ON Semiconductor

FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #20324-D

Generic Copy

Issue Date: 23-Jul-2014

TITLE: Assembly and Test site transfer from Kanto Sanyo Semiconductors Co., Ltd to ON Semiconductor SSMP Philippines Corporation (Group 01-D)

PROPOSED FIRST SHIP DATE: 24-Oct-2014 (or earlier upon approval due to shortage of product)

AFFECTED CHANGE CATEGORY(S): Assembly and Test site

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact your local ON Semiconductor Sales Office or
<toshiitsu.igarashi@onsemi.com><takeshi2.hoshino@onsemi.com> <shinya.okada@onsemi.com>
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SAMPLES: Contact your local ON Semiconductor Sales Office or <Takakshi.Asami@onsemi.com>

ADDITIONAL RELIABILITY DATA: Available
Contact your local ON Semiconductor Sales Office
or<Takashi.Naruse@onsemi.com><Satoru.Fujinuma@onsemi.com>

NOTIFICATION TYPE:

Final Product/Process Change Notification (FPCN)

Final change notification sent to customers. FPCNs are issued at least 90 days prior to implementation of the change.

ON Semiconductor will consider this change approved unless specific conditions of acceptance are provided in writing within 30 days of receipt of this notice. To do so, contact <quality@onsemi.com>.

DESCRIPTION AND PURPOSE:

As a part of restructuring of semiconductor production infrastructure, Hanyu plant of Kanto Sanyo Semiconductors Co., Ltd will be closed at the end of June, 2014 and have been started preparation for end of production.

In order to continue supply of applicable products under this condition, the products and the equipments will be transferred to ON Semiconductor SSMP Philippines Corporation.

The materials and package outline of these products will remain identical. Qualification tests are designed to show that the reliability of transferred devices will continue to meet or exceed ON Semiconductor standards.

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RELIABILITY DATA SUMMARY:

Package name: VCT16

Test Items	Test Condition	Test Time	Results
Temperature Humidity Bias *	Ta=85degC,RH=85%, Vcc=Recommended	168hrs	Pass
Temperature Humidity Storage *	Ta=85degC,RH=85%	168hrs	Pass
Temperature Cycle *	Ta=-65degC(30min) ⇔ Ta=150degC (30min)	100cycles	Pass
Pressure Cooker *	Ta=121degC,RH=100% ,205kPa	100hrs	Pass
High Temperature Storage	Ta=150degC	168hrs	Pass
Resistance to Soldering heat (Reflow Soldering)	255degC,10s (Peak260degC)	2times	Pass
Solderability	245degC,3s(with Flux) Soldering area,95% over(Sn-3.0Ag-0.5Cu)	1time	Pass

Notes:
The test items with * mark are put into operation after the reflow soldering (at 255degC for 10seconds) -> SMD
Temperature Humidity Bias Test: PD>=0.1W -> Intermittent power application consists of 1h ON and 3h OFF.
Judgment Criteria :
Judgment Criteria are due to the limits of the electrical characteristics in the detail specification. (Except for Solderability)

Package name: VCT20

Test Items	Test Condition	Test Time	Results
Temperature Humidity Bias *	Ta=85degC,RH=85%, Vcc=Recommended	168hrs	Pass
Temperature Humidity Storage *	Ta=85degC,RH=85%	168hrs	Pass
Temperature Cycle *	Ta=-65degC(30min) ⇔ Ta=150degC (30min)	100cycles	Pass
Pressure Cooker *	Ta=121degC,RH=100% ,205kPa	100hrs	Pass
High Temperature Storage	Ta=150degC	168hrs	Pass
Resistance to Soldering heat (Reflow Soldering)	255degC,10s (Peak260degC)	2times	Pass
Solderability	245degC,3s(with Flux) Soldering area,95% over(Sn-3.0Ag-0.5Cu)	1time	Pass

Notes:
The test items with * mark are put into operation after the reflow soldering (at 255degC for 10seconds) -> SMD
Temperature Humidity Bias Test: PD>=0.1W -> Intermittent power application consists of 1h ON and 3h OFF.
Judgment Criteria :
Judgment Criteria are due to the limits of the electrical characteristics in the detail specification. (Except for Solderability)

Package name: VCT24

Test Items	Test Condition	Test Time	Results
Temperature Humidity Bias *	Ta=85degC,RH=85%, Vcc=Recommended	168hrs	Pass
Temperature Humidity Storage *	Ta=85degC,RH=85%	168hrs	Pass
Temperature Cycle *	Ta=-65degC(30min) ⇔ Ta=150degC (30min)	100cycles	Pass
Pressure Cooker *	Ta=121degC,RH=100% ,205kPa	100hrs	Pass
High Temperature Storage	Ta=150degC	168hrs	Pass
Resistance to Soldering heat (Reflow Soldering)	255degC,10s (Peak260degC)	2times	Pass
Solderability	245degC,3s(with Flux) Soldering area,95% over(Sn-3.0Ag-0.5Cu)	1time	Pass

Notes:
The test items with * mark are put into operation after the reflow soldering (at 255degC for 10seconds) -> SMD
Temperature Humidity Bias Test: PD>=0.1W -> Intermittent power application consists of 1h ON and 3h OFF.

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Judgment Criteria :
Judgment Criteria are due to the limits of the electrical characteristics in the detail specification. (Except for Solderability)

Package name: VCT28

Test Items	Test Condition	Test Time	Results
Temperature Humidity Bias *	Ta=85degC,RH=85%, Vcc=Recommended	168hrs	Pass
Temperature Humidity Storage *	Ta=85degC,RH=85%	168hrs	Pass
Temperature Cycle *	Ta=-65degC(30min) ⇔ Ta=150degC (30min)	100cycles	Pass
Pressure Cooker *	Ta=121degC,RH=100% ,205kPa	100hrs	Pass
High Temperature Storage	Ta=150degC	168hrs	Pass
Resistance to Soldering heat (Reflow Soldering)	255degC,10s (Peak260degC)	2times	Pass
Solderability	245degC,3s(with Flux) Soldering area,95% over(Sn-3.0Ag-0.5Cu)	1time	Pass

Notes:
The test items with * mark are put into operation after the reflow soldering (at 255degC for 10seconds) -> SMD
Temperature Humidity Bias Test: PD>=0.1W -> Intermittent power application consists of 1h ON and 3h OFF.
Judgment Criteria :
Judgment Criteria are due to the limits of the electrical characteristics in the detail specification. (Except for Solderability)

Package name: FLGA24

Test Items	Test Condition	Test Time	Results
Temperature Humidity Bias *	Ta=85degC,RH=85%, Vcc=Recommended	168hrs	Pass
Temperature Humidity Storage *	Ta=85degC,RH=85%	168hrs	Pass
Temperature Cycle *	Ta=-65degC(30min) ⇔ Ta=150degC (30min)	100cycles	Pass
Pressure Cooker *	Ta=121degC,RH=100% ,205kPa	100hrs	Pass
High Temperature Storage	Ta=150degC	168hrs	Pass
Resistance to Soldering heat (Reflow Soldering)	255degC,10s (Peak260degC)	2times	Pass
Solderability	245degC,3s(with Flux) Soldering area,95% over(Sn-3.0Ag-0.5Cu)	1time	Pass

Notes:
The test items with * mark are put into operation after the reflow soldering (at 255degC for 10seconds) -> SMD
Temperature Humidity Bias Test: PD>=0.1W -> Intermittent power application consists of 1h ON and 3h OFF.
Judgment Criteria :
Judgment Criteria are due to the limits of the electrical characteristics in the detail specification. (Except for Solderability)

Package name: FLGA49

Test Items	Test Condition	Test Time	Results
Temperature Humidity Bias *	Ta=85degC,RH=85%, Vcc=Recommended	168hrs	Pass
Temperature Humidity Storage *	Ta=85degC,RH=85%	168hrs	Pass
Temperature Cycle *	Ta=-65degC(30min) ⇔ Ta=150degC (30min)	100cycles	Pass
Pressure Cooker *	Ta=121degC,RH=100% ,205kPa	100hrs	Pass
High Temperature Storage	Ta=150degC	168hrs	Pass
Resistance to Soldering heat (Reflow Soldering)	255degC,10s (Peak260degC)	2times	Pass
Solderability	245degC,3s(with Flux) Soldering area,95% over(Sn-3.0Ag-0.5Cu)	1time	Pass

Notes:
The test items with * mark are put into operation after the reflow soldering (at 255degC for 10seconds) -> SMD

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Temperature Humidity Bias Test: PD>=0.1W -> Intermittent power application consists of 1h ON and 3h OFF.
Judgment Criteria :
Judgment Criteria are due to the limits of the electrical characteristics in the detail specification. (Except for Solderability)

Package name: FLGA68K

Test Items	Test Condition	Test Time	Results
Temperature Humidity Bias *	Ta=85degC,RH=85%, Vcc=Recommended	168hrs	Pass
Temperature Humidity Storage *	Ta=85degC,RH=85%	168hrs	Pass
Temperature Cycle *	Ta=-65degC(30min) ⇔ Ta=150degC (30min)	100cycles	Pass
Pressure Cooker *	Ta=121degC,RH=100% ,205kPa	100hrs	Pass
High Temperature Storage	Ta=150degC	168hrs	Pass
Resistance to Soldering heat (Reflow Soldering)	255degC,10s (Peak260degC)	2times	Pass
Solderability	245degC,3s(with Flux) Soldering area,95% over(Sn-3.0Ag-0.5Cu)	1time	Pass

Notes:
The test items with * mark are put into operation after the reflow soldering (at 255degC for 10seconds) -> SMD
Temperature Humidity Bias Test: PD>=0.1W -> Intermittent power application consists of 1h ON and 3h OFF.
Judgment Criteria :
Judgment Criteria are due to the limits of the electrical characteristics in the detail specification. (Except for Solderability)

This FPCN will be updated after reliability evaluation was completed.
Reliability test is still in progress.
Estimated date for completion: 29/Aug/2014

ELECTRICAL CHARACTERISTIC SUMMARY:
There is no change in the electrical performance. Datasheet specifications remain unchanged.

CHANGED PART IDENTIFICATION:
Products manufactured at SSMP will be marked with ‘L7’ preceding the Serial No. on shipping label.

List of affected General Parts:

LB11620GP-H	LV5207LP-E	LV8075LP-E
LB11620GP-TE-L-H	LV5207LP-TE-L-E	LV8075LP-TE-L-E
LC709201F01RD-TE-L-H	LV5217GP-E	LV8080LP-E
LC709201F02RD-TE-L-H	LV5217GP-TE-L-E	LV8080LP-TE-L-E
LC709202FRD-01-2H	LV5223GR-TE-L-E	LV8402GP-H
LC709202FRD-01-MH	LV5227GR-E	LV8402GP-TE-L-H
LC709202FRD-02-2H	LV5254LG-MPB-E	LV8411GR-E
LC709202FRD-02-MH	LV5254LG-TLM-E	LV8411GR-TE-L-E
LC717A00AR-NH	LV5256GP-E	LV8413GP-E
LC717A00ARZ-NH	LV5256GP-TE-L-E	LV8413GP-H
LC717A10AR-NH	LV56081GP-E	LV8413GP-TE-L-E
LC87FBG08AURE-TE-L-H	LV56081GP-TE-L-E	SS30-E
LC898113-TBM-H	LV5609LP-E	SS30-TE-L-E
LC898220A-TE-B-H	LV5609LP-TE-L-E	
LC898221RA-NH	LV5710GP-TE-L-H	