



QUALIFICATION REPORT
RELIABILITY LABORATORY

PCN #: JAON-28UACW121

Date:
May 13, 2016

**Qualification of ANAP as an assembly site for selected
products available in 64L LQFP (10x10x1.4mm)
package.**

Distribution: **CORPORATE QA/RE**
 CORPORATE PACKAGING
 SUPPLIER ENGINEERING



OBJECTIVE

Qualification of ANAP as an assembly site for selected products available in 64L LQFP (10x10x1.4mm) package.

QUAL ID	QAR2015-033
BD #	BDM-000943
PART #	TA3127V6XA00 (LAN8187-JT)
CCB #	1784

PRODUCT INFORMATION

PACKAGE TYPE	LQFP
PACKAGE LEAD COUNT	64 (10x10X1.4mm)
PACKAGE CODE	V6X
MANUFACTURE PART #	TA3127V6XA00 (LAN8187-JT)
WAFER LOT	W3F262
WAFER MASK	66814A2 (TA312)
WAFER PROCESS	0.18um
FAB	TSR - Fab 11 (TSMC)
CIRCUIT UNDER PAD	YES

Material used in the Assembly:

LEADFRAME MATERIAL

C194 (Double Ring / Stamped)

LEADFRAME SURFACE

No Treatment

DIE ATTACH EPOXY TYPE

3230

WIRE TYPE

Au

MOLDING COMPOUND TYPE

G700L

LEAD FINISH PROCESS

ELECTROPLATING

LEAD FINISH COMPOSITION

Matte-Sn

MARKING

LASER



MICROCHIP

PACKAGE QUALIFICATION REPORT

Manufacturing Information

Assembly Lot No.	Wafer Lot No.	MARKING /Date Code
ANAP164300342.000	W3F262.00 / TC11916055461.100	SMSC LAN8187i-JT C1603-A2C14 603H93A (e3)
ANAP164300340.000	W3F262.00 / TC11916055461.100	SMSC LAN8187i-JT C1603-A2C14 603H8VA (e3)
ANAP164300341.000	W3F262.00 / TC11916055461.100	SMSC LAN8187i-JT C1603-A2C14 603H8WA (e3)

Result

☒ Pass ☐ Fail ☐ _____

The UDLF Leadframe (101387045) using the 64L LQFP Package (10x10x1.4mm) and the Au wire, assembled by ANAP Pass Reliability test per QCI-39000. This package was qualified the Moisture/Reflow Sensitivity Classification Level 3 at 260°C reflow temperature per IPC/JEDEC J-STD-020D standard.

Prepared By: Peter Boudouris Date: May 16, 2016 (Corporate Reliability & FA)

Approved By: Vassilios Danginis Date: May 16, 2016 (Corporate Reliability & FA)

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS	Result	Remarks
Moisture/Reflow Sensitivity Classification Test (At MSL Level 3a)	60 °C/ 60%RH	IPC/	160	0/160	Pass	LOT 1
	Moisture Soak 40 hrs.	JEDEC	160	0/160	Pass	LOT 2
	(IPC/JEDEC J-STD-020D)	J-STD-020D	160	0/160	Pass	LOT 3

<u>Precondition</u> <u>Prior Perform</u> <u>Reliability Tests</u> (At MSL Level 3a)	Electrical Test :+25 °C and +85 °C	JESD22-A113	160 (0)	160	PASS	Good Devices
	SAT		Lot 1	160		
	Bake 125 °C, 24 hrs			160		
	60 °C/60%RH Moisture Soak 40hrs			160		
	3x Convection-Reflow 265 °C max			160		
	SAT			160		
	Electrical Test :+25 °C and +85 °C			160	PASS	

<u>Precondition</u> <u>Prior Perform</u> <u>Reliability Tests</u> (At MSL Level 3a)	Electrical Test :+25 °C and +85 °C	JESD22-A113	160 (0)	160	PASS	Good Devices
	SAT		Lot 2	160		
	Bake 125 °C, 24 hrs			160		
	60 °C/60%RH Moisture Soak 40hrs			160		
	3x Convection-Reflow 265 °C max			160		
	SAT			160		
	Electrical Test :+25 °C and +85 °C			160	PASS	

<u>Precondition</u> <u>Prior Perform</u> <u>Reliability Tests</u> (At MSL Level 3a)	Electrical Test :+25°C and +85 °C	JESD22-A113	240 (0) Lot 2	240	PASS	Good Devices
	SAT			160		
	Bake 125°C, 24 hrs			160		
	60 °C/60%RH Moisture Soak 40hrs			160		
	3x Convection-Reflow 265 °C max			160		
	SAT			160		
	Electrical Test :+25 °C and +85 °C			160	PASS	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
Temp Cycle	Stress Condition: -65°C to +150°C, 1000 Cycles	JESD22-A104		231		Parts had been pre-conditioned at 260°C
	Electrical Test: + 25°C, + 85°C		231 (0)	0/231	Pass	77 units / lot
uHAST	Stress Condition: +130°C/85%RH, 96hrs, 192hrs.	JESD22-A110		231		Parts had been pre-conditioned at 260°C
	Electrical Test: + 25°C, + 85°C		231 (0)	0/231	Pass	77 units / lot
High Temperature Storage Life	Stress Condition: Bake +150°C, 1008hrs	JESD22-A103		231		Parts had no Pre-Condition
	Electrical Test : + 25°C, + 85°C		231 (0)	0/231	Pass	77 units / lot

JAON-28UACW121 - CCB 1784 Final Notice: Qualification of ANAP as an assembly site for selected products available in 64L LQFP (10x10x1.4mm) package.

Affected Catalog Part Numbers (CPN)

PCN_JAON-28UACW121
CATALOG_PART_NBR
LAN8187I-JT
LAN8187-JT