

# Summary

## e- Manufacturing Workshop

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# What we've seen in this Workshop

- Equipment Engineering System is becoming the reality through EEC guidelines and SEMI standard
  - the real examples for OEE improvement in terms of concrete new EE data requirement and task & data sharing.
- Individual players in the industry need to examine one's own task sharing scheme and business models, and figure out best service providing with appropriate data handling mechanisms.

*and an important leap into e-Manufacturing.....*

# Where e-Manufacturing starts

- Phase 2.5 GLs provide directions for;
  - equipment control task sharing
  - a comprehensive way of handling more elaborate equipment controls
  - integration of all the possible process definition information
- Grand assumption of e-Manufacturing
  - Access to the required data AND collaboration/task sharing on the open mechanism.

# Summary

- **Need industry consensus for e-Manufacturing**
  - EEC systems shall have open architectures
  - EEC systems shall make data readily available to the chip maker
- **Collaboration among device makers, equipment makers, and software suppliers is a must**
  - Detailed equipment data is necessary through Interface A
  - The next step is detailed data analysis by EEC applications
- **Need to develop a new standardization process**
  - Prototype system development and standardization is critical

# Summary

## Next Steps

- **Continue to develop an industry-wide consensus for e-Mfg**
- **Discuss openly business and technical issues/barriers**
- **Continue standards development**
- **Develop standards that are testable and certifiable**
- **Expand and accelerate early standards validation testing**
- **Commercial availability of Interface A is needed ASAP**

# Summary

## Key Messages

- **e-Mfg builds upon 300mm standards – these must be completed by the semiconductor community**
- **OEMs are deploying e-Diagnostics & EEC solutions (100s of tools) – and reporting significant benefit**
- **Interface A (data off the equipment) is the current focus: standardized, open, and with accurate data**
- **Prototypes needed: Interface A and e-Diagnostics**
- **Chipmakers and suppliers must cooperate early to assure mutual success**
- **International SEMATECH and Selete/JEITA are collaborating to assure these capabilities are made available as soon as possible**