



PV Automation Committee EU Chapter Meeting Summary and Minutes

SEMICON Europa October 7, 2013 Dresden, Germany

Next Committee Meeting

(Tentative) Intersolar Europe, June 2014 Munich, Germany

Table 1 Meeting Attendees

Co-Chairs: Eberhard Teichmann (Peer Group) **SEMI Staff:** John Doe

| Company | Last | First | Company | Last | First |
|----------------|---------|-----------|----------------|----------|---------|
| Vitronic | Born | Carsten | Tokyo Electron | Murakami | Takeshi |
| AIS | Fincke | Friedmann | | Wagner | Peter |
| Tokyo Electron | Asakawa | Terry | SEMI | Amano | James |

Table 2 Leadership Changes

Co-chair Eberhard Teichmann stated that he would be retiring in the near future, and while he would like to continue participating, he would no longer be able to serve as Co-Chair of the EU PV Automation Committee.

Table 3 Ballot Results (or move to Section 4, Ballot Review)

Passed ballots and line items will be submitted to the ISC Audit & Review Subcommittee for procedural review.

Failed ballots and line items were returned to the originating task forces for re-work and re-balloting.

No ballots were reviewed at this meeting.

Table 4 Authorized Ballots

| # | When | SC/TF/WG | Details |
|------|------------------|----------|--|
| 5153 | Cycle 8- 2013 | | New Subordinate Standard "Data Definition specifications for a Horizontal Communication between equipment for crystalline photovoltaic fabrication system" (Parent Document PV35-1012 Specification For A Horizontal Communication Between Equipment For Photovoltaic Fabrication System) |

Table 5 Authorized Activities

No new activities were authorized at this meeting. Note: SNARFs and TFOFs are available for review on the SEMI Web site at: <u>http://downloads.semi.org/web/wstdsbal.nsf/TFOFSNARF</u>

Table 6 New Action Items

None

Table 7 Previous Meeting Action Items

| Item # | Assigned to | Details |
|---------|-----------------|--|
| 1008-01 | Yann Guillou | Contact Wafer Traceability TF leader to see if he can take over Itsvan Gyory CLOSED |
| 1008-02 | Jorgen Lundgren | Contact Transport Carrier TF leaders and see if that is a reason not to sunset the TF CLOSED |





1 Welcome, Reminders, and Introductions

Co-chair Eberhard Teichmann called the meeting to order at 16:30. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Attachment: RequiredElementsJune2,2010.ppt, EU PV Automation TC Agenda 2013_Oct v1_0.pdf

2 Review of Previous Meeting Minutes

The committee reviewed the minutes of the previous meeting.

Motion:To approve the minutes from the previous PV Automation TC meeting (October, 2012) as written.By / 2nd:Terry Asakawa/Peter WagnerDiscussion:NoneVote:6-0Attachment:PV Automation SCEU12.pdf

3 Liaison Reports

3.1 Japan PV Automation Committee

Terry Asakawa reported. Of note:

- PV Transport Carrier TF has been disbanded.
- Two ballots will be issued in Cycle 6, for adjudication at the next Japan PV Automation TC meeting (October 24)
 - Doc. #5223A, New Subordinate Standard: "Media Interface Specifications for a Horizontal Communication between Equipment" to be Used to Implement SEMI PV35
 - Doc. #5631 Line Item Revisions to SEMI PV35-1012, Specification For Horizontal Communication Between Equipment For Photovoltaic Fabrication System

Attachment: JP_PVAuto_Liaison_at_EU_PVAuto_2013_1013_R0.1.ppt

3.2 SEMI Staff Report

James Amano reported.

- An additional ballot cycle has been added to accommodate meetings held in January and February.
 - Cycle 8, 2013
 - Ballot Submission Date: Nov 15, 2013
 - Voting Period Starts: Nov 29, 2013
 - Voting Period Ends: Dec 31, 2013
- The Silicon Wafer TC has been effectively maintaining its catalog of standards via five-year reapproval ballots.

Attachment: SEMI Staff Report (Europa 2013) rev2.ppt

4 Ballot Review

No ballots were reviewed at this meeting.





5 Subcommittee & Task Force Reports

5.1 EIS TF

Carsten Born reported.

- The PV2 revision (5566) is on hold until the SML IP issue has been resolved.
 - SNARF for 5566: SEMI E30 contains 2 new message pairs to query the DV and CEID information and their relationships. With this modification in SEMI E30, these new message pairs are automatically 'additional capabilities' for SEMI PV02. Suppliers who implement these new namelist requests are not required to provide DV and CEID documentation as described in requirement [PV02-RQ-00007-00].
- The TF is ready to ballot document 5153, New Standard: Data Definition Specification for a Horizontal Communication Between Equipment for Photovoltaic Fabrication System, in Cycle 7 or 8.

| Motion: | To issue 5153 in Cycle 7 or 8. |
|------------------------|---------------------------------|
| By / 2 nd : | Carsten Born/Eberhard Teichmann |
| Discussion: | None |
| Vote: | 6-0 |

5.2 Wafer Traceability TF

Peter Wagner reported that laser marking documents were being revised to unify code reading in PV29 and PV32.

- 5418: Revision of SEMI PV29-0212, Specification for Front Surface Marking of PV Silicon Wafers with Two-Dimensional Matrix Symbols
- 5419: Revision of SEMI PV32-0312, Specification for Marking of PV Silicon Brick Face and PV Wafer Edge

6 Old Business

None

7 New Business

7.1 Discussion of automation standardization

Terry Asakawa brought up the issue of reduced participation in PV automation activities in both EU and Japan. He followed that creating a committee solely focused on PV may have been a mistake. While the standards that have been developed and that are under development are applicable to other industries, having "PV" in the committee name may have limited participation from relevant companies as the PV industry has struggled in recent years. He mentioned that he would meeting with VDMA during this trip to introduce PV35 (Specification for Horizontal Communication Between Equipment for Photovoltaic Fabrication System), and how it could be applicable to other non-PV manufacturing. Terry asked all members to think about how the current PV Automation Committee could be transformed to attract new participants.

8 Action Item Review

8.1 Open Action Items

James Amano (SEMI) reviewed the open action items. These can be found in the Open Action Items table at the beginning of these minutes.

8.2 New Action Items

James Amano (SEMI) reviewed the new action items. These can be found in the New Action Items table at the beginning of these minutes.





9 Next Meeting and Adjournment

The next meeting of the EU Chapter of the PV Automation committee is tentatively scheduled for Intersolar Europe in Munich, June 2014.

Respectfully submitted by:

James Amano SEMI HQ

Table 8 Index of Available Attachments #1

| # | Title | # | Title |
|---|---|---|-------|
| | RequiredElementsJune2,2010.ppt | | |
| | EU PV Automation TC Agenda 2013_Oct v1_0 | | |
| | PV Automation_SCEU12.pdf | | |
| | JP_PVAuto_Liaison_at_EU_PVAuto_2013_1013_R0.1.ppt | | |
| | SEMI Staff Report (Europa 2013) rev2.ppt | | |

#1 Due to file size and delivery issues, attachments must be downloaded separately. A .zip file containing all attachments for these minutes is available at www.semi.org.