
MC9S12XDP512 (L15Y) ROOM TEST ELIMINATION REPORT

1. Objective

This report describes the MC9S12XDP512 Room Final Test elimination plan and results.

Current Final Test Flow:

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

Proposed Final Test Flow:

Cold Temp Testing → Hot Temp Testing → In Line Quality Assurance (QA) Gate

2. General Information

Product Family: MC9S12XDP512

Mask set: L15Y

Package(s): LQFP 144 20*20*1.4P0.5, LQFP 112 20*20*1.4P0.65, and QFP 80 14*14*2.2P0.65

Test Site: Freescale Kuala Lumpur Malaysia / KESM Test Malaysia

Test Platform: J750

3. Qualification Plan

The requirements and acceptance criteria were based on Freescale specification 12MRE10539D.

Achieve zero test insert failures from at least 100,000 units tested to the standard production Final Test flow. Units must be sourced from at minimum of 12 wafer lots from the same fab, mask set, and processed over a minimum period of 9 weeks.

For Auto, verify zero Room Final Test failures.

4. Correlation/Qualification Results:

4.1. Lots and Data Summary:

Lot summary. No unresolved rejects were observed.

Auto

Lot	Wafer Lot	Test Lot	Quantity	Unresolved Rejects
1	MXPC8Y462900	KLMHA0VRHR00	1,704	0
2	MXPC8Y641900	KLMHA0VYJQ00	2,914	0
3	MXPC8Y507000	KLMHA0WC9500	2,302	0
4	MXPC8Y507200	KLMHA0WC9600	3,362	0
5	MXPC8Y507200	KLMHA0WC9800	3,282	0
6	MXPC8Y507200	KLMHA0WC9700	3,343	0
7	MXPC8Y507200	KLMHA0WC9900	3,156	0
8	MXPC8Y507000	KLMHA0WATL00	1,737	0
9	MXPC8Y568900	KLMHA0WC9A00	2,104	0
10	MXPC8Y462500	KLMHA0WDCL00	3,170	0
11	MXPC8Y677700	KLMHA0WN9F00	1,599	0
12	MXPC8Y690400	KLMHA0WK2400	541	0
13	MXPC8Y677700	KLMHA0WN9A00	3,377	0
14	MXPC8Y677700	KLMHA0WN9D00	3,288	0
15	MXPC8Y690200	KLMHA0WFLW00	3,240	0
16	MXPC8Y677700	KLMHA0WN9E00	1,799	0
17	MXPC8Y462500	KLMHA0WH7N00	523	0
18	MXPC8Y690400	KLMHA0WK2900	2,158	0
19	MXPC8Y641901	KLMHA0WN9400	559	0
20	MXPC8Y642000	KLMHA0WQ5W00	3,132	0
21	MXPC8Y462500	KLMHA0WRZW00	1,574	0
22	MXPC8Y723400	KLMHA0WU3Z00	3,450	0

23	MXPC8Y690100	KLMHA0WRHE00	1,759	0
24	MXPC8Y720300	KLMHA0WR7U00	3,336	0
25	MXPC8Y642000	KLMHA0WQ5T00	3,408	0
26	MXPC8Y462500	KLMHA0WQP000	537	0
27	MXPC8Y659200	KLMHA0WP6E00	2,003	0
28	MXPC8Y642000	KLMHA0WQ5U00	3,443	0
29	MXPC8Y462500	KLMHA0WRHD00	1,087	0
30	MXPC8Y728500	KLMHA0WTLW00	3,188	0
31	MXPC8Y720600	KLMHA0WRZU00	3,209	0
32	MXPC8Y437900	KLMHA0WWGD00	1,022	0
33	MXPC8Y723400	KLMHA0WU3R00	1,084	0
34	MXPC8Y744800	KLMHA0WXX400	3,388	0
35	MXPC8Y728700	KLMHA0WXWM00	3,453	0
36	MXPC8Y745100	KLMHA0WXX600	3,400	0
37	MXPC8Y709400	KLMHA0WXWV00	3,354	0
38	MXPC8Y478100	KLMHA0WYJD00	3,252	0
39	MXPC8Y729300	KLMHA0WXXL00	3,137	0
40	MXPC8Y744800	KLMHA0WXX500	2,795	0
41	MXPC8Y601100	KLMHA0X0GT00	3,371	0
42	MXPC8Y478100	KLMHA0WYJE00	3,273	0
43	MXPC8Y723400	KLMHA0X27000	3,325	0
44	MXPC8Y601200	KLMHA0X2G200	3,161	0
45	MXPC8Y601200	KLMHA0X2G300	3,340	0
46	MXPC8Y720200	KLMHA0X26Z00	2,502	0
		Total	118,141	0

4.2 Product Quality Customer Return Assessment

It has been verified that all available customer returns (CQI) can be detected by the remaining test insertion(s).

5. Data Analysis and Verification Summary

From the above data, it was verified that the requirements and acceptance criteria based on Freescale specification 12MRE10539D was achieved. For the Final test flow, Room can be eliminated for Product Marketing Family.

6. Document History:

Rev	Date	Originator
0	14 October 2009	Kenny Tan