



Title of Change:	SOIC-8 Insourcing to ON Semiconductor Philippines (OSPI) Factory from HANA (Thailand)	
Proposed first ship date:	28 June 2018 or earlier upon customer approval	
Contact information:	Contact your local ON Semiconductor Sales Office or <Shannon.Riggs@onsemi.com>	
Samples:	Contact your local ON Semiconductor Sales Office	
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or <shannon.riggs@onsemi.com>	
Type of notification:	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 <PCN.Support@onsemi.com>.	
Change Part Identification:	Product marked with date code 2518 or later may be built from current factory or from OSPI Factory. The trace code marking on Line 2 is of the form ALYW where A = Assembly Location, L = Wafer Lot ID and YW is a 2-digit date code. Product marked with "P" as the assembly location will be from OSPI. Additionally on the label of the box and reel, the ASSY LOC: PO will also indicate product assembled in OSPI. Please see sample label on Page 2 at the following URL http://www.onsemi.com/pub/Collateral/LABELRM-D.PDF to see the location of the ASSY LOC.	
Change category:	<input type="checkbox"/> Wafer Fab Change <input checked="" type="checkbox"/> Assembly Change <input checked="" type="checkbox"/> Test Change <input type="checkbox"/> Other _____	
Change Sub-Category(s):	<input checked="" type="checkbox"/> Manufacturing Site Change/Addition <input checked="" type="checkbox"/> Material Change <input type="checkbox"/> Datasheet/Product Doc change <input type="checkbox"/> Manufacturing Process Change <input type="checkbox"/> Product specific change <input checked="" type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Other: _____	
Sites Affected:	ON Semiconductor Sites: ON Carmona, Philippines	External Foundry/Subcon Sites: HANA, Thailand
Description and Purpose:		
<p>ON Semiconductor would like to inform its customers of the qualification of ON Semiconductor Philippines (OSPI) for the assembly and test of all of the SOIC-8 products listed in this Final Product Change Notification (FPCN). This is a capacity expansion, and at the end of the FPCN approval cycle, these products may be dual sourced from either HANA, Thailand or from OSPI.</p> <p>For Test, consigned testers and handlers as HANA have been transferred to OSPI to support the testing of products. The same load boards, test programs and other necessary hardware that is used in HANA, will be used to test the products listed.</p> <p>For assembly, BOM changes associated with this FPCN are shown here:</p>		
	Before Change Description	After Change Description
Leadframe	Cu NiPdAu Plating	Cu NiPdAu Plating (no change)
Mold Compound	CEL8240HF10LYR, HENKEL GR828FC1	EME G600
Die Attach	Henkel QMI519	Henkel SBP-8062T
Wire Size and material	1.0mil Au	1.0mil Au (no change)



Additionally, this FPCN serves to notify customers of a change in the marking for all products listed for BOTH sites, HANA and OSPI. The new marking will be of the form:



Line 1 is the Product Identification (see table for new Product IDs)

Line 2 is the Trace code with the following nomenclature: A = Assy Location, L = Wafer Lot ID, YW = 2 digit date code. The X at the end of the line is a wrap character if additional identification is needed from Line 1.

HANA: A = H

OSPI: A = P

OPN	Line 1 Marking
LM2903M	LM2903M
LM2903MX	LM2903M
LM2904M	LM2904M
LM2904MX	LM2904M
LM358AM	LM358AM
LM358AMX	LM358AM
LM358M	LM358M
LM358MX	LM358M
LM393AM	LM393AM
LM393AMX	LM393AM
LM393M	LM393M
LM393MX	LM393M
LP2951CM	LP2951CM
LP2951CMX	LP2951CM



Reliability Data Summary:

QV DEVICE NAME: LM2904MXRMS: K44373, O45110PACKAGE: SOIC 8

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 80 % max rated Vcc	1008 hrs	0/80
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/77
TC	JESD22-A104	Ta= -65°C to +150°C	1000 cyc	0/80
THB	JESD22-A101C	85°C, 85% RH, bias	1008 hrs	0/80
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	192 hrs	0/80
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	-	0/320
SAT	JEDEC STD 035	Pre and Post MSL 1	-	0/25
RSH	JESD22- B106	Ta = 265C, 10 sec	-	0/30
SD	JSTD002	Ta = 245C, 10 sec	-	0/15
PD	JESD22-B100	Per POD, case 751EB	-	0/30
CDPA	MILSTD750 Method 2037	Wire Pull after TC500 cycles	-	0/5

QV DEVICE NAME: LP2951CMXRMS: K44371, O45090PACKAGE: SOIC 8

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 80 % max rated Vcc	1008 hrs	0/80
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/77
TC	JESD22-A104	Ta= -65°C to +150°C	1000 cyc	0/80
THB	JESD22-A101C	85°C, 85% RH, bias	1008 hrs	0/80
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	192 hrs	0/80
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	-	0/320
SAT	JEDEC STD 035	Pre and Post MSL 1	-	0/25
RSH	JESD22- B106	Ta = 265C, 10 sec	-	0/30
SD	JSTD002	Ta = 245C, 10 sec	-	0/15
PD	JESD22-B100	Per POD, case 751EB	-	0/30
CDPA	MILSTD750 Method 2037	Wire Pull after TC500 cycles	-	0/5



QV DEVICE NAME: FAN7527BMX

RMS K43325, O44719

PACKAGE SOIC 8

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 80 % max rated Vcc	1008 hrs	0/80
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/77
TC	JESD22-A104	Ta= -65°C to +150°C	1000 cyc	0/80
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs	0/80
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	192 hrs	0/80
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	-	0/320
SAT	JEDEC STD 035	Pre and Post MSL 1	-	0/25
RSH	JESD22- B106	Ta = 265C, 10 sec	-	0/30
SD	JSTD002	Ta = 245C, 10 sec	-	0/15
PD	JESD22-B100	Per POD, case 751EB	-	0/30
CDPA	MILSTD750 Method 2037	Wire Pull after TC500 cycles	-	0/5

Electrical Characteristic Summary:

Electrical characteristics are not impacted by this change. Electrical comparison reports are available upon request

List of Affected Standard Parts:

Part Number	Qualification Vehicle	
LM2903M	LM2904MX	
LM2903MX		
LM2904M		
LM2904MX		
LM358AM		
LM358AMX		
LM358M		
LM358MX		
LM393AM		
LM393AMX		
LM393M		
LM393MX		
LP2951CM		LP2951CMX
LP2951CMX		