S9S08LG32 TEST ELIMINATION REPORT

1. Objective

This report describes the S9S08LG32 Room/Cold Final Test elimination plan and results.

Current Final Test Flow:

Hot Temp Testing \rightarrow Cold Temp Testing \rightarrow Room Temp Testing \rightarrow In line Quality Assurance (QA) Gate

Proposed Final Test Flow:

Hot Temp Testing \rightarrow In Line Quality Assurance (QA) Gate

2. General Information

Product Family: S9S08LG32 Mask set: M48V Package(s): LQFP80 Test Site: Freescale KLM-FM, KLM, Malaysia Test Platform: J750

3. Qualification Plan

The requirements and acceptance criteria were based on Freescale specification 12MWS10108G. Achieve zero test insert failures from at least 6109 units tested to the standard production Final Test flow. Units must be sourced from at minimum of 3 wafer lots from the same fab, mask set, and processed over a minimum period of 4 weeks.

4. Correlation/Qualification Results:

4.1. Lots and Data Summary:

Final Test: Identify any initial rejects and containment actions

	Failing Test	# of units	Containment
1	None		None required
2			
3			
4			
5			
6			
7			
8			

The following lots represent a total of 23731 units that were evaluated post test enhancement or guardband adjustments, resulting in 0 Room and Cold test rejects.

Lot summary.

Lot	Device	Wafer Lot	Test lot	Lot Quantity
1	MC9S08LG32CLK	PC903117R1	KLMHA15A1700	3140
2	MC9S08LG32CLK	PC903117R1	KLMHA15MH500	2890
3	MC9S08LG32CLK	PC903117R1	KLMHA15MH600	4308
4	MC9S08LG32CLH	PC01100800	TJMEA0RH5V00	3157
5	MC9S08LG16CLH	PC01031500	TJMEA0QS6J00	10236
6				
7				
8				
9				

10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
	23731		

Final Verification steps:

JVT test is contained in the Hot Test flow, the last Final Test insertion.

NVM erase and security disable are being done at the end of the Hot Test flow, the last Final Test insertion.

Flash contents (including main array and information row) are verified and in the correct state.



5. Product Quality Customer Return Assessment

This is no customer return incident until now.

6. Data Analysis and Verification Summary

From the above data, it was verified that the the requirements and acceptance criteria based on Freescale specification 12MWS10108G was achieved. For the Final test flow, Cold/Room can be eliminated for S9S08LG32.

7. Document History:

Rev	Date	Originator
0	Nov2010	Su Yue