May 2022 Electronic Session

Approved Meeting Minutes, prepared by John D'Ambrosia and Kent Lusted

Session called to order at 10:00 am ET (all times ET), 17 May 2022

Meeting called to order by John D'Ambrosia, IEEE P802.3df Task Force Chair

Chair noted that attendance would be taken by IMAT.

Presentation #1	Agenda and General Information
Presenters	John D'Ambrosia
URL	https://www.ieee802.org/3/df/public/22 05/agenda 3df a 2205.pdf

Chair reviewed the agenda (Slide #2) and noted presentation order on Slide #3. Chair noted that the agendas for all of the meetings during the session were full. Time had been scheduled for discussion / straw polls /motions during the 24 May and 02 June sessions.

Chair asked if there were any objections to the agenda (Slide #3). The chair asked if there were there any other objections, and there were none. The chair asked if there were any objections to the approval of the agenda, and there were none. The agenda was considered approved by unanimous consent.

Minutes - Mar 2022 session

https://www.ieee802.org/3/df/public/22 03/minutes 3df 2203 unapproved.pdf

Chair asked if there were any other corrections. There were none. Chair asked if there were any objections to approving the modified minutes. There were none, and the minutes were considered approved by unanimous consent.

Chair reviewed the Task Force Project Information / Organization. See Slides #4.

Chair reviewed meeting decorum. See Slide #5.

Chair ruled Task Force voting, voting rights, and attendance. See Slides #8-9.

Slide #10 - Chair noted that the information regarding the IEEE SA Policies had been sent out, and requested that individuals review the following IEEE SA policies prior to the interim meeting –

- IEEE SA Patent policy
- IEEE SA Copyright Policy
- IEEE SA Participation Policy

Chair asked if anyone needed to review the policies at that time – there were no requests to do so.

Chair presented the third slide (See Slide #31) of the IEEE SA Patent Policy slides. Chair did call for Potentially Essential Patents, and no one came forward.

Chair presented the second slide (See Slide #36) of the IEEE SA Copyright Policy slides. Chair noted – "By participating in this activity, you agree to comply with the IEEE Code of Ethics, all applicable laws, and all IEEE policies and procedures including, but not limited to, the IEEE SA Copyright Policy."

Chair presented the second slide (See Slide #40) of the IEEE SA Participation Policy slides. Chair noted — "Participants in the IEEE-SA "individual process" shall act independently of others, including employers. By participating in standards activities using the "individual process", you are deemed to accept these requirements; if you are unable to satisfy these requirements then you shall immediately cease any participation."

Chair noted that as of 16 May, there were no liaisons for the Task Force to consider. See Slide #11.

Chair reviewed future meetings. See Slide #12.

Chair presented summary of ad hoc meetings. See Slides #13-14.

D'Ambrosia asked Nowell to chair the meeting while he gave the next presentation. Mark Nowell assumed chairing meeting at 10:11 am.

Presentation #2	State of IEEE P802.3df
Presenters	John D'Ambrosia
URL	https://www.ieee802.org/3/df/public/22 05/22 0517/dambrosia 3df 01 220517.pdf

General questions of clarification.

D'Ambrosia resumed chairing the meeting at 10:26 am.

Prior to the start of presentation, Mark Gustlin indicated that editorial changes had been made and supporters had been added. He will provide the chair with the updated presentation (noted below) after the meeting.

Presentation #3	Logic Architecture Baseline
Presenter	Mark Gustlin
URL	https://www.ieee802.org/3/df/public/22 05/22 0517/gustlin 3df 01a 220517.pdf

General questions of clarification.

Prior to the start of presentation, Kapil Shriklande indicated that editorial changes had been made and supporters had been added. Chair noted that the version had been uploaded already (noted below).

Presentation #4	800GbE PCS/FEC/PMA Baseline Proposal for PHYs using 8 x 100G PMD lanes - Update
Presenters	Kapil Shrikhande
URL	https://www.ieee802.org/3/df/public/22 05/22 0517/shrikhande 3df 01b 220517.pdf

Nathan Tracy and Megha Shanbag stated that they wanted to be listed as supporters of the presentation. Author to provide updated version '01b'.

General questions and discussion.

Presentation #5	Analysis of FEC1 Proposals from Reuse Perspective
Presenters	Xiang He
URL	https://www.ieee802.org/3/df/public/22 05/22 0517/he 3df 01 220517.pdf

General questions and discussion.

Break at 11:42 a.m. Resumed 11:45 a.m.

Presentation #6	Concatenated Code Update in PCS/FEC/PMA Architecture
Presenters	Xinyuan Wang
URL	https://www.ieee802.org/3/df/public/22 05/22 0517/wang 3df 01 220517.pdf

General questions and discussion.

Presentation #7	Soft Inner Hamming Net Coding Gain vs Interleaver Latency
Presenters	Will Bliss
URL	https://www.ieee802.org/3/df/public/22 05/22 0517/bliss 3df 01a 220517.pdf

General questions and discussion.

Bliss noted he had added a supporters page, and will send the chair an update (noted above).

Chair opened the floor for additional Q&A related to any presentation seen at the 17 May 2022 meeting.

Chair reviewed the presentation list for the 18 May meeting. Presentations were posted to the Task Force website (see: <a href="https://www.ieee802.org/3/df/public/22">https://www.ieee802.org/3/df/public/22</a> 05/index.html)

Session recessed for the day at 12:55 pm

May 2022 Electronic Session

Unapproved Meeting Minutes, prepared by John D'Ambrosia and Kent Lusted

Session reconvened at 10:00 am ET (all times ET), 18 May 2022

Meeting called to order by John D'Ambrosia, IEEE P802.3df Task Force Chair

Chair noted that attendance would be taken by IMAT.

Slide #10 - Chair noted that the information regarding the IEEE SA Policies had been sent out, and requested that individuals review the following IEEE SA policies prior to the interim meeting –

- IEEE SA Patent policy
- IEEE SA Copyright Policy
- IEEE SA Participation Policy

Chair asked if anyone needed to review the policies at that time - there were no requests to do so.

Chair presented the third slide (See Slide #31) of the IEEE SA Patent Policy slides. Chair did call for Potentially Essential Patents, and no one came forward.

Chair presented the second slide (See Slide #36) of the IEEE SA Copyright Policy slides. Chair noted – "By participating in this activity, you agree to comply with the IEEE Code of Ethics, all applicable laws, and all IEEE policies and procedures including, but not limited to, the IEEE SA Copyright Policy."

Chair presented the second slide (See Slide #40) of the IEEE SA Participation Policy slides. Chair noted — "Participants in the IEEE-SA "individual process" shall act independently of others, including employers. By participating in standards activities using the "individual process", you are deemed to accept these requirements; if you are unable to satisfy these requirements then you shall immediately cease any participation."

Chair noted that the agenda had been updated to <a href="https://www.ieee802.org/3/df/public/22">https://www.ieee802.org/3/df/public/22</a> 05/agenda 3df b 2205.pdf to reflect that remote access for the July 2022 Plenary session would be provided on best effort basis.

Chair noted that he received an updated presentation from Adee Ran with editorial changes and added supporters that would be posted to the website shortly.

Presentation #8	FEC Striping across Optical Lanes
Presenter	Jeff Rahn
URL	https://www.ieee802.org/3/df/public/22 05/22 0518/rahn 3df 01 220518.pdf

General questions of clarification.

Vice-Chair reminded participants to declare their affiliation in the meeting tool.

Presentation #9	PCS and FEC sublayer considerations
Presenter	Tom Huber
URL	https://www.ieee802.org/3/df/public/22 05/22 0518/huber 3df 01 220518.pdf

General questions of clarification.

Presentation #10	Selecting right FEC Architecture for 200G per Lane PMD
Presenters	Lenin Patra
URL	https://www.ieee802.org/3/df/public/22 05/22 0518/patra 3df 01 220518.pdf

General questions and discussion.

Presentation #11	Architecture considerations for 800GbE and 1.6TbE
Presenters	Yuchun Lu
URL	https://www.ieee802.org/3/df/public/22 05/22 0518/lu 3df 01 220518.pdf

General questions and discussion. It was noted that slide 2 summarized the adopted objectives listing one-lane, two-lane and four-lane 200Gbps/lane backplane objectives, which have not been adopted by the Task Force or Work Group. Author confirmed that these backplane objectives in yellow were not adopted but it was his personal opinion to see them considered and adopted in the future.

Break at 12:03 p.m. Resumed at 12:05 p.m.

Prior to the start of the presentation, Ali Ghiasi indicated that editorial changes had been made and supporters had been added. He will provide the chair with the updated presentation (noted below) after the meeting.

Presentation #12	FEC Architecture with Evolution of AUI and PMDs
Presenters	Ali Ghiasi
URL	https://www.ieee802.org/3/df/public/22 05/22 0518/ghiasi 3df 01a 220518.pdf

General questions and discussion.

Prior to the start of the presentation, the Chair reminded participants of the updated presentation from Adee Ran. Chair will post the updated presentation (noted below) after the meeting.

Presentation #13	RS-FEC with error bursts at 200G/lane compared to earlier rates
Presenters	Adee Ran
URL	https://www.ieee802.org/3/df/public/22 05/22 0518/ran 3df 01a 220518.pdf

General questions and discussion.

Chair reviewed future meetings and noted that the meeting for 24 May would begin at 9am eastern time.

Session recessed for the day at 01:00 p.m.

May 2022 Electronic Session

Unapproved Meeting Minutes, prepared by John D'Ambrosia and Kent Lusted

Session called to order at 09:03 am ET (all times ET), 24 May 2022

Meeting called to order by John D'Ambrosia, IEEE P802.3df Task Force Chair

Chair noted that attendance would be taken by IMAT.

Chair began with the agenda presentation <a href="https://www.ieee802.org/3/df/public/22">https://www.ieee802.org/3/df/public/22</a> 05/agenda 3df b 2205.pdf

Slide #10 - Chair noted that the information regarding the IEEE SA Policies had been sent out, and requested that individuals review the following IEEE SA policies prior to the interim meeting –

- IEEE SA Patent policy
- IEEE SA Copyright Policy
- IEEE SA Participation Policy

Chair asked if anyone needed to review the policies at that time – there were no requests to do so.

Chair presented the third slide (See Slide #31) of the IEEE SA Patent Policy slides. Chair did call for Potentially Essential Patents, and no one came forward.

Chair presented the second slide (See Slide #36) of the IEEE SA Copyright Policy slides. Chair noted – "By participating in this activity, you agree to comply with the IEEE Code of Ethics, all applicable laws, and all IEEE policies and procedures including, but not limited to, the IEEE SA Copyright Policy."

Chair presented the second slide (See Slide #40) of the IEEE SA Participation Policy slides. Chair noted — "Participants in the IEEE-SA "individual process" shall act independently of others, including employers. By participating in standards activities using the "individual process", you are deemed to accept these requirements; if you are unable to satisfy these requirements then you shall immediately cease any participation."

Presentation #14	Architecture Preface
Presenters	Mark Gustlin
URL	https://www.ieee802.org/3/df/public/22 05/22 0524/gustlin 3df 01 220524.pdf

General questions of clarification.

## Straw Poll #1

I would support adopting the architecture described in gustlin\_3df\_01a\_220517 as the basis for the logic architecture for IEEE P802.3df

Y: 87, N: 1, Need More Information: 6

#### Motion #1

Move to adopt the architecture described in gustlin\_3df\_01a\_220517 as the basis for the logic architecture for IEEE P802.3df

M: Mark Nowell S: Paul Brooks Technical (>=75%)

Motioned passed by unanimous consent.

Prior to the start of the presentation, Brian Welch indicated that supporters had been added. He will provide the chair with the updated presentation (noted below) after the meeting.

Presentation #15	400GBASE-DR4-2 Baseline Proposal
Presenter	Brian Welch
URL	https://www.ieee802.org/3/df/public/22 05/22 0524/welch 3df 01a 220524.pdf

During the presentation, Peter Stassar offered his support to the proposal.

General questions of clarification.

Prior to the start of the presentation, the Chair indicated that he had received an update to the following presentation with additional new content to help clarify the message of the presentation. The chair received the updated presentation (noted below) before the meeting that had not yet been posted. Chair asked if there was opposition to hearing the updated presentation. No one responded.

Presentation #16	Four-wave Mixing Penalty for WDM-based Ethernet PMDs in O-band
Presenters	Xiang Zhou
URL	https://www.ieee802.org/3/df/public/22 05/22 0524/lam 3df 01a 220524.pdf

General questions and discussion.

Prior to the start of the presentation, the Chair indicated that he had received an update to the following presentation with editorial changes. The chair received the updated presentation (noted below) before the meeting that had not yet been posted. Chair asked if there was opposition to hearing the updated presentation. No one responded.

Presentation #17	Further Considerations on analyzing FWM effect on 200G/lane IMDD for LR
Presenters	Guangcan Mi
URL	https://www.ieee802.org/3/df/public/22 05/22 0524/mi 3df 01a 220524.pdf

General questions and discussion.

Break at 10:51 a.m. Resumed at 10:56 a.m.

Presentation #18	Modeling MPI penalty and its implication for next generation PAMx systems
Presenters	Huijian Zhang
URL	https://www.ieee802.org/3/df/public/22 05/22 0524/zhang 3df 01 220524.pdf

General questions and discussion.

Chair provided an update on liaisons. (see slide #11 of

https://www.ieee802.org/3/df/public/22 05/agenda 3df c 2205.pdf) The Task Force received a liaison from OIF. Chair reviewed the proposed response plan and asked if there was objection to the plan. No one responded.

### Motion #2

Move to adopt welch\_3df\_01a\_220524.pdf as the baseline proposal to satisfy the objective to "define a physical layer specification that supports 400 Gb/s operation over 4 pairs of SMF with lengths up to at least 2 km".

M: Gary NichollS: Ed Ulrichs

Technical (>=75%)

Motion passed by unanimous consent.

Chair reminded participants to attend the IEEE 802.3 May 2022 interim Working Group call on Thursday, 26 May. Discussed various aspects of the IEEE 802.3 voter rights and participation.

Session recessed for the day at 11:46 a.m.

May 2022 Electronic Session

Unapproved Meeting Minutes, prepared by John D'Ambrosia and Kent Lusted

Session called to order at 09:05 am ET (all times ET), 2 June 2022

Meeting called to order by John D'Ambrosia, IEEE P802.3df Task Force Chair

Chair noted that attendance would be taken by IMAT.

Slide #10 - Chair noted that the information regarding the IEEE SA Policies had been sent out, and requested that individuals review the following IEEE SA policies prior to the interim meeting —

- IEEE SA Patent policy
- IEEE SA Copyright Policy
- IEEE SA Participation Policy

Chair asked if anyone needed to review the policies at that time - there were no requests to do so.

Chair presented the third slide (See Slide #31) of the IEEE SA Patent Policy slides. Chair did call for Potentially Essential Patents, and no one came forward.

Chair presented the second slide (See Slide #36) of the IEEE SA Copyright Policy slides. Chair noted – "By participating in this activity, you agree to comply with the IEEE Code of Ethics, all applicable laws, and all IEEE policies and procedures including, but not limited to, the IEEE SA Copyright Policy."

Chair presented the second slide (See Slide #40) of the IEEE SA Participation Policy slides. Chair noted – "Participants in the IEEE-SA "individual process" shall act independently of others, including employers. By participating in standards activities using the "individual process", you are deemed to accept these requirements; if you are unable to satisfy these requirements then you shall immediately cease any participation."

Chair reviewed status of liaisons. See Slide #11.

Chair reviewed future meetings. See Slide #12 for the Task Force, and Slide #15 for the ad hocs..

Presentation #19	Cl 73 AN Baseline Proposal for eight-lane 800GBASECR8 and 800GBASE-KR8
Presenters	Kent Lusted
URL	https://www.ieee802.org/3/df/public/22 05/22 0602/lusted 3df 01a 220602.pdf

General questions of clarification.

Presentation #20	Considerations for test fixture specifications
Presenter	Chris DiMinico
URL	https://www.ieee802.org/3/df/public/22 05/22 0602/diminico 3df 02a 220602.pdf

Author noted an error on slide 9 and would provide an updated version '02a' with correction.

General questions of clarification.

Presentation #21	8 lane MDIs for 8x100G PMDs
Presenters	Chris DiMinico
URL	https://www.ieee802.org/3/df/public/22 05/22 0602/diminico 3df 01a 220602.pdf

Author to provide updated version '01a' that adds Kent Lusted as a contributor on slide 3.

General questions and discussion.

Prior to the start of this presentation, the chair noted that Tobey's affiliation, rather than her name had been listed in the presentation list in the agenda file. Chair noted he would update the agenda file to version "d" (see <a href="https://www.ieee802.org/3/df/public/22">https://www.ieee802.org/3/df/public/22</a> 05/agenda 3df d 2205.pdf)

Presentation #22	COM Simulation and Analysis for 200Gbps/Lane CR
Presenters	Tobey P. R. Li
URL	https://www.ieee802.org/3/df/public/22 05/22 0602/li 3df 01 220602.pdf

General questions and discussion.

Break at 10:36 a.m. Resumed at 10:40 a.m.

Chair reviewed the future meetings and reminded participants of the Task Force meeting on 9 June. (See the IEEE 802.3 call and meeting calendar: <a href="https://www.ieee802.org/3/calendar.html">https://www.ieee802.org/3/calendar.html</a>). Mr. Nowell noted that had canceled the optics ad hoc meeting for 9 June.

Presentation #23	Optical PHY Nomenclature
Presenters	Kent Lusted
URL	https://www.ieee802.org/3/df/public/22 05/22 0602/lusted 3df 02 220602.pdf

General questions and discussion.

Prior to the start of the presentation, Brian Welch indicated that he had an updated version with editorial changes. He will provide the chair with the updated presentation version '01b' (noted below) after the meeting.

Presentation #26	Baseline proposals for 800GBASE-DR4, 800GBASE-DR4-2, and 800GBASE-FR4
Presenters	Brian Welch
URL	https://www.ieee802.org/3/df/public/22 05/22 0602/welch 3df 01b 220602.pdf

General questions and discussion.

## Motion #3

#### Move to:

Adopt lusted\_3df\_01a\_220602 slides 4-5 as the Clause 73 baseline for eightlane 800GBASE-CR8 and 800GBASE-KR8

M: Kent Lusted S: Jeff Slavick Technical (>= 75%)

Passed by unanimous consent 11:46 a.m.

### Motion #4

Move to adopt diminico\_3df\_01a\_220602.pdf slides 4 and 6-7 as the baseline for the 800GBASE-CR8 MDIs

M: Chris Diminico S: Kent Lusted Technical (>= 75%)

Passed by unanimous consent 11:48 a.m.

### Motion #5

#### Move to:

Adopt the nomenclature for the 500m and 2km SMF solutions listed on lusted\_3df\_02\_220602, slide 3

M: Kent LustedS: Gary NichollTechnical (>= 75%)

Passed by unanimous consent 11:50 a.m.

Presentation #27	Update of 802.3df Baseline Status Summary
Presenters	Mark Nowell
URL	https://www.ieee802.org/3/df/public/22 05/22 0602/dambrosia 3df 01 220602.pdf

Chair reviewed the path forward as shown in the State of the Project <a href="https://www.ieee802.org/3/df/public/22\_05/22\_0517/dambrosia\_3df\_01\_220517.pdf">https://www.ieee802.org/3/df/public/22\_05/22\_0517/dambrosia\_3df\_01\_220517.pdf</a> slides 7-11 and discussed a possible PAR split and PAR modification of the Task Force.

Chair reviewed the July 2022 Plenary details. He noted that remote attendee support would be "best effort".

Chair reminded participants of the next meeting on 9 June. See https://www.ieee802.org/3/calendar.html

Chair noted that the agenda was complete.

Meeting adjourned at 12:09 p.m.

# Attendees

Name	Employer	Affiliation	17- May	18- May	24- May	2- Jun
Akbaba, Enis	Analog Devices Inc.	Analog Devices Inc.	Х	Х	Х	
Akinwale, Oluwafemi		Intel Corporation	Χ			Х
Ben-Artsi, Liav	Marvell Semiconductor, Inc.	Marvell Semiconductor, Inc.	Χ	Х	Х	
Bernier, Eric		Huawei Technologies Canada; Huawei Technologies Co., Ltd	Х	Х	Х	Х
Bernstein, Gary	Leviton Manufacturing Co.	The Siemon Company				Х
Bliss, William	Broadcom Corporation	Broadcom Corporation	Χ	X	Х	Х
Bois, Karl	NVIDIA Corporation	NVIDIA Corporation	Χ	X	Χ	Х
Bovington, Jock		Cisco Systems, Inc.	Χ			Х
Brooks, Paul	Viavi solutions GmbH	Viavi Solutions	Χ	Х	Х	
Brown, Blake		University of New Hampshire InterOperability Laboratory (UNH-IOL)		X	X	
Brown, Matthew	Huawei Technologies Canada	Huawei Technologies Canada			Х	Х
Bruckman, Leon	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	Χ	Х	Х	Х
Brychta, Michal	Analog Devices Inc.	Analog Devices Inc.			Χ	
Calvin, John	Keysight Technologies	Keysight Technologies	Χ	Х	Х	Х
Cassan, Dave	Alphawave	Alphawave			Х	
Chang, Yongmao	Inphi Corporation	Source Photonics		Х	Х	Х
Chen, Chan	Applied Optoelectronics, Inc.	Applied Optoelectronics, Inc.		Х		Х
Choe, Denz		BeCe Pte Ltd	Х	Х		Х
Choudhury, Golam	OFS	OFS	Х	Х	Х	Х
D'Ambrosia, John	Futurewei Technologies	Futurewei Technologies, U.S. Subsidiary of Huawei	X	X	х	Х
Dawe, Piers J G	NVIDIA	Nvidia	Х	Х	Х	Х
Deandrea, John	Finisar Corporation	Finisar Corporation	Χ	Х		Х
Didde, Stephen	Keysight Technologies	Keysight Technologies	Χ	Х	Х	Х
Diminico, Christopher	M C Communications, LLC	Panduit Corp.	Χ		Х	Χ
Dube, Kathryn	UNH-IOL	UNH-IOL	Χ	X	X	Х
Dudek, Michael	Marvell	Marvell	Х	Х	Х	Х
Dumais, Patrick		Huawei Technologies Co., Ltd				Х
Ellison, Jason	Amphenol Corporation	The Siemon Company	Χ			
Estes, David	Spirent Communications	Spirent Communications	Χ	Х	Χ	
Ewen, John	Marvell	Marvell	Х	Х	Χ	Х
Ferretti, Vincent	Corning Incorporated	Corning Incorporated	Х	Х		Х
Feyh, German	Broadcom Corporation	Broadcom Corporation		Х		
FILIPPOU, DIMITRIS		Dimitris Filippou; I2QS		Х	Χ	
Gao, Xiangrong	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	Х	Χ	Χ	
Geng, Limin	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	Х	Х	Х	<del>                                     </del>
Ghiasi, Ali	Ghiasi Quantum LLC	Ghiasi Quantum LLC; Marvell Semiconductor, Inc.	Х	X	X	Х
Goodwill, Dominic		Huawei Technologies Canada; Huawei Technologies Co., Ltd	Х	X		
Gore, Brandon	Samtec, Inc.	Samtec, Inc.	Χ	Χ		
Gorshe, Steven Scott	Microchip Technology, Inc.	Microchip Technology, Inc.	Х	Х	Х	

Gustlin, Mark	Cisco Systems, Inc.	Cisco Systems, Inc.	Χ	Х	Х	Х
Haasz, Jodi	IEEE-SA	IEEE Standards Association	<u> </u>	<del>  ^</del>	X	X
Hadsz, Jour	IEEE-SA	(IEEE-SA)			^	^
Han, Ruibo	China Mobile Communications	China Mobile	Х	X	+	
rian, naibo	Corporation (CMCC)	Communications Corporation				
		(CMCC)				
He, Xiang	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	Χ	Х	Х	Х
Healey, Adam	Broadcom Inc.	Broadcom Inc.	Х	Х	Х	Х
Heck, Howard	Intel Corporation	Intel Corporation	Х	Х	Х	Х
Hidaka, Yasuo	Credo Semiconductor	Credo Semiconductor	Х		Х	Х
Huang, Kechao	Huawei Technologies Co., Ltd.	Huawei Technologies Co., Ltd.	Х	Х	Х	Х
HUANG, QINHUI	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	Х		Х	
Huber, Thomas	Nokia	Nokia	Х	Х	Х	
Hutchins, Jeff	Ranovus	Ranovus			Х	Х
Isono, Hideki	Fujitsu Optical Components	Fujitsu Optical Components	Х	Х	Х	Х
,	Limited	Limited				
Issenhuth, Tom	Issenhuth Consulting, LLC	Huawei Technologies Co., Ltd	Х	Х	Х	Х
Jackson, Kenneth	Sumitomo Electric Device	Sumitomo Electric Industries,	Х	Х	Х	Х
	Innovations, USA	LTD				
Jafari, Amir		Semtech		Х		
Jiang, Chendi	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd				Х
Jimenez, Andrew	Anixter Inc.	Anixter Inc.			Х	
Johnson, John	Broadcom Corporation	Broadcom Corporation	Х		Х	Х
Jonsson, Ragnar	Marvell Semiconductor, Inc.	Marvell		Х		
Kao, Chienping	Intel Corporation	Cornelis Networks			Х	
Kareti, Upen	Cisco Systems, Inc.	Cisco Systems, Inc.		Х		
Kim, Kihong/Joshua	Hirose Electric (USA), Inc.	Hirose Electric (USA), Inc.	Х	Х	Х	Х
Kim, Yongbum	Tenstorrent	Tenstorrent	Х	Х	Х	
Kinningham, Alan	I-PEX CONNECTORS	I-PEX (division of Dai-Ichi	Х	Х		Х
,		Seiko)				
Klempa, Michael	Amphenol Corporation	Amphenol Corporation	Х		Х	
Klingensmith, William	U.S. Federal Government	DoD			Х	Х
Koch, Lavi		Lavi Koch Nvidia	Х			
Kochuparambil,	Cisco Systems, Inc.	Cisco Systems, Inc.	Х	Х		
Elizabeth						
Koehler, Daniel	MorethanIP	Synopsys, Inc.	Х	Х		
Kondo, Taiji	MegaChips Corporation	Dexerials Corporation	Х	Х	Х	
Kota, Kishore	Marvell Semiconductor, Inc.	Marvell Semiconductor, Inc.	Х	Χ		
Kuschnerov, Maxim	Huawei Technologies	Huawei Technologies	Х			
	Duesseldorf GmbH	Duesseldorf GmbH				
Lam, Cedric		Google	Χ		Х	Χ
Lambert, Angela		Corning Incorporated	Χ		Х	Х
Lapierre, Dominic		EXFO Inc.		Х	X	
Law, David	Hewlett Packard Enterprise	Hewlett Packard Enterprise	Χ		Х	
Lawson, Matthew	Cisco Systems, Inc.	Cisco Systems, Inc.	Х	Х	Х	Х
Le Cheminant, Greg	Keysight Technologies	Keysight Technologies			Х	Х
Levin, Itamar		Intel Corporation	Χ			
Lewis, David	Lumentum Inc.	Lumentum Inc.	Χ	Х		Х
Li, Mike-Peng	Intel Corporation	Intel Corporation	Х	Х	Х	Х

Li, Pei-Rong	MediaTek Inc.	MediaTek Inc.	Х	Х	Х	Х
Lim, Jane	Cisco Systems, Inc.	Cisco Systems, Inc.	Х	Х		
Lin, Youxi	Huawei Technologies	Huawei Technologies Co., Ltd			Х	Х
	Duesseldorf GmbH					
Liu, Cathy		Broadcom Corporation		Х		
Liu, Hai-Feng	HG Genuine	HG Genuine	Х	Х	Х	Χ
LIU, XIANG	Huawei R&D USA	Huawei Technologies Co., Ltd			Х	
Lu, Yuchun	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	Х	Х	Х	
Lusted, Kent	Intel Corporation	Intel Corporation	Х	Х	Х	
Maguire, Valerie	The Siemon Company	The Siemon Company	Х		Х	
Mak, Gary	Marvell Corporation	inphi	Х	Х	Х	Х
Maki, Jeffery	Juniper Networks, Inc.	Juniper Networks, Inc.	Х	Х	Х	Χ
Malicoat, David	Malicoat Networking Solutions	Malicoat Networking Solutions; SENKO Advanced Components	Х	Х	Х	Х
Maniloff, Eric	Ciena Corporation	Ciena Corporation	Х	Χ	Χ	
Marris, Arthur	Cadence Design Systems, Inc.	Cadence Design Systems, Inc.	Χ	Х	Х	
Mazzini, Marco	Cisco Systems, Inc.	Cisco Systems, Inc.			Х	Χ
McMillan, Larry	Western Digital Corporation	Western Digital Corporation		Х		
Mellitz, Richard	Samtec, Inc.	Samtec, Inc.	Х	Х	Х	Х
Meltser, Roman		NVIDIA Corporation	Х	Х	Х	Χ
mi, guangcan	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd		Х	Х	Х
Moorwood, Charles	Keysight Technologies	Keysight Technologies	Х	Х	Х	Х
Mu, Jianwei		Hisense			Х	Х
Muller, Shimon	Enfabrica Corp.	Enfabrica Corp.	Х	Х	Х	Χ
Murty, Ramana	Broadcom Inc.	Broadcom Corporation	Х	Х	Х	
Muth, Karlheinz	Broadcom Corporation	Broadcom Corporation	Х	Х	Х	Х
Nakamoto, Edward	Spirent Communications	Spirent Communications	Х	Х	Х	
Nering, Raymond	Cisco Systems, Inc.	Cisco Systems, Inc.	Х	Х	Х	Х
Nicholl, Gary	Cisco Systems, Inc.	Cisco Systems, Inc.	Х		Х	Х
Nicholl, Shawn	Xilinx	Advanced Micro Devices	Х	Х	Х	Х
		(AMD)				
Noujeim, Leesa	Google	Google				Χ
Nowell, Mark	Cisco Systems, Inc.	Cisco Systems, Inc.	Χ	Χ	Х	Χ
Ofelt, David	Juniper Networks, Inc.	Juniper Networks, Inc.	Χ	Х	Х	Х
Omori, Kumi	NEC Corporation	NEC Corporation		Χ	Χ	Χ
Opsasnick, Eugene	Broadcom Inc.	Broadcom Inc.	Х	Χ	Х	Χ
Palkert, Thomas	Macom, Samtec	Samtec-Macom	Х	Х	Х	
PARK, CHUL SOO	Juniper Networks Inc.	Juniper Networks, Inc.	Х	Х	Х	Х
Parsons, Earl	CommScope, Inc.	CommScope, Inc.	Х		Х	Х
Parthasarathy, Vasu	Broadcom Corporation	Broadcom Corporation	Х	Х		
Patra, lenin	Marvell Semiconductor, Inc.	Marvell Semiconductor, Inc.		Χ		
peng, semmy		Huawei Technologies Co., Ltd	Χ	Х	Х	Х
Pepper, Gerald	Keysight Technologies	Keysight Technologies	Χ	Х		
Piehler, David	Dell Technologies	Dell	Χ	Х	Х	
Pimpinella, Rick	Panduit Corp.	Panduit Corp.			Х	Х
Pitwon, Richard	Resolute Photonics	Resolute Photonics			Х	
Quan, Yu	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	Χ		Х	
Rabinovich, Rick	Keysight Technologies	Keysight Technologies	Χ	Х	Х	Х

Radhamohan,	Cisco Systems, Inc.	Cisco Systems, Inc.		Х	Х	Х
Rajeshmohan		<u> </u>			<b>-</b>	1,,
Rahn, Jeffrey	Facebook	Facebook	Х	X	Х	Х
Ramesh, Sridhar	MaxLinear	MAXLINEAR INC		Х	<b>—</b>	
Ran, Adee	Cisco Systems, Inc.	Cisco Systems, Inc.	Х	Х	X	
Ren, Hao	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	Х		Х	Х
Renteria, Victor	Bel Fuse	Bel Fuse			Х	
Rodes, Roberto	II-VI	II-VI	Х	X	Х	Х
Rush, Joshua		UNH-IOL	Х	Х		
Sakai, Toshiaki	Socionext Inc.	socionext	Х	X	Х	Х
Sales, Marti		HiSilicon Technologies Co., LTD.			Х	
Sambasivan, Sam	AT&T	AT&T	Χ	X	Х	
sanyal, madhumita		Synopsys, Inc.	Χ	X		
Savi, Olindo	Hubbell Incorporated	Hubbell Incorporated	Χ	X	Х	Χ
SAWANO, Hiroshi	OITDA (Optoelectronics Industry and Technology Development Association)	OITDA		X		
Shanbhag, Megha	Тусо	TE Connectivity				Х
She, Qingya	Fujitsu Network	Fujitsu Network	Х	Х	Х	
	Communications	Communications				
Shrikhande, Kapil	Marvell Semiconductor, Inc.	Marvell Semiconductor, Inc.	Χ	X	Х	Χ
Shubochkin, Roman	OFS	OFS			Х	
Shukla, Priyank	Synopsys, Inc.	Synopsys, Inc.	Χ		Х	
Sikkink, Mark		Hewlett Packard Enterprise	Х	Х	Х	Х
Simms, William	NVIDIA Corporation	NVIDIA Corporation	Х	Х	Х	Х
Sivakolundu, Ramesh	Cisco Systems, Inc.	Cisco Systems, Inc.			Х	Х
Slavick, Jeff	Broadcom Inc	Broadcom Inc	Χ	Х	Х	Х
Sluyski, MIke		Cisco Systems, Inc.	Х	Х	Х	
Sommers, Scott	Molex LLC	Molex Incorporated	Х	Х	Х	Х
Son, Yung Sung	Optomind Inc	Optomind Inc	Х		Х	Х
Sorbara, Massimo	GLOBALFOUNDRIES	GLOBALFOUNDIRES	Х	Х	Х	Х
Sprague, Edward	Infinera Corporation	Infinera Corporation	Х	Х	Х	
Srivastava, Atul	NEL-America	NTT Electronics	Х	Х	Х	
Stassar, Peter	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	Х	Х	Х	Х
SU, CHANGZHENG		Huawei Technologies Co., Ltd	Х	Х	Х	
Sun, Junqing	Credo Semiconductor	Credo Semiconductor	Х			
Sun, Yi		OFS		Х	Х	Х
Tailor, Bharat	Semtech Canada Corporation	Semtech Canada Corporation			Х	
TAKAHARA, TOMOO	FUJITSU LABORATORIES LIMITED	FUJITSU LIMITED	Х	Х	Х	Х
TAZEBAY, MEHMET	Broadcom Corporation	Broadcom Corporation	Х	Х	Х	
Terada, Masaru	FURUKAWA ELECTRIC	FURUKAWA ELECTRIC	Х		Х	Х
Theodoras, James	HG Genuine	HG Genuine	Х	Х		
Thompson, lance	II-VI	II-VI				Х
tomofuji, hiroaki		FUJITSU	Х		Х	
Tooyserkani, Pirooz	Cisco Systems, Inc.	Cisco Systems, Inc.	Х	Χ	Х	Х
Tracy, Nathan	TE Connectivity	TE Connectivity	Х	Х	Х	Х
Tran, Viet	Keysight Technologies	Keysight Technologies	Х	Х	Х	Х

Ulrichs, Ed	Intel Corporation	Intel Corporation	Х	Х	Х	
Venkataraman, Srinivas		Facebook			Х	
Wang, Haojie	China Mobile Communications Corporation (CMCC)	China Mobile Communications Corporation (CMCC)	X	Х	Х	Х
Wang, Ruoxu	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	Χ	Х	Х	Х
Wang, Xinyuan	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	Χ	Х	Х	Х
Weaver, James	Arista Networks	Arista Networks	Χ	Х	Х	Х
Welch, Brian	Cisco Systems, Inc.	Luxtera	Χ	Х	Х	Х
Williams, Tom	Cisco Systems, Inc.	Cisco Systems, Inc.	Χ	Х	Х	Х
Wu, Mau-Lin	MediaTek Inc.	MediaTek Inc.	Χ	Х	Х	Х
Xu, Yu	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	Х	Х		
Yin, Shuang		Google	Χ	Х	Х	Х
Young, James	CommScope, Inc.	CommScope	Х	Х	Х	Х
Yu, Rang-Chen		SiFotonics Technologies		Х		
Zhang, Bo	Marvell Technology, Inc	Marvell Technology, Inc	Х			
Zhang, Tingting		Huawei Technologies Co., Ltd		Х		
Zhiwei, Yang	ZTE Corporation	ZTE Corporation	Х	Х	Х	Х
Zhong, Qiwen	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd		Х		
Zhou, Xiang		Google		Х	Х	
Zhuang, Yan	Huawei Technologies Co., Ltd	Huawei Technologies Co., Ltd	Х	Х	Х	Х
Zivny, Pavel	Tektronix, Inc.	Tektronix, Inc.		Х	Х	