



2305171455 Additional Assembly, Test and Ship Site for Si401x Automotive

PCN Issue Date: May 17, 2023

Effective Date: Aug 23, 2023

PCN Type: Assembly

Description of Change

Silicon Labs is pleased to announce the successful qualification of UTAC Thailand (UTL) as an additional assembly, test and ship site for Si401x(Automotive),10-MSOP. UTAC Thailand is an existing assembly, test and ship site for Silicon Labs, and is certified to ISO9001, ISO14001 and IATF 16949.

UTL Address - Ship Site
UTAC Thai Limited (UTL 3)
73 Moo5, Wellgrow Industrial Estate
Bangsamak, Bangpakong,
Chachoengsao, 24180, Thailand

As of the effective date of the PCN, Silicon Labs may ship from either of the qualified sites.

Reason for Change

The additional assembly and test location will provide additional capacity for supply assurance.

Impact on Form, Fit, Function, Quality, Reliability

There is no change on form, fit, function, quality or reliability.

Product Identification

Existing Part #
SI4010-C2-AT
SI4010-C2-ATR
SI4010-C2003AT
SI4010-C2003ATR
SI4010-C2004AT
SI4010-C2004ATR
SI4012-C1001AT
SI4012-C1001ATR

Last Date of Unchanged Product: Aug 23, 2023

Qualification Samples

Qualification samples available upon request.

Customer Response

Lack of acknowledgment of the PCN within 30 days constitutes acceptance of the change, Ref. JEDEC-J-STD-046.

To request further data or inquire about this notification, please contact your Silicon Labs sales representative. A list of Silicon Labs sales representatives is available at <http://www.silabs.com>.


Customers may approve early PCN acceptance by emailing approval, along with PCN # to PCNEarlyAcceptance@silabs.com

User Registration

Register today to create your account on Silabs.com. Your personalized profile allows you to receive technical document updates, new product announcements, "how-to" and design documents, product change notices (PCN) and other valuable content available only to registered users. <http://www.silabs.com/profile>

Qualification Data

Please refer to the Qualification Report below.

 Si4010 10-MSOP Product Qualification Report The information contained in this document is PROPRIETARY to Silicon Laboratories, Inc. and shall not be reproduced or used in part or whole without Silicon Laboratories' written consent. The document is uncontrolled if printed or electronically saved.							
Part Rev C2, TSMC Fabrication, UTL Assembly							
Test Name	Test Condition	Qualification	Lot ID or Start	Fail/Pass or End	Notes	Summary	Status
Test Group A – Accelerated Environment Stress Tests - 10MSOP - UTL							
HAST	JA110 130°C, 85%RH Vcc=3.6V, 96 hours	3 lots, N=>77	Q050157 Q050158 Q050159	0/77 0/77 0/77	1	3 lots 0/231	Pass
UHAST	JA110 130°C, 85%RH 96 hours	3 lots, N=>77	Q049531 Q049535 Q049543	0/77 0/77 0/77	1	3 lots 0/231	Pass
Temp Cycle	JA104 Cond C: -65°C to 150°C 500 cycles	3 lots, N=>77	Q049532 Q049536 Q049544	0/77 0/77 0/77	1	3 lots 0/231	Pass
HTSL	JA103 150°C 1000 hours	1 lot, N=>45	Q049540	0/45	1	1 lot 0/45	Pass
Test Group B – Accelerated Lifetime Simulation Tests							
HTOL	JA108 T _J ≥ 125°C, Dynamic Vcc=3.6V, 1000 hours	3 lots, N=>77	Q029729 Q030319 Q030320	0/80 0/80 0/80		3 lots 0/240	Pass
LTOL	JA108 T _A = -10°C, Dynamic Vcc=3.6V, 1000 hours	1 lot, N=>32	Q022643	0/78		3 lot 0/78	Pass
ELFR	JA108 T _J ≥ 125°C, Dynamic Vcc=3.6V, 48 hours	3 lots, N=>500	Q029612 Q030542 Q030553	0/810 0/810 0/806		3 lots 0/2426	Pass
Test Group C – Package Assembly Integrity Tests							
Wire Bond Shear	AEC-Q100-001	5 units, N=>30	1154038 1154039 1154040	0/30 0/30 0/30		3 lots 0/90	Pass
Wire Bond Pull	M-STD-883 Performed post-TC	5 units, N=>30	1154038 1154039 1154040	0/30 0/30 0/30		3 lots 0/90	Pass
Physical Dimensions	JB100	3 lots, N=>10	1154038 1154039 1154040	0/30 0/30 0/30		3 lots 0/90	Pass
Solderability	JB102	1 lot, N=>15	1154038 1154039 1154040	0/10 0/10 0/10		3 lots 0/30	Pass

Approved by: Wilson Choy

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Prepared on: 10-May-2023



Si4010 10-MSOP Product Qualification Report

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Part Rev C2, TSMC Fabrication, UTL Assembly

Test Name	Test Condition	Qualification	Lot ID or Start	Fail/Pass or End	Notes	Summary	Status
Test Group E – Electrical Verification							
ESD-HBM	JA114	1 lot, N=>3	Q029675			2000V	Class H2
ESD-CDM	JC101	1 lot, N=>3	Q029730			1000V	Class C6
Latch Up	JESD78 ±200mA Overvoltage = 5.4V	1 lot, N=>3	Q029115 Q029116		25 °C 85 °C		Pass
Electromagnetic Compatibility	SAE J1752	1 lot, N=>1	Q030669				Pass

Notes:

- Parts are Pre-conditioned at MSL2 @ 260C Preconditioning

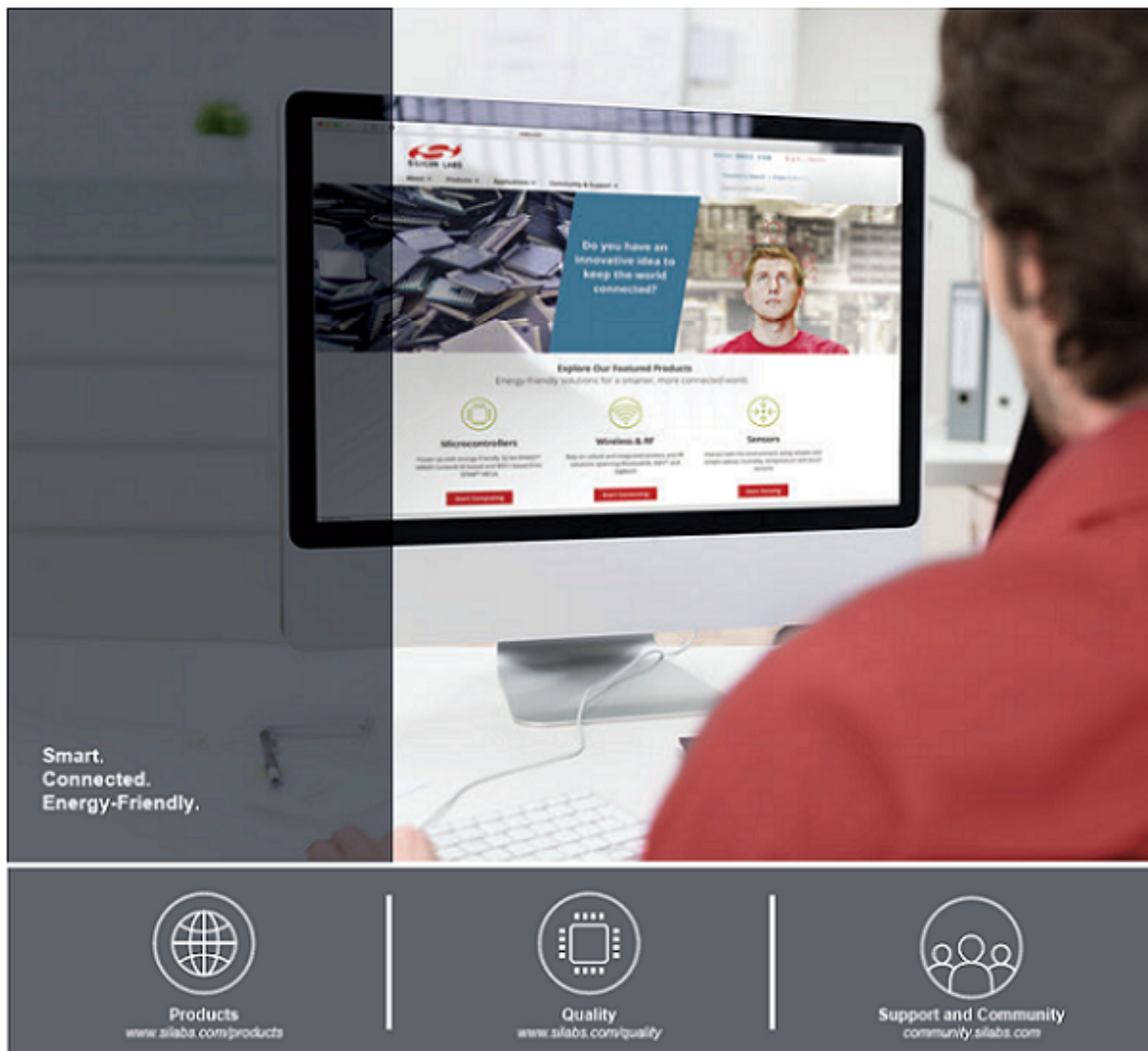
This report applies to the following part numbers:

Si4010-C2-AT Si4010-C1xxxAT Si4010-C2xxxAT

Approved by: Wilson Choy

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Prepared on: 10-May-2023



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