

SUPPLY-CHAIN PERFORMANCE SUBCOMMITTEE MINUTES

Date: November 6, 2007
Location: Teleconference Only
Time: 1:30pm – 2:30pm (PST)

Participants:

Chelsea Boone - FSA
Ed Pausa - PricewaterhouseCoopers LLP
Colm Moran – Cragg House
Susanne Lake - Cragg House
Eelco Bergman - Vietnam-Chipscale Advanced Packaging Services
Roger DeAmicis - ChipX, Inc.
Dan Wark – Amalfi Semiconductor
Alex Delcea - PMC-Sierra, Inc.
Steve Joyce - Volterra Semiconductor
Jack Day - Analog Devices, Inc.
Joe Holt - Integra Technologies

Meeting Purpose:

- Discuss User Satisfaction Survey Results
- Discuss Survey Participation Trend Report
- Verify Current Formulas
- Verify Current Filters
- Discuss Participant Comments
- Discuss Changes to 2008 Survey/Report
- Discuss Future Timelines/Dates for Next Survey

Items Discussed/Conclusions:

- User Satisfaction Survey
 - Committee will continue to monitor participant concerns, as the survey will continue to stay open. If we continue to hear the same concerns, then we will implement their specific requests. However, we don't want to make the survey too granular, as we will not be able to report the data because of a shortage of data.
 - Flipchip and wirebond packaging information will be reported separately in the executive summary. Is there a figure of merit that could be normalized? How do you report normalized assembly data? Solution - come up with an algorithm by probing major players. Alex, Eelco and Dan will help to address this issue.
- Survey Participation Trend Report
 - Participation is remaining relatively the same QoQ. FSA will find out if the number of wafers purchased is increasing or decreasing and how many people access the survey results/report each quarter (might need to create new query).
- Verify Current Formulas
 - All formulas are correct.
 - Need to specify what formulas are weighted.
- Verify Current Filters
 - Steve will help develop mask filters by wafer size, process and geometry.
- Participant Comments
 - Regarding test, I suggest adding a mandatory field for tester platform (e.g. J750, Integra flex, catalyst, etc.). This field will help to analyze the test price wisely. – YES, committee agreed this would be helpful. Joe will help create the question and selections that they may choose from.

- Hourly Rates: In order to compare this to our internal cost, we would like to ask you whether those include just the tester; tester and handler; tester, handler and other equipment needed for test; or pricing of test houses projected on an hourly basis. – Committee agreed to input that it includes tester w/handler or tester w/prober in the yellow question mark box next to “Hourly Rate” to clarify. Will also clarify that a participant can report an hourly rate over a group of parts.
- The back-end pricing that is entered in the survey - should it include grinding, sorting, boxing and trays, and packaging materials, or is it just purely packaging? – Committee agreed that it should include all those above, however, sorting needs to change to marking.
- Committee decided to take out the Die Size question in the survey, as it is not included in the interactive results, does not affect any of our formulas and many participants find it confusing.
- There was no 100mm option for wafer size available. We put in the nearest option, which was 150mm. – Committee agreed to now include 100mm wafer size in the survey.
- There was no option of EXACTLY 1.0um geometry available, we had to select between 0.8um and >1.0um. Here again, we selected the nearest option which was >1.0um, but the correct, exact number for the "foundry nbr 2" is EXACTLY 1.0um geometry. – Committee agreed to include “>=1.0” in the survey.
- Changes to 2008 Survey/Report
 - Need to include median and average on the same graph.
 - Should we graph forecasts? – NO
 - It might be interesting to create a survey for wafer and back-end contractors (suppliers) to track their capacity, what packages they have available, etc. This will be beneficial to fabless and IDM companies.
- Future Timelines/Dates for Next Survey
 - The next subcommittee meeting will be held on 11/26/2007 at 1:30pm (PST) to discuss the Q4 2007 Wafer & Back-End Pricing Survey results.
 - The next survey (Q1 2008) will begin 1/2/2008.

*For additional information, please see the PowerPoint presentation that was given at Tuesday’s meeting.