



Product Change Notification / MAAN-12TDMK498

Date:

18-Dec-2023

Product Category:

Memory

PCN Type:

Manufacturing Change

Notification Subject:

CCB 6760 Initial Notice: Qualification of ATP7 as an additional assembly site for selected SST38VF640x, SST39LF40x, SST39LF80xx, SST39VF16xx, SST39VF32xx, SST39VF40xx, SST39VF80xx, SST39WF160x, SST39WF800B and SST39WF400B device families available in 48L TFBGA (6x8x1.2mm) package.

Affected CPNs:

[MAAN-12TDMK498_Affected_CPN_12182023.pdf](#)

[MAAN-12TDMK498_Affected_CPN_12182023.csv](#)

Notification Text:

PCN Status:Initial Notification

PCN Type:Manufacturing Change

Microchip Parts Affected:Please open one of the files found in the Affected CPNs section.

Note: For your convenience Microchip includes identical files in two formats (.pdf and .xls)

Description of Change:Qualification of ATP7 as an additional assembly site for selected SST38VF640x, SST39LF40x, SST39LF80xx, SST39VF16xx, SST39VF32xx, SST39VF40xx, SST39VF80xx, SST39WF160x, SST39WF800B and SST39WF400B device families available in 48L TFBGA (6x8x1.2mm) package.

Pre and Post Change Summary:

	Pre Change	Post Change	
Assembly Site	Lingsen Precision Industries, LTD. (LPI)	Lingsen Precision Industries, LTD. (LPI)	Amkor Technology Philippines (P3/P4), INC. (ATP7)
Core Material	HL832NXA	HL832NXA	HL832NXA
SM Material	AUS308	AUS308	AUS308
Wire Material	Au	Au	Au
Die attach Material	2100A	2100A	2300
Molding Compound Material	G770HT	G770HT	G770FE
Solder Ball Material	SAC405	SAC405	SAC405

Impacts to Data Sheet:None

Change Impact:None

Reason for Change:To improve on-time delivery performance by qualifying ATP7 as an additional assembly site.

Change Implementation Status:In Progress

Estimated Qualification Completion Date:May 2024

Note: Please be advised the qualification completion times may be extended because of unforeseen business conditions however implementation will not occur until after qualification has completed and a final PCN has been issued. The final PCN will include the qualification report and estimated first ship date. Also note that after the estimated first ship date guided in the final PCN customers may receive pre and post change parts.

Time Table Summary:

	December 2023					>	May 2024				
Workweek	4 8	4 9	5 0	5 1	5 2		18	19	20	21	22
Initial PCN Issue Date				x							
Qual Report Availability							x				
Final PCN Issue							x				

Affected Catalog Part Numbers (CPN)

SST39VF1681-70-4C-B3KE
SST39VF1682-70-4C-B3KE
SST39VF1602-70-4C-B3KE
SST39VF1601-70-4C-B3KE
SST39VF1601-70-4C-B3KE-T
SST39VF1602-70-4C-B3KE-T
SST39VF1601-70-4I-B3KE
SST39VF1602-70-4I-B3KE
SST39VF1681-70-4I-B3KE
SST39VF1682-70-4I-B3KE
SST39VF1601-70-4I-B3KE-T
SST39VF1602-70-4I-B3KE-T
SST39VF1682-70-4I-B3KE-T
SST39VF3201B-70-4I-B3KE-T
SST39VF1601C-70-4I-B3KE
SST39VF1602C-70-4I-B3KE
SST39VF400A-70-4C-B3KE-T
SST39VF1601C-70-4I-B3KE-T
SST39VF1602C-70-4I-B3KE-T
SST39VF3201B-70-4C-B3KE
SST39VF3202B-70-4C-B3KE
SST39VF400A-70-4I-B3KE-T
SST39VF3201B-70-4I-B3KE
SST39VF3202B-70-4I-B3KE
SST39VF3202B-70-4I-B3KE-T
SST39LF401C-55-4C-B3KE
SST39VF400A-70-4C-B3KE
SST39VF400A-70-4I-B3KE
SST39LF402C-55-4C-B3KE
SST39VF401C-70-4C-B3KE
SST39VF402C-70-4C-B3KE
SST39VF401C-70-4I-B3KE
SST39VF402C-70-4I-B3KE
SST39VF402C-70-4I-B3KE-T
SST39LF401C-55-4C-B3KE-T
SST39LF402C-55-4C-B3KE-T
SST39VF401C-70-4C-B3KE-T
SST39VF402C-70-4C-B3KE-T
SST39VF401C-70-4I-B3KE-T
SST39VF3201-70-4I-B3KE-T
SST39VF3202-70-4I-B3KE-T
SST39VF3201-70-4C-B3KE-T
SST39VF3202-70-4C-B3KE-T
SST39VF3201-70-4C-B3KE
SST39VF3202-70-4C-B3KE
SST39WF800B-70-4I-B3KE-T

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SST38VF6402-90-5C-B3KE

SST38VF6401-90-5C-B3KE

SST38VF6403-90-5C-B3KE

SST38VF6404-90-5C-B3KE

SST39VF3201-70-4I-B3KE

SST39VF3202-70-4I-B3KE

SST38VF6401-90-5I-B3KE-T

SST38VF6402-90-5I-B3KE-T

SST38VF6401-90-5I-B3KE

SST38VF6402-90-5I-B3KE

SST38VF6403-90-5I-B3KE

SST38VF6404-90-5I-B3KE

SST38VF6401-90-5I-B3KE-NCJ

SST39WF1601-70-4C-B3KE

SST39WF1602-70-4C-B3KE

SST39WF800B-70-4C-B3KE

SST39WF800B-70-4I-B3KE

SST39WF1601-70-4C-B3KE-T

SST39WF1602-70-4C-B3KE-T

SST39VF800A-70-4C-B3KE

SST39VF800A-70-4I-B3KE

SST39VF800A-70-4C-B3KE-T

SST39VF800A-70-4I-B3KE-T

SST39WF1601-70-4I-B3KE

SST39WF1602-70-4I-B3KE

SST39WF1601-70-4I-B3KE-T

SST39WF1602-70-4I-B3KE-T

SST39WF1601-70-4I-B3KE-MQ1

SST39WF1602-70-4I-B3KE-MQ2

SST39WF1601-70-4I-B3KE-MQ1-T

SST39WF1602-70-4I-B3KE-MQ2-T

SST39VF801C-70-4C-B3KE

SST39VF802C-70-4C-B3KE

SST39VF801C-70-4I-B3KE

SST39VF802C-70-4I-B3KE

SST39LF801C-55-4C-B3KE-T

SST39LF801C-55-4C-B3KE

SST39LF802C-55-4C-B3KE

SST39LF802C-55-4C-B3KE-T

SST39VF801C-70-4C-B3KE-T

SST39VF802C-70-4C-B3KE-T

SST39VF801C-70-4I-B3KE-T

SST39VF802C-70-4I-B3KE-T

SST39VF3201B-70-4I-B3KE-125

SST39LF800A-55-4C-B3KE-T

SST39LF400A-55-4C-B3KE-T

SST39LF800A-55-4C-B3KE

SST39LF400A-55-4C-B3KE

SST39WF400B-70-4C-B3KE

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~~SST39WF400B-70-4I-B3KE~~

SST39WF400B-70-4C-B3KE-T

SST39WF400B-70-4I-B3KE-T

SST39VF1601-70-4I-B3KE-T-MCH

SST39VF1601C-70-4C-B3KE

SST39VF1602C-70-4C-B3KE

SST39VF1601C-70-4C-B3KE-T

SST39VF1602C-70-4C-B3KE-T



QUALIFICATION PLAN SUMMARY

PCN #: MAAN-12TDMK498

Date:

December 07,2023

**Qualification of ATP7 as an additional assembly site for selected
SST38VF640x, SST39LF40x, SST39LF80xx, SST39VF16xx,
SST39VF32xx, SST39VF40xx, SST39VF80xx, SST39WF160x,
SST39WF800B and SST39WF400B device families available in 48L
TFBGA (6x8x1.2mm) package.**

Purpose: Qualification of ATP7 as an additional assembly site for selected SST38VF640x, SST39LF40x, SST39LF80xx, SST39VF16xx, SST39VF32xx, SST39VF40xx, SST39VF80xx, SST39WF160x, SST39WF800B and SST39WF400B device families available in 48L TFBGA (6x8x1.2mm) package.

CCB No.: 6760

<u>Misc.</u>	Assembly site	ATP7
	BD Number	BD-002027-01
	MP Code (MPC)	T000778TXM70
	Part Number (CPN)	SST39VF3201-70-4I-B3KE
	MSL information	MSL3/260
	Assembly Shipping Media (T/R, Tube/Tray)	Tray
	Base Quantity Multiple (BQM)	480
	Reliability Site	MPHIL
<u>Substrate</u>	Core Material	HL832NXA
	Core Thickness	100um
	L1/L2 Thickness	12/12um
	SM Material	AUS308
	Process	Std
	SM Thickness	30um
	Part Number	101427171
	Drill Size	150um
	Line/Space Specs	40 / 40 um
<u>Bond Wire</u>	Material	Au
<u>Die Attach</u>	Part Number	2300
	Conductive	Yes
<u>MC</u>	Part Number	G770FE
<u>PKG</u>	PKG Type	TFBGA
	Pin/Ball Count	48
	PKG width/size	6x8x1.2mm
	Ball Pitch/Size	0.80 mm / 0.45 mm
	Solder Ball Material	SAC405

Test Name	Conditions	Reliability Stress Read Point	Pre & Post Reliability Stress Test Temperature	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	ATE Test Site	REL Test Site	Special Instructions
Wire Bond Pull - WBP	Mil. Std. 883-2011			5	0	1	5	0 fails after TC	5			30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001			5	0	1	5	0	5			30 bonds from a min. 5 devices.
Physical Dimensions	Measure per JESD22 B100 and B108			10	0	3	30	0	5			
Solder Ball Shear (For BGA device only)	AEC Q100-010 AEC Q003			10	0	3	30	0	5			5 balls from a min. of 10 devices.
External Visual	Mil. Std. 883-2009/2010			All devices prior to submission for qualification testing	0	3	ALL	0	5			
HTSL (High Temp Storage Life)	JESD22-A103 +125°C, +150°C or +175°C	Grade 3: 500 hrs (150°C)	Grade 3: +25°C, +95°C	45	5	1	50	0	21 - 83	MTAI	MTAI	Spares should be properly identified.
Preconditioning - Required for surface mount devices	J-STD-020 JESD22-A113 +150°C Bake for 24 hours, moisture loading requirements per MSL level + 3X reflow at peak reflow temperature per Jedec-STD-020E for package type. MSL3/260		Grade 3: +25°C	231 + 45 (for devices requiring PTC)	15 + 5 (for devices requiring PTC)	3	738 + 50 (for devices requiring PTC)	0	15	MTAI	MTAI	Spares should be properly identified. 77 parts from each lot to be used for HAST, uHAST, Temp Cycle test. 45 parts from one lot to be used for PTC test (for devices requiring PTC).
HAST	JESD22-A101 or A110 +130°C/85% RH for 96 hrs or +110°C/85%RH for 264 hrs	Grade 3: 96 hrs (+130°C/85% RH)	Grade 3: +25°C, +95°C	77	5	3	246	0	10 - 14	MTAI	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
UHAST	JESD22-A102, A118, or A101 +130°C/85% RH for 96 hrs or +110°C/85% RH for 264 hrs	Grade 3: 96 hrs (+130°C/85% RH)	Grade 3: +25°C	77	5	3	246	0	10	MTAI	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Temp Cycle	JESD22-A104 and Appendix 3 -55°C to +125°C, -55°C to +150°C or -65°C to +150°C	Grade 3: 500 cycles (-55°C to +125°C)	Grade 3: +95°C	77	5	3	246	0	15 - 60	MTAI	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.