



Product Change Notification

Doc no: PCN-19 Rev A01

Notice Date:	February 05, 2018
Title:	Addition of UTAC, Thailand as Assembly and Test site for SiTime products using SOT23 package
Effective Date:	May 06, 2018 ^{Note}

Type of Change:	<input type="checkbox"/> Product	<input type="checkbox"/> Process/Material	<input checked="" type="checkbox"/> Other: Added SOT23 package assembly/test location
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Products Affected: SiT2001, SiT2002, SiT2018, SiT2019, SiT2020, SiT2021, SiT2024, SiT2025, and SiT9201

Reason for Change: Added Capacity to fulfill increased demand

Description of Change: SiTime is in process of qualifying UTAC, Thailand, as an additional package subcontractor of SOT23 for assembly, test and shipping of products. As SiTime increases the unit shipments of our products to meet customer demands, it is necessary to add additional capacity for our SOT23 package.

All products manufactured in our SOT23 package built at UTAC assembly site may be shipped from UTAC or current supplier on and after the effective date of May 06, 2018^{Note}. All parts assembled in UTAC will be identified by “B” as the first character of the lot number (top marking line 1). Refer to Appendix-1 for the top marking details identifying assembly location.

As with our current product/package offerings, all products from UTAC are MSL 1 (260°C peak reflow) compliant and meet the industry/regulatory environmental material content (RoHS/Green/REACH/PFOS) requirements. SOT23 package manufactured at UTAC is form, fit, function, and reliability compatible with existing SOT23 package currently available. Furthermore, there is no change in POD (product out-line dimensions) and electrical performance of package built at UTAC. All product environmental documents (RoHS, composition table, and REACH) are available now upon request. The reliability qualification plan is shown in Appendix-2. The qualification report is expected to be available by April 15, 2018.

Upon effective date of this notification, SiTime will ship units assembled and/or tested from any of our qualified suppliers (including UTAC) as needed to meet increasing demand for our products. Samples will be available, upon request, after Feb 20, 2018. Please contact our sales and customer service representatives for sample request or any clarifications.

Note: For approved automotive customers, agreed upon notification period and specific subcon location requirements, as per contract, will be fulfilled.




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Effect of Change: None Description below (ea. Product Quality, Performance, Reliability)

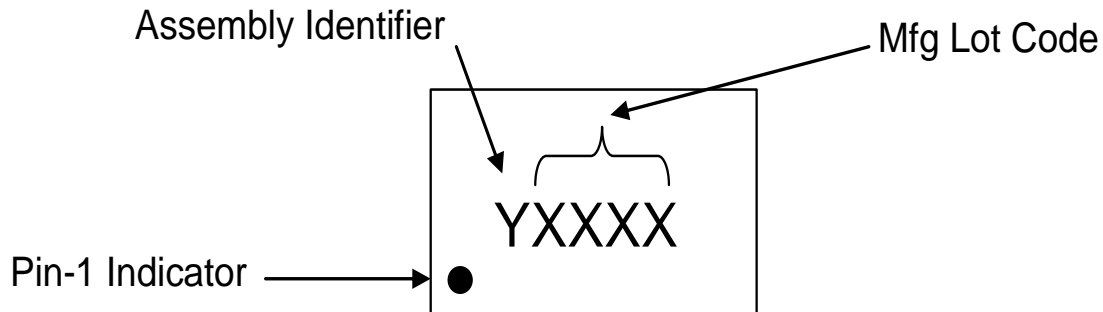
Document/s Attached: No Yes Qualification Plan (Appendix-2)

Quality Assurance 

Acknowledgement of Receipt _____ Date _____
Customer Representative

Customer's Company _____

Appendix-1 SiTime Standard Top Marking Showing Assembly Location



Example:

“Y” denotes assembly identifier e.g.:

A as a first letter to indicate Carsem, Malaysia

B as a first letter to indicate UTAC, Thailand

“XXXX” denotes 4 alpha-numeric characters of the manufacturing lot code without any dashes, periods, and/or symbols

Appendix-2 Qualification Plan for UTAC SOT23 Package

Qualification Plan: Total three lots		
Test Name	Conditions/Referenced Industry Standard	SS/Pass Criteria (Per lot)
Pre-conditioning for Autoclave, Temp Cycle, & HAST	JESD22-A113 Level I (24 Hrs bake, 168 hrs 85 °C/85% RH, 3 reflow cycles @ +260 °C)	250/0
Highly accelerated stress test (HAST)	JESD22-A110 ; 130°C, 85% RH, 96 hours	77/0
Autoclave (Pressure Pot, PCT)	JESD22-A102; 121°C, 100% RH, 15 PSIG, 96 hours	77/0
Temperature Cycling (TC)	JESD22- -65°C to +150°C, 500 Cycles, 1000 cycles	77/0
High Temp Storage	JESD22-A103 (+150°C, 1000 hours)	45/0
Solderability Test	JESD 22-B102	15/0 *
Process Parameters Evaluation		
Physical Dimensions	JESD22-B100; Per applicable JEDEC package outline drawing	30/0
Bond Pull Strength	MIL-STD-883 Method 2011, Cond. C or D	36/0
Bond Shear	JESD22- B116	36/0
Die Shear Test	MIL-STD 883- Method 2019	20/0
Note: * One lot only		

Appendix-3 BOM Comparison

	Current	UTAC
Leadframe	Pre-plated PPF/NiPdAu	Same type
DA #1	Dispense	DAF(Die Attach Film)
DA#2	DAF	DAF
Bondwire	Copper	Gold
Mold Compound	Hitachi CEL-8240	EME-G600