Robert Grow, IEEE P802.3cz Task Force Chair.

Mr. Grow presented *Agenda and General Information* (https://www.ieee802.org/3/cz/public/may 2022/Agenda 3cz 01 0522.pdf).

Mr. Grow presented the agenda for the meeting. The agenda was approved by unanimous consent.

Mr. Grow presented the March TF plenary minutes for approval. The minutes were approved by unanimous consent.

Mr. Grow asked the audience if there was anybody from the press. No one responded to the call.

Mr. Grow issued the call for essential patent claims. No one responded to the call. He also presented the slides on the IEEE Copyright Policy and participation guidelines.

Mr. Grow announced that the P802.3cz modified PAR, CSD and objectives have been approved and are available in the TF website.

Mr. Grow presented the IEEE P802.3cz Working Group ballot results, summarized in the following table:

P802.3cz	Initial	(D2.0)		
F 802.3CZ	#	%	Status	Req %
Comments	261	-	Ī	-
Abstain	15	10.20%	PASS	< 30
Disapprove with comment	6	-	-	-
Disapprove without comment	0	-	-	-
Approve	126	95.45%	PASS	≥ 75
Ballots returned	147	70.33%	PASS	> 50
Voters	209	-	-	-

Mr. Grow talked about the future meetings. He noted that next July IEEE 802 plenary will be hybrid, but all meetings will be scheduled for in-person attendees. Mr. Grow also reminded the dates for registration.

P802.3cz plan for July meeting is to be working on WG first recirculation ballot comment resolution. Mid-August teleconferences will be scheduled in case that the TF decide to have two recirculation ballots between July and September.

Mr. Torres asked to present *Chief Editor's report*

(https://www.ieee802.org/3/cz/public/may 2022/editor 3cz 01 0522.pdf) This presentation showed the received comments statistics and a proposed roadmap to resolve them in the next sessions during interim 802.3 meeting. Mr. Torres asked the TF participants to request to take out from the "EZ" bucket any comment they want to discuss in the TF. Mr. Torres proposed the TF to approve the suggested remedy of comments in the "EZ" bucket in the last comment resolution session without individual discussion.

Mr. Torres moved a motion to consider 24 late comments and integrate them in the database. Mr. Pérez-de-Aranda seconded. The motion was approved by unanimous consent.

Mr. Torres started comment resolution with comments in the "General" bucket.

Mr. Pérez-de-Aranda asked to present *TDFOM simplification proposal* (https://www.ieee802.org/3/cz/public/may 2022/perezaranda 3cz 01a 0522 TDFOM Simpler.pdf) in support of comment #160. Mr. Pérez-de-Aranda answered to several questions from TF participants, and the comments in the "TDFOM" bucket were resolved accordingly.

Mr. Pérez-de-Aranda asked to present *TX/RX characteristics proposed changes* (https://www.ieee802.org/3/cz/public/may 2022/perezaranda 3cz 02 0522 TXRX Characteristics

<u>.pdf</u>) in support of comment #90. Mr. Pérez-de-Aranda answered to several questions from TF participants, and the comments in the "TXRX Characteristics" bucket were resolved accordingly.

Mr. Torres continued the comment resolution, and the comments in the "Definitions" and "Registers effect" buckets were resolved.

Having reached the scheduled ending time, the meeting was recessed at approximately 14:03 UTC.

Wednesday, 18th May 2022, 12:00 (noon) UTC

The meeting was called to order at approximately 12:00 UTC Wednesday 18th May 2022 Chaired by Robert Grow, IEEE P802.3cz Task Force Chair.

Mr. Grow presented *Agenda and General Information* (https://www.ieee802.org/3/cz/public/may 2022/Agenda 3cz 01 0522.pdf).

Mr. Grow reviewed the agenda approved on 17 May.

Mr. Grow issued the call for essential patent claims. No one responded to the call. He also presented the slides on the IEEE Copyright Policy and participation guidelines.

Mr. Torres continued with the comment resolution. A total of 35 comments were resolved, structured in the "OAM capability", "EEE capability", "LFSR", "PPCS Encoding", "Reserved control codes", "RS-FEC", "Technical fix required" and "Hierarchy level" buckets, in addition to comment #27 from the "External standard" bucket.

Having passed the scheduled ending time, the meeting was recessed at approximately 14:08 UTC.

Tuesday, 19th May 2022, 12:00 (noon) UTC

The meeting was called to order at approximately 12:00 UTC Tuesday 19th May 2022 Chaired by Robert Grow, IEEE P802.3cz Task Force Chair.

Mr. Grow presented *Agenda and General Information* (https://www.ieee802.org/3/cz/public/mar 2022/Agenda 3cz 01 0322.pdf).

Mr. Grow reviewed the agenda approved on 17 May.

Mr. Grow issued the call for essential patent claims. No one responded to the call. He also presented the slides on the IEEE Copyright Policy and participation guidelines.

Mr. Torres continued with the comment resolution, starting with comment #35. Mr. Ferretti volunteered to draft a liaison communication to IEC. A total of 60 comments were resolved, structured in the "External standards", "Text improvement", "Normative wording", "IEEE-SA Style", and "P802.3/D3.2 alignment" buckets, in addition to comments #7, #21 and #198 which were taken out from the "EZ" bucket.

Mr. Grow asked Mr. Torres to send to the reflector the current resolution of the comments, and to ask the TF participants to take out any comment from the "EZ" bucket that they may consider to discuss in the next TF meeting. Mr. Torres agreed to do so.

The meeting was recessed at approximately 13:31 UTC.

Wednesday, 25th May 2022, 12:00 (noon) UTC

The meeting was called to order at approximately 12:02 UTC Wednesday 25th May 2022 Chaired by Robert Grow, IEEE P802.3cz Task Force Chair.

Mr. Grow presented *Agenda and General Information* (https://www.ieee802.org/3/cz/public/may 2022/Agenda 3cz 01 0522.pdf).

Mr. Grow reviewed the agenda approved on 17 May.

Mr. Grow issued the call for essential patent claims. No one responded to the call. He also presented the slides on the IEEE Copyright Policy and participation guidelines.

Mr. Torres continued with the comment resolution. A total of eight comments were taken out from the "EZ" bucket after discussion on the P802.3cz reflector.

Comments number #139, #142, #71, #180, #206, #230, #221 and #24 were discussed and resolved by the TF.

Mr. Torres moved the following motion, reworded after a friendly amendment from Ms. Wienckowski:

Motion #1

Move to accept the comment responses to the remaining comments in the "EZ" bucket.

The motion was seconded by Mr. Pardo.

The motion was approved by unanimous consent.

Mr. Torres moved the following motion:

Motion #2

Move to create P802.3cz/D2.1 for WG recirculation ballot incorporating resolutions to P802.3cz/D2.0 comments with editorial license.

The motion was seconded by Mr. Pérez-Aranda.

The motion was approved by unanimous consent.

Mr. Torres announced that he expected to have the D2.1 version of the draft ready for WG recirculation by the week of 6 June.

Mr. Ferretti asked to present a liaison communication draft to IEC TC 86 (ferretti_3zc_01_0522_TC86). He presented the draft, that was elaborated jointly with Mr. Abbott. Some comments and modifications were done by TF participants, and a new version of the liaison communication draft was generated

(https://www.ieee802.org/3/cz/public/may 2022/ferretti 3cz 01a 0522 TC86%20liaison.doc).

Mr. Ferretti moved the following motion:

Motion #3

Request approval of liaison communication to IEC TC 86 per ferretti_3cz_01a_0522_TC86 liaison with editorial license.

The motion was seconded by Mr. Pérez-Aranda.

The motion was approved by unanimous consent.

Mr. Grow asked to talk about future meetings, and he noted that there are no Task Force meetings scheduled until the July plenary meeting in Montreal. Mr. Grow also asked about the convenience of another comment resolution during August. Several participants pointed out that this eventually depends on the number of comments to resolve on D2.1, and all agreed this should be decided in July.

Having exhausted the agenda items, the meeting was adjourned at approximately 11:45 UTC.

Recording secretary: Luisma Torres.