The Hermes Standard
for "M-to-M" in SMT Assembly

Minutes of Meeting – 3rd The Hermes Standard Initiative Meeting

Date: 23rd April 2018
Venue: Shanghai, Marriott Hotel Riverside, Concord room 3F
Minutes: Thomas Bliem, Chair of the initiative

Participating companies in alphabetical order	
ACHAT Engineering GmbH5	ASM AS GmbH
ASYS Automatisierungssysteme GmbH	BESI
CTI Systems	CYBEROPTICS
ERSA GmbH	FLEXLINK
GÖPEL electronic GmbH	HANWHA
HELLER Industries	ITW EAE
JAPAN UNIX Co. LTD.	KIC
KOH YOUNG Technology Inc.	MAGIC RAY Technology
MYCRONIC (including Vi Technology)	Nordson ASYMTEK
Nutek Europe B.V.	OMRON Corporation
PARMI	PEMTRON
Rehm Thermal Systems GmbH	RG Elektrotechnologie
SAKI Corp	SEICA Automation
Shenzhen Rejoint Automachine Equip. Co. LTD.	SONIC Technology
SPEA S.p.A	Test Research, Inc. (TRI)
VISCOM AG	ViTrox

Initiative members not present in the meeting	
eXelsius	IPTE
Kulicke & Soffa	MIRTEC
SMT Thermal Discoveries	YJ Link Co., Ltd.

Shanghai Marriot Hotel Riverside

Connectivity Needs Cooperation
Thank You Very Much For Your Support

The Hermes Standard Initiative Meeting Shanghai, April 23, 2018

Agenda of 3rd The Hermes Standard (THS) Initiative Meeting, April 23rd

Introductory event for new members @ Concord room 3F		
Welcome	Thomas Bliem Chair of the THS Initiative	9:00
Introduction of participants and companies including collection of the different expectations	All participants	9:15
Introduction to the standard & technical considerations regarding version 1.0 Rev 1	Leif Reichert Moderator of THS member forum	10:00
Coffee Break		10:30
Introduction to The Hermes Standard Initiative approach and agreed initiative principles	Thomas Bliem Chair of the THS Initiative	11:00
Evolvement of the standard over time	Thomas Bliem Chair of the THS Initiative	11:30

Joint buffet lunch for all member companies @ City Bistro 2F	12:00 – 13:00

The Hermes Standard Initiative meeting @ Concord room 3F		
Welcome • Introduction of new initiative members • Recap 2nd Meeting in November 2017 • Joint activities since then (PRODUCTRONICA, APEX, …)	Thomas Bliem Chair of the THS Initiative	13:00
Status per company (optional) • Status of implementation • Learnings (technical / process / …) • Planned next steps (e.g. customer field tests)	All participants	13:30
The Hermes Standard – Network configurations • Possible solutions and selection guide	Arthur Choi Koh Young Technology	14:15
Synergy discussion with CFX / IPC • Relation of both standards to each other • Connection from horizontal to vertical communication	Florian Ritter Co-chair of the THS Initiative	14:45
Coffee Break		15:15
Technical issues & decisions • Process: Completeness, linguistic & textual finalization • Protocol extensions (presentation and official voting) • Outlook: Next versions	Leif Reichert Moderator of THS member forum	15:45
Organizational issues & decisions • Discussion about JARA sub-committee for M to M • Next meeting	Thomas Bliem Chair of the THS Initiative	17:15
The Hermes Standard at NEPCON Shanghai • Joint marketing (press / signage / …) • Related exhibits and activities at NEPCON	Thomas Bliem Chair of the THS Initiative	17:30
Wrap-up and end of meeting @ 18:00	All participants	17:45

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General Information	Who	When
Presentation material & access to members area All presented material can be downloaded by members from the members area of the initiative homepage: https://members.the-hermes-standard.info/download/ The new version of the standard will be available as well on the public section of the homepage for all other parties.		
Next meeting location & meeting host The 4th initiative meeting will be held shortly before APEX 2019 in San Diego / US in order to minimize the overall traveling effort and to synchronize the activities for the fair. The invitation including a draft of the agenda will be sent out 12 weeks before the meeting. The host of the meeting is not determined yet. If your company would like to host the next meeting please contact the chair.	Mr. Bliem	12 weeks before next meeting

Introduction for new members (April 23rd, 9:00 - 12:00)

In the morning session an introduction of The Hermes Standard Initiative principles as well as The Hermes Standard interface description to the 11 new members took place.
The common understanding of the The Hermes Standard Initiative has been presented to the new members and agreed. In a nutshell:
- **Open collaboration** for developing a common standard.
- The initiative members **want to articulate common interests** and help all market participants offer their customers uniform and efficient Industy-4.0-solutions.
- The initiative is **neither a legal nor a commercial subject**. There is **no profit motive**.
- The participants in the meetings **do not want to establish a company** and **do not want to enter into any contractual obligations**.
- Every equipment vendor interested can join. No one shall be excluded.
- The participants agreed that **all legal consequences** and the provisions of the German Civil Code Sec. 675ff and 705 ff **are excluded**.

The Hermes Standard Initiative meeting (April 23rd, 13:00 - 19:00)

Introduction of the new members		
Introduction of the new members The introduction of the 11 new members to the existing members took place. The new members introduced themselves via short presentations. The initiative now consists of 39 members. More companies are in the final decision making process and will join in the next meeting already. More details: 1&2_EventIntro_3rd_Meeting_April2018.pptx	New members	Done

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Status update and readiness of members A verbal status update per member took place. First installations took place in Q1/2018 and field-tests started already. A first line in the Netherlands already started producing consumer products based on The Hermes Standard. Large Automotive and EMS companies are now also starting with the adoption and latest Q3 / 2018 we expect mass adoption to start. Meetings are conducted on a regular base in order to plan the next implementation steps at different end customer sites. About 30% of the members implemented The Hermes Standard already in (parts) of their portfolio and are ready to sell this equipment. 50% of the parties are in the final implementation and testing stage and will release products within the next 3-6 month. The remaining parties – mainly the new members – explained that they will focus on implementing The Hermes Standard in order to be ready by Q4 / 2018 respectively Q1 / 2019.	All parties	Done
Review of last minutes of meeting The 3rd initiative meeting started in the afternoon with the review of the last minutes of the meeting held before Productronica in November 2017. Only open point is to amend WIKIPEDIA in order to explain the targets of the standard as well as the setup of The Hermes Standard Initiative to the public. This action item shall be closed within the next month.	Mr. Mittermair (REHM)	Ongoing
Test driver for interface pre integration A short discussion regarding the existing test driver took place. Mr. Reichert from ASM committed to update the test driver based on the extension proposal shortly after the meeting.	Mr. Reichert (ASM)	Open
The Hermes Standards – Network configurations Harald Eppinger, Koh Young Europe held a presentation prepared by Arthur Choi, Director of Software R&D Koh Young Technology regarding considerations and evaluation criteria's to select a network topology for implementing The Hermes Standard as Machine to Machine link in a production line. Mr. Eppinger proposed to set-up a working group in order to come up with a proposal on how to select an adequate network structure. The following companies committed to join this working group: Koh Young, ASM, OMRON, VISCOM and PEMTRON.	Mr. Eppinger (KY Europe) Working group "Selection guide for network configuration"	Done Started

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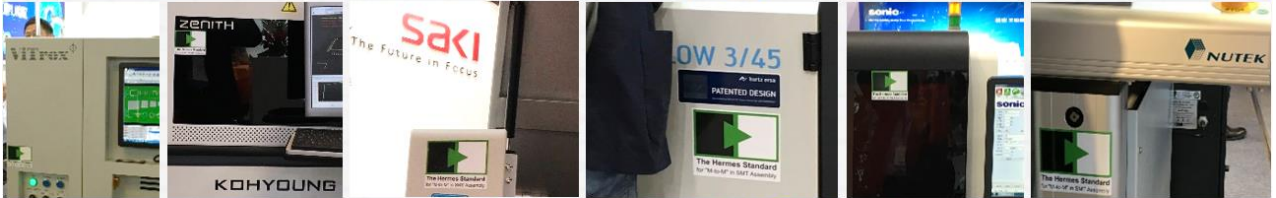|		
Synergy discussion with CFX / IPC in Erlangen (Feb 2018) Florian Ritter summarized the meeting with IPC/CFX in his presentation. Core statements regarding the positioning: • The Hermes Standard (THS) and CFX are both designed as free and open standards, for different but related purposes • Michael Ford (Aegis, Coordination of content for IPC/CFX standard) stated in the meeting back in February 2018 that THS is the ideal backbone for the CFX implementation. • The focus of each specification is complementary • Goal is to add value for the customer and machine vendors, separately and together In addition to that Florian presented ideas about a vertical extension of The Hermes Standard in order to simplify the connection to existing vertical interfaces (SECS / GEM, iTAC, SEMI, CFX, …) in order to supply The Hermes Standard interface with the necessary data or to upload data at the end of the line.	Mr. Ritter (ASYS Group and Co-Chair)	Done
Florian prosed to set-up a working group in order to come up with a proposal on how to extend The Hermes Standard in vertical direction. The following companies committed to join: ASYS, Göpel, Koh Young, Achat5, Flexlink and RG Elektrotechnologie. More details: 4_HERMES_CFX.pptx	Working group "Hermes vertical"	Started
Joint Marketing of The Hermes Standard & CFX @ APEX IPC/CFX will repeat the APEX-showcase also on the SMT fair in Nuremberg (June 2018). Every party is invited to join this showcase. For THS members The Hermes Standard logo will be displayed in this case as the Board-ID which is part of the CFX message and could be transmitted by the Hermes Standard once implemented. Link: http://www.connectedfactoryexchange.com/CFXDemo/ Contact person: Michael Ford (mford@aiscorp.com)		
Technical issues & decisions The following decisions have been taken: a) Amendments to the standard will be cross-checked by HELLER in order to harmonize the future development of the standard in terms of linguistic aspects. b) Application of Semantic Versioning (Hermes Moderator) **Revision: Version 1.0.2** Result: Accepted c) Define minimum requirements for strings (GÖPEL electronic) **Revision: Version 1.0.2** Result: Accepted	All proposals accepted by present parties via majority decisions	Done

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d) Adding InterfaceId to the configuration (GÖPEL electronic)	**Minor: Version 1.1** Result: Accepted	
e) Add weight attribute to BoardAvailable message (SPEA)	**Minor: Version 1.1** Result: Accepted	
Details: The members decided not to specify on how to handle the "Weight attribute" if an equipment is changing the weight of the board but cannot determine the exact increase / decrease. In the discussion the participants discovered that also the handling of the BottomClearance & TopClearance are not defined in such cases.		
f) CheckAlive Response (ERSA)	**Minor: Version 1.1** Result: Accepted	
Details: The members decided to specify a recommended reaction time of 3 seconds for responses to a CheckAlive message.		
g) BoardForecast (ERSA)	**Minor: Version 1.1** Result: Accepted	
h) Reinsert Board (ERSA)	**Minor: Version 1.1** Result: Accepted	
Details: The members decided that an equipment supporting this feature shall be able to store and supply upon request the XML-data package of at least 50 handled boards as a minimum.		
The amended version 1.0.2 is now available on the Hermes Standard homepage as 2nd revision to version 1.0 for parties which will implement the basic featureset of The Hermes Standard interface only. This may apply to more simpler equipment e.g. conveyor belt which cannot benefit from higher level features facilitated by The Hermes Standard. In addition to this version 1.1 is available as well for equipment vendors committed to support the full feature set of The Hermes Standard interface e.g. oven or inspection equipment which can heavily benefit from the newly added feature set.		
The Hermes Standard meets CfX / IPC The members agreed that the discussion with IPC/CFX shall be continued. Thomas Bliem (Chair) will organize a next meeting and will again invite all members.		

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