

Minutes  
Multi-Gigabit Optical Automotive Ethernet (OMEGA)  
Task Force Interim  
8 June 2021

Attendance list as recorded in Webex participant list

Last Name	First Name	Employer	Affiliations	June 8th
Abbott	John	Corning	Corning	X
Amamiya	Yasushi	MegaChips	MegaChips	
Andrae	Stefan	SEI Antech-Europe GmbH	SEI Antech-Europe GmbH	
Aono	Michikazu	Yazaki	Yazaki	
Araki	Nobuyasu	Yazaki	Yazaki	X
Bergner	Bert	TE Connectivity	TE Connectivity	
Boyer	Rich	APTIV	APTIV	
Barbero	Fernando	KDPOF	KDPOF	X
Bordogna	Mark	Intel	Intel	
Brooks	Paul	Viavi Solutions	Viavi Solutions	
Bruckman	Leon	Huawei	Huawei	
Chang	Jae-yong	Keysight	Keysight	X
Choudhury	Mabud	OFS	OFS	
Chuang	Keng Hua	HPE	HPE	
Cuesta	Emilio	TE Connectivity	TE Connectivity	X
Dittmann	Markus	KDPOF	KDPOF	X
Donthu	Suresh	Corning	Corning	X
Eek	Magnus	Volvo Cars	Volvo Cars	
Felgenhauer	Alexander	Yazaki	Yazaki	X
Ferretti	Vincent	Corning	Corning	X
Fortusini	David	Corning	Corning	
Fukuoka	Takashi	AutoNetworks Technologies Ltd.	AutoNetworks Technologies Ltd.; Sumitomo Electric Industries, Ltd.	X
Giovanne	Laura	Broadcom	Broadcom	X
Glanzner	Martin	SEI Antech-Europe GmbH	SEI Antech-Europe GmbH	
Gomez	Chisato	Nitto Denko Corporation	Nitto Denko Corporation	
Goto	Hideki	Toyota Motor Corporation	Toyota Motor Corporation	
Grow	Robert	Robert M. Grow Consulting	RMG Consulting, KDPOF	X
Hajduczenia	Marek	Charter Communications	Charter Communications	
Harshbarger	Douglas	Corning Incorporated	Corning Incorporated	X
Hartmann	Stephan	Siliconally GmbH	Siliconally GmbH	
Hayashi	Takehiro	HAT Labs	HAT Labs	X
HIRASE	Hidenari	AGC	AGC	X
Hormmeyer	Bernd	Phoenix Contact	Phoenix Contact	
Huang	David	Broadcom	Broadcom	X
Huang	Shaowu	Marvell	Marvell	
Hyakutake	Yasuhiro	Adamant Namiki Precision Jewel	Adamant Namiki Precision Jewel	X
Isono	Hideki	FOC	FOC	
Kadry	Haysam	Ford Motor Company	Ford Motor Company	X
KAGAMI	Manabu	NI Tech	NI Tech	X
Kazuhiko	Ishibe	Anritsu	Anritsu	
Kamino	John	OFS	OFS	
Kawahara	Keisuke	Furukawa Electric	Furukawa Electric	X
KIKUTA	Tomohiro	Adamant Namiki Precision Jewel	Adamant Namiki Precision Jewel	X
Kim	Joshua	Hirose USA	Hirose USA	
King	Roger	TRUMPF Photonic Components	TRUMPF Photonic Components	X

Kobayashi	Shigeru	AIO Core	AIO Core	X
Koeppendoerfer	Erwin	Leoni	Leoni	
Kondo	Taiji	MegaChips	MegaChips	X
Law	David	HPE	HPE	X
Lewis	David	Lumentum	Lumentum	X
Liu	Karen	Lightwave	Lightwave	
Lee	Bernard	Senko	Senko	
Lee	Sylvanus	Leviton	Leviton	
Lingle	Robert	OFS	OFS	
Malicoat	David	Malicoat Networking Solutions	Senko Advanced Components	X
Martino	Kjersti	Inneos	Inneos	
Marques	Flavio	Furukawa electric	Furukawa Electric	
Masuda	Takeo	OITDA/PETRA	OITDA/PETRA	X
McMillan	Larry	Western Digital	Western Digital	
Mueller	Harald	Endress + Hauser	Endress + Hauser	
Mueller	Thomas	Rosenberger	Rosenberger	
Murty	Ramana	Broadcom	Broadcom	X
Nakagawa	Hideki	AGC	AGC	
Nicholl	Gary	Cisco	Cisco	
Nikolich	Paul	802 Chairman	802 Chairman	X
Niihara	Yoshihiro	Fujikura	Fujikura	
Ogura	Ichiro	Petra	Petra	X
Omori	Kumi	NEC	NEC	
Ortiz	David	KDPOF	KDPOF	X
Pandey	Sujan	Huawei	Huawei	
Pankert	Joseph	TRUMPF Photonic Components	TRUMPF Photonic Components	X
Pardo	Carlos	KDPOF	KDPOF	X
Pérez-Aranda	Rubén	KDPOF	KDPOF	X
Pham	Phong	EastPoint	EastPoint	
Piehler	David	Dell	Dell	
Pimpinella	Rick	Panduit	Panduit	X
Pinzón	Plinio	KDPOF	KDPOF	X
Pitwon	Richard	Resolute Photonics	Resolute Photonics	X
Preis	Roland	MD Elektronik	MD Elektronik	X
Reinhard	Michael	SEI Antech-Europe GmbH	SEI Antech-Europe GmbH	X
Sambasivan	Sam	AT&T	AT&T	
Savi	Olindo	Hubbell Incorporated	Hubbell Incorporated	
Sawano	Hiroshi	OITDA		
Sayre	Edward	Samtec	Samtec	
Shukla	Priyank	Synopsys	Synopsys	
Shigematsu	Masayuki	Sumitomo Electric	Sumitomo Electric	
Shiino	Masato	Furukawa Electric	Furukawa Electric	X
Shukla	Priyank	Synopsys	Synopsys	
Silvano de Sousa	Jonathan	GG-Group	GG-Group	
Sun	Wensheng	Marvell	Marvell	X
Sun	Yi	OFS	OFS	
Suzuki	Yasuo	KDPOF Japan	KDPOF	X
Swanson	Steve	Corning Inc.	Corning Inc.	X
Takahashi	Ryutaro	Senko	Senko	
Takahashi	Satoshi	POF Promotion	POF Promotion	X
Takahashi	Tadashi	Nitto Denko Corporation	Nitto Denko Corporation	X
Takayama	Kazuya	Nitto Denko Corporation	Nitto Denko Corporation	X
Tan	I-Hsing	Broadcom	Broadcom	X
Theodoras	James	HG Genuine	HG Genuine	
Torres	Luisma	KDPOF	KDPOF	X
Tsujita	Yuichi	Nitto Denko Corporation	Nitto Denko Corporation	X
Tsuzaki	Nozomi	Independent	Independent	X

Ueno	Yuto	Sumitomo	Sumitomo	X
WATANABE	Yuji	AGC	AGC	X
Wendt	Mattias	Signify	Signify	
Wienckowski	Natalie	General Motors	General Motors	X
Wiesner	Michael	Trumpf	Trumpf	X
Xu	Xing	Huawei	Huawei	X
Yamada	Osamu	Yazaki	Yazaki	
Yasui	Hideshi	AGC	AGC	X
Yonezawa	Kenji	AGC	AGC	X
Yurtin	John	APTIV	APTIV	
Zhiwei	Yang	ZTE	ZTE	
Zhu	Liang	Marvell	Marvell	

## Tuesday, 8th June 2021, 12:00 (noon) UTC

The meeting was called to order at approximately 12:02 UTC Tuesday 8th June 2021  
Chaired by Robert Grow, IEEE P802.3cz Task Force Chair.

Mr. Grow presented *Agenda and General Information*  
([https://www.ieee802.org/3/cz/public/8\\_jun\\_2021/Agenda\\_3cz\\_01\\_080621.pdf](https://www.ieee802.org/3/cz/public/8_jun_2021/Agenda_3cz_01_080621.pdf)).

Mr. Grow presented the agenda for the meeting. The agenda was 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. Torres asked to present *Chief Editor's Report*  
([https://www.ieee802.org/3/cz/public/8\\_jun\\_2021/CEReport\\_3cz\\_080621.pdf](https://www.ieee802.org/3/cz/public/8_jun_2021/CEReport_3cz_080621.pdf)). The presentation announces that 68 comments (54 Editorial/14 Technical) to 802.3cz D1.1 have been received. A comment resolution roadmap was proposed, with the comments sorted into 7 topics/buckets. The comment resolution roadmap included an order to tackle the buckets, and a petition to revise the proposed response of the comments in the "Grammar and syntax" bucket. The "Editing instructions" bucket contains comments on the editing instructions, that should be changed completely in D1.2. Mr. Torres proposed to synchronize the editing instructions and the introduction text with the current available P802.3 Draft version. Mr. Torres announced that the comment resolution will start by 15 June following the proposed roadmap, and that the proposed responses for the comments are available in the website public area (<https://www.ieee802.org/3/cz/comments/index.html>).

Mr. Torres started the review of the ToDo list  
([https://www.ieee802.org/3/cz/P802\\_3cz\\_todo\\_01k\\_250521.xlsm](https://www.ieee802.org/3/cz/P802_3cz_todo_01k_250521.xlsm)). Mr. Torres showed the current tasks status for the different PMD options in the ToDo list. VCSEL + OM3 PMD related tasks are finished.

Mr. Takayama informed that he can provide GIPOF data for VCSEL +GIPOF PMD and Silicon Photonics + GIPOF PMD by the end of 2021 or the beginning of 2022. Mr. Torres answered that these dates are outside the approved project timeline.

Mr. Ogura and Mr. Pitwon provided due dates for presentations regarding several Silicon photonics +OM2/OM3 PMD tasks. The ToDo list was updated accordingly.

Ms. Giovane asked to present *850 nm 25G VCSEL Reliability*  
([https://www.ieee802.org/3/cz/public/8\\_jun\\_2021/giovane\\_3cz\\_01\\_080621.pdf](https://www.ieee802.org/3/cz/public/8_jun_2021/giovane_3cz_01_080621.pdf)). This presentation shows an extrapolation of the reliability of 850 nm VCSEL made for Data Centers to the Automotive requirements. Some assumptions regarding the temperature difference between substrate and ambient, and mission profile have been made. Several questions about the validity of the temperature difference assumptions, and the difference in the results provided in previous TF meetings by Mr. King ([https://www.ieee802.org/3/cz/public/may\\_2021/king\\_3cz\\_01a\\_0521.pdf](https://www.ieee802.org/3/cz/public/may_2021/king_3cz_01a_0521.pdf)) were made, and Ms. Giovane provided answers.

Mr. Pérez-de-Aranda, asked to present *VCSEL reliability comparison* ([https://www.ieee802.org/3/cz/public/8\\_jun\\_2021/perezaranda\\_3cz\\_01b\\_080621\\_vcsel\\_reliability.pdf](https://www.ieee802.org/3/cz/public/8_jun_2021/perezaranda_3cz_01b_080621_vcsel_reliability.pdf)). This presentation analyzed the possible root of the difference in 850nm VCSEL reliability results between Ms. Giovane ([https://www.ieee802.org/3/cz/public/8\\_jun\\_2021/giovane\\_3cz\\_01\\_080621.pdf](https://www.ieee802.org/3/cz/public/8_jun_2021/giovane_3cz_01_080621.pdf)) and Mr. King ([https://www.ieee802.org/3/cz/public/may\\_2021/king\\_3cz\\_01a\\_0521.pdf](https://www.ieee802.org/3/cz/public/may_2021/king_3cz_01a_0521.pdf)) presentations. After presenting the mathematical modeling behind the reliability numbers, the conclusion of this presentation is that the temperature delta between ambient and substrate temperature seems to be the origin of the different results. As a consequence, the reliability data provided by Ms. Giovane is optimistic for the Automotive environment. Temperature dissipation in automotive application is different from the one in Data Centers. There is no air-forcing, and all the dissipation is made through the PCB. A number of questions were made and Mr. Pérez-de-Aranda provided answers.

Mr. Swanson asked participants to read his presentation *Straw Polls* ([https://www.ieee802.org/3/cz/public/8\\_jun\\_2021/swanson\\_3cz\\_01\\_080621\\_straw\\_polls.pdf](https://www.ieee802.org/3/cz/public/8_jun_2021/swanson_3cz_01_080621_straw_polls.pdf)) that contains some Straw Polls that he will propose for voting during the next TF meeting.

The meeting was adjourned at approximately 14:16 UTC.