



<b>Title of Change:</b>	1) Qualification of OSPI Carmona Assembly and ISMF Fab site for SOIC16 MMPQ devices. 2) Capacity expansion of Assembly and Test operations of former Fairchild SSOT 3L Transistor to ON Semiconductor Seremban Malaysia and wafer Fab change from Phenetic, Japan to ON Semiconductor ISMF Malaysia.	
<b>Proposed First Ship date:</b>	01 Jul 2021 or earlier if approved by customer	
<b>Contact Information:</b>	Contact your local ON Semiconductor Sales Office or <a href="mailto:Suthakaran.Solamuthu@onsemi.com">Suthakaran.Solamuthu@onsemi.com</a> or <a href="mailto:farrah.omar@onsemi.com">farrah.omar@onsemi.com</a>	
<b>PCN Samples Contact:</b>	Contact your local ON Semiconductor Sales Office or < <a href="mailto:PCN.samples@onsemi.com">PCN.samples@onsemi.com</a> >. Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.	
<b>Additional Reliability Data:</b>	Contact your local ON Semiconductor Sales Office or <a href="mailto:Dustin.Tenney@onsemi.com">Dustin.Tenney@onsemi.com</a>	
<b>Type of Notification:</b>	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. ON Semiconductor will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a>	
<b>Marking of Parts/ Traceability of Change:</b>	Customers may receive the parts once FPCN expired or earlier depending on customer approval. Parts from new assembly and test can be identified through product marking and product packaging which follows ON Semiconductor standard format.	
<b>Change Category:</b>	Test Change, Assembly Change, Wafer Fab Change	
<b>Change Sub-Category(s):</b>	Manufacturing Site Transfer, Manufacturing Site Addition	
<b>Sites Affected:</b>		
<b>ON Semiconductor Sites</b>	<b>External Foundry/Subcon Sites</b>	
ON Semiconductor Carmona, Philippines	Phenitec Semiconductor, Japan	
ON Semiconductor Cebu, Philippines	Amkor, Philippines	
ON Semiconductor Seremban, Malaysia		
<b>Description and Purpose:</b>		
<p>This Product Change Notice announces that ON Semiconductor is transferring Assembly operation site of former Fairchild Small Signal Transistors in SOIC-16 package from existing external manufacturing facility to internal manufacturing site; ON Semiconductor Carmona, Philippines and capacity expansion of Assembly and Test operations of former Fairchild SSOT 3L Transistor to ON Semiconductor Seremban Malaysia.</p> <p>ON Semiconductor also notifying customers the qualification of ON Semiconductor ISMF, Malaysia as the wafer source for these parts. ON Semiconductor ISMF Wafer Fab is an internal fabrication facility that is TS16949, ISO-9001 and ISO-14000 certified.</p>		
<b>SOIC16 MMPQ devices :</b>		
	<b>Before Change Description</b>	<b>After Change Description</b>
LeadFrame	CuAg Leadframe	Rough PPF Leadframe
Die Attach	Ablebond 8290	Ablestik ABP8062T
Mold Compound	EME G600	G700LS
Moisture Sensitivity Level	MSL3	MSL1
Assembly Site	Amkor, Philippines	ON Semiconductor Carmona, Philippines
Wafer FAB /BG/BM Site	Phenitec Fab, Japan	ON Semiconductor Seremban (ISMF), Malaysia



## SSOT3 devices :

	Before Change Description	After Change Description
Mold Compound	CEBU: GREEN PA CK5000A	CEBU : GREEN PA CK5000A Seremban : SUMITOMO EME-G600FB
Assembly/Test Site	ON Semiconductor Cebu	ON Semiconductor Seremban ON Semiconductor Cebu
Wafer FAB /BG/BM Site	Phenitex Fab, Japan	ON Semiconductor Seremban (ISMF), Malaysia

## Reliability Data Summary:

QV DEVICE NAME: MMPQ2907A (PNP)RMS: O66482, 067493PACKAGE: SOIC16

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 80% max rated V	1008 hrs	0/240
HTSL	JESD22-A103	Ta=150°C	1008 hrs	0/240
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/120
TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/240
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/240
AC	JESD22-A102	121°C, 100% RH, 15psig	96 hrs	0/240
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/840
RSH	JESD22- B106	Ta = 265C, 10 sec		0/90
SD	JSTD002	Ta = 245C, 5 sec		0/45
PD	JESD22 B100			0/30

QV DEVICE NAME: MMPQ6700 (PNP/NPN)RMS: O64491, 045670PACKAGE: SOIC16

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 80% max rated V	1008 hrs	0/160
HTSL	JESD22-A103	Ta=150°C	1008 hrs	0/80
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/80
TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/80
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/160
AC	JESD22-A102	121°C, 100% RH, 15psig	96 hrs	0/80
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/320
RSH	JESD22- B106	Ta = 265C, 10 sec		0/30
SD	JSTD002	Ta = 245C, 5 sec		0/15
PD	JESD22 B100			0/30



QV DEVICE NAME FSB749

RMS L70999,V67552,V68690,S68747,S72533

PACKAGE SSOT3

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta= 150°C,100% rated max voltage	1008 hrs	0 / 385
HTSL	JESD22-A103	Ta=150°C	1008 hrs	0 / 385
TC	JESD22-A104	Ta= -55°C to +125°C	1000 cyc	0 / 616
HAST	JESD22-A110	130°C, 85% RH, bias	96 hrs	0 / 385
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0 / 385
IOL	MIL-STD-750	Ta=+25°C, delta Tj=100°C On/off = 2 min	15k cyc	0/271
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		
RSH	JESD22- B106	Ta = 265C, 10 sec		0 / 30
SD	J-STD-002			0/45

**Electrical Characteristics Summary:**

Electrical characteristics are not impacted.

**List of Affected Parts:**

*Note: Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the [PCN Customized Portal](#).*

Part Number	Qualification Vehicle
FSB749	FSB749
FMMT549	FSB749
MMPQ2222A	MMPQ6700
MMPQ3906	MMPQ2907A
MMPQ3904	MMPQ6700
MMPQ6700	MMPQ6700
MMPQ2907A	MMPQ2907A



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**Appendix A: Changed Products**

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**PCN#: FPCN23779X**  
**Issue Date: Mar 23, 2021**

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Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
FSB749		FSB749	NA	
FMMT549		FSB749	NA	
MMPQ2222A		MMPQ6700	NA	
MMPQ2907A		MMPQ2907A	NA	
MMPQ6700		MMPQ6700	NA	
MMPQ3904		MMPQ6700	NA	
MMPQ3906		MMPQ2907A	NA	