

Generic Copy

Issue Date: 12-Nov-2014

<u>TITLE</u>: Assembly and Test site transfer from Kanto Sanyo Semiconductors Co., Ltd to ON Semiconductor SSMP Philippines Corporation (Group 06-D)

**PROPOSED FIRST SHIP DATE**: 14-Feb-2015 (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>

<ikuo.saeki@onsemi.com><Toshimitsu.Namiki@onsemi.com><naoki.koyama@onsemi.com>

<takehito.tsukui@onsemi.com> <keiji.ueda@onsemi.com>

**SAMPLES**: Contact your local ON Semiconductor Sales Office or < <u>jun.hasunuma@onsemi.com</u> >

# **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 was closed at the end of June, 2014.

In order to continue supply of applicable products under this condition, the products and the equipments is transferring 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.

Issue Date: 12-Nov-2014 Rev. 06-Jan-2010 Page 1 of 4



## **RELIABILITY DATA SUMMARY:**

Package name: QIP100EK

Test Items	Test Condition	Test Time	Results
Temperature Humidity Bias *	Ta=85degC,RH=85%, Vcc=Recommended	1000hrs	Pass
Temperature Humidity Storage *	Ta=85degC,RH=85%	1000hrs	Pass
Temperature Cycle *	Ta=-65degC(30min) ⇔ Ta=150degC (30min)	100cycles	Pass
Pressure Cooker *	Ta=121degC,RH=100% ,205kPa	96hrs	Pass
High Temperature Storage	Ta=150degC	1000hrs	Pass
Resistance to Soldering heat (Reflow Soldering : SMD)	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: MFP24

Test Items	Test Condition	Test Time	Results
Temperature Humidity Bias *	Ta=85degC,RH=85%, Vcc=Recommended	1000hrs	Pass
Temperature Humidity Storage *	Ta=85degC,RH=85%	1000hrs	Pass
Temperature Cycle *	Ta=-65degC(30min) ⇔ Ta=150degC (30min)	100cycles	Pass
Pressure Cooker *	Ta=121degC,RH=100% ,205kPa	96hrs	Pass
High Temperature Storage	Ta=150degC	1000hrs	Pass
Resistance to Soldering heat (Reflow Soldering : SMD)	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: DIP8

Test Items	Test Condition	Test Time	Results
Temperature Humidity Bias	Ta=85degC,RH=85%, Vcc=Recommended	1000hrs	Pass
Temperature Humidity Storage	Ta=85degC,RH=85%	1000hrs	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	1000hrs	Pass
Resistance to Soldering heat (Flow Soldering)	260degC,10s	1time	Pass
Solderability	245degC,3s(with Flux) Soldering area,95% over(Sn-3.0Ag-0.5Cu)	1time	Pass

Notes:

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)

Issue Date: 12-Nov-2014 Rev. 06-Jan-2010 Page 2 of 4



Package name: MFP16FS

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	50hrs	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:

# Package name: DIP16F

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 (Flow Soldering)	260degC,10s	1time	Pass
Solderability	245degC,3s(with Flux) Soldering area,95% over(Sn-3.0Ag-0.5Cu)	1time	Pass

#### Notes

This FPCN will be updated after reliability evaluation was completed.

Reliability test of MFP16FS and DIP16F is still in progress.

Estimated date for completion: 28/Nov/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.

Issue Date: 12-Nov-2014 Rev. 06-Jan-2010 Page 3 of 4

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)

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)



#### **List of affected General Parts:**

C74781M-9017-L-E

LA5693D-N-E

LA6584M-MPB-E

LA6584M-MPB-H

LA6584M-TLM-E

LA6584M-TLM-H

LB1205-L-E

LB1205M-MPB-E

LB1205M-TLM-E

LB1205Z-E

LB1412M-TRM-E

LB1731-H-E

LC72722PM-MPB-E

LC72722PMS-MPB-E

LC72722PMS-TLM-E

LC72722PM-TLM-E

LC74781M-9017-E

LC74781M-9017-TLM-E

LC74782M-9011-E

LV71081E-MPB-E

LV71081E-SPL-MPB-E

LB1663M-DELTA-MPB-H

LC74782M-8A13-E

LC74782M-9885-E

LC74782M-9885-TLM-E

LV7107M-MPB-E

Issue Date: 12-Nov-2014 Rev. 06-Jan-2010 Page 4 of 4