

e-Manufacturing Workshop Concluding Remarks

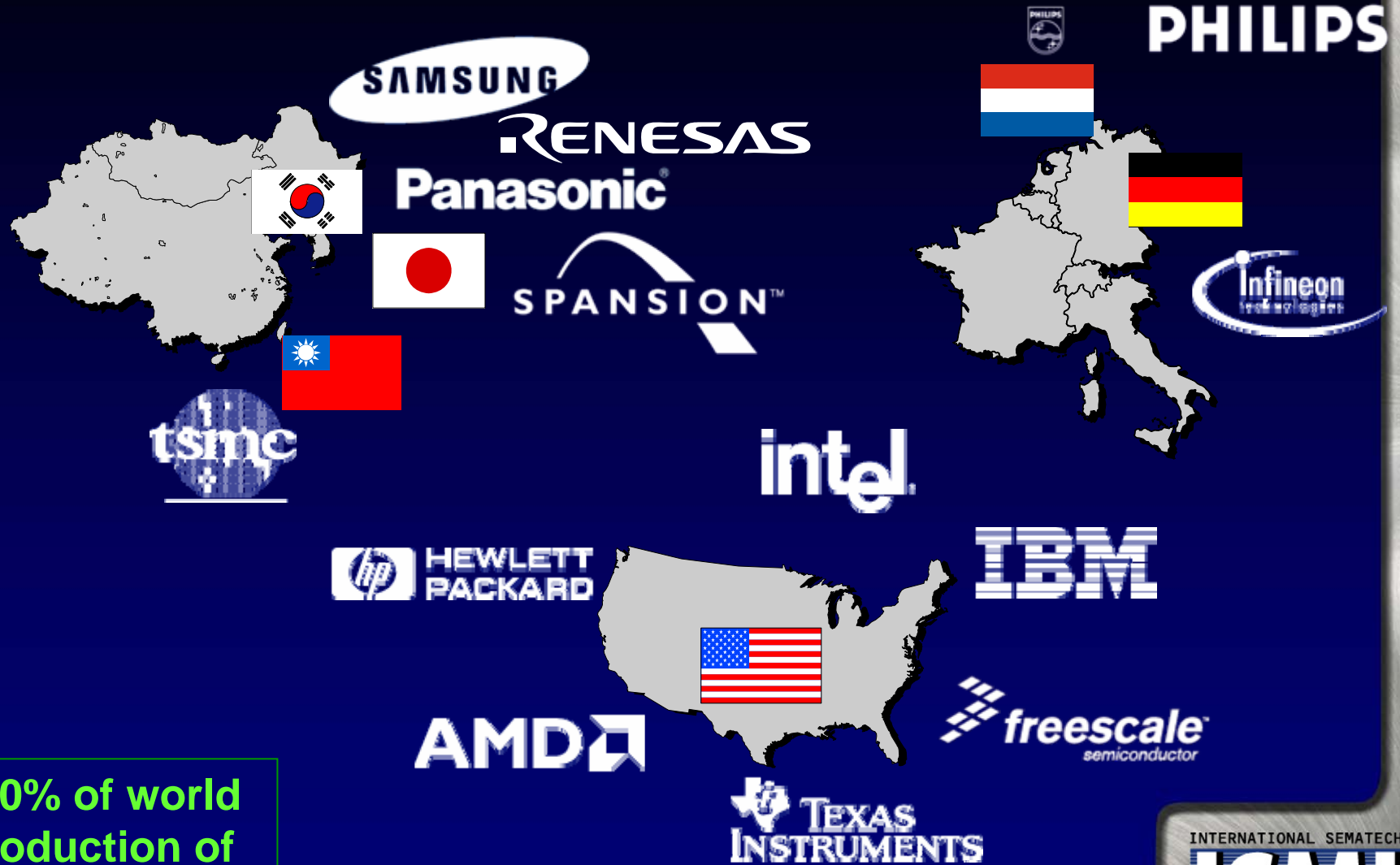
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ISMI Members



>50% of world
production of
ICs

References

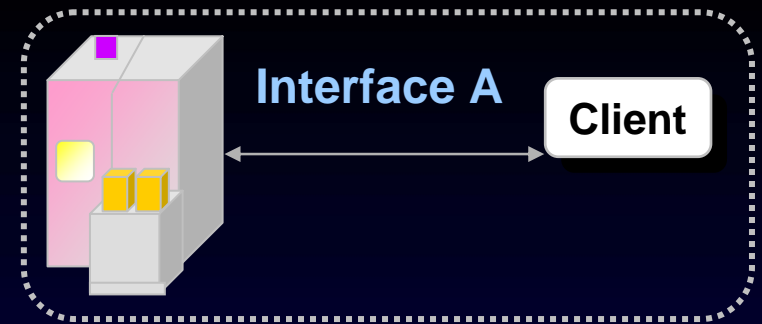
- **SEMI EDA standards: E120, E125, E132, E134, E138**
downloads.semi.org/PUBS/SEMIPUBS.NSF/webstandardssoftware!OpenView
teams.semi.org/QuickPlace/stds_icdda/Main.nsf/h_Toc/
- **e-Diagnostics Guidebook, v2.1**
ismi.sematech.org/docubase/document/4153deng.pdf
- **EEC Guidelines, v2.5**
ismi.sematech.org/emanufacturing/docs/eecguidebook.pdf
- **EEC High-level Requirements for APC**
ismi.sematech.org/emanufacturing/docs/EECReqs.pdf
- **EDA Usage Scenarios, 04104579B-TR**
ismi.sematech.org/docubase/abstracts/4579btr.htm
- **EDA Evaluation Methodology**
ismi.sematech.org/docubase/abstracts/4664btr.htm
- **Equipment Data Acquisition (EDA) Metadata Guidance**
ismi.sematech.org/docubase/abstracts/4748aeng.htm
- **Virus Protection, 04104567B-ENG**
ismi.sematech.org/docubase/abstracts/4567beng.htm
- **Time Synchronization, 04094557A-ENG**
ismi.sematech.org/docubase/abstracts/4557aeng.htm
- **NTP White Paper**
ismi.sematech.org/docubase/abstracts/4736aeng.htm

Accomplishments to Date

ISMI drove the industry to standardize a second data port (Interface A) to enable the member companies to obtain more and better equipment data

- ✓ Established member company consensus requirements and communicated requirements to suppliers
- ✓ Standardization is complete, modern Internet-based interface standards
- ✓ ISMI Sponsored Prototypes demonstrated Interface A feasibility
- ✓ Performance Studies demonstrated Interface A capabilities
 - ✓ Performance not an issue on properly architected solutions
 - ✓ ISMI Usage Scenarios represent the member company fab usage and define expected behaviors
 - ✓ EDA Evaluation Method provides common functional execution scenarios

Maturing Interface A



- ✓ **Compatibility Profiling**
 - ✓ Support for commercial implementers to confirm software interoperability
- ✓ **Reference Client Implementation**
 - ✓ ISMI providing common client software to suppliers (.exe file) and ISMI members (source code)
 - ✓ Utilizing client to evaluate implementations
- ✓ **Stability**
 - ✓ ISMI members froze on standards suite version 1105
- **Implementation Assessment**
 - Working with suppliers to provide an Advanced Software Tester for the industry

Conclusion

- *ISMI responded to member company requirements*
- *Interface A enables transmission of process and equipment data for e-Manufacturing*
 - *APC (Fault Detection & Classification, Run-2-Run Control)*
 - *Equipment health monitoring*
 - *Other equipment productivity enhancement applications*
- **Interface A deployment is ramping!**

Interface A brings a new generation of factory capabilities and applications

What's Next

- Working with suppliers to provide an Advanced Software Tester for the industry
- Data Quality is required for factory optimization
 - Begins with Time Synchronization guidelines and standard
- Recipe Management commercialization has begun

Thank You

- **Speakers**
 - AMD, Novellus, TEL, Qimonda
 - ISMI: Lance, Gino, Steve, Charisse
- **Demonstration Partners**
 - Asyst, Cimetrix, HCL
 - AIS, Infineon, Roth & Rau, Siemens
 - Asyst, Open Integration
- **For your attendance and interest**