191211689 Additional 10MSOP Leadframe Supplier for Si401x

PCN Issue Date: 12/11/2019   **Effective Date:** 3/17/2020

PCN Type: Assembly

Description of Change

Silicon Labs is pleased to announce the successful qualification of ASM lead frame for Si401x 10MSOP package devices. Currently, Si401x 10MSOP package devices use Rokko lead frame. Both Rokko & ASM are qualified lead frame suppliers.

There is no change between Rokko and ASM lead frame in terms of material type, properties, dimensions, or a change in other Bill of Materials, Assembly Process, Assembly Flow, etc.

As of the effective date of the PCN, Silicon Labs will continue to fulfill orders using the lead frames from both Rokko & ASM. The package qualification report is attached.

Reason for Change

Lead frame tool is expiring at current lead frame supplier (Rokko) site.

Impact on Form, Fit, Function, Quality, Reliability

No impact to Form, Fit, Function, Quality & Reliability.

Product Identification

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Existing Part #
SI4010-C2-AT
SI4010-C2-ATR
SI4010-C2-GT
SI4010-C2-GTR
SI4010-C2-ZT1
SI4010-C2-ZT1R
SI4010-C2-ZT4
SI4010-C2-ZT4R
SI4010-C2001AT
SI4010-C2001ATR
SI4010-C2002AT
SI4010-C2002ATR
SI4010-C2003AT
SI4010-C2003ATR
SI4010-C2004AT
SI4010-C2004ATR
SI4010-C200FGT
SI4010-C200FGTR
SI4010-C200RGT
SI4010-C200RGTR
SI4010-C200SGT
SI4010-C200SGTR
SI4010-C200WGT
SI4010-C200WGTR
SI4010-C200YGT
SI4010-C200YGTR
SI4010-C200ZGT
SI4010-C200ZGTR
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SI4010-C2010GT
SI4010-C2010GTR
SI4010-C2012GT
SI4010-C2012GTR
SI4010-C2014GT
SI4010-C2014GTR
SI4010-C2017GT
SI4010-C2017GTR
SI4010-C2019GT
SI4010-C2019GTR
SI4010-C201AGT
SI4010-C201AGTR
SI4010-C201BGT
SI4010-C201BGTR
SI4010-C201GGT
SI4010-C201GGTR
SI4010-C201LGT
SI4010-C201LGTR
SI4010-C201MGT
SI4010-C201MGTR
SI4010-C201PGT
SI4010-C201PGTR
SI4010-C201QGT
SI4010-C201QGTR
SI4010-C201RGT
SI4010-C201RGTR
SI4010-C201SGT
SI4010-C201SGTR
SI4010-C201TGT
SI4010-C201TGTR
SI4010-C201UGT
SI4010-C201UGTR
SI4010-C201YGT
SI4010-C201YGTR
SI4010-C2M00GT
SI4010-C2M00GTR
SI4010-C2M01GT
SI4010-C2M01GTR
SI4010-C2M02GT
SI4010-C2M02GTR
SI4010-C2M03GT
SI4010-C2M03GTR
SI4010-C2M04GT
SI4010-C2M04GTR
SI4010-C2M0RGT
SI4010-C2M0RGTR
SI4010-C2M0UGT
SI4010-C2M0UGTR
SI4010-C2P01GT
SI4010-C2P01GTR
SI4010-C2P02GT
SI4010-C2P02GTR
SI4010-C2X-AT
SI4010-C2X-GT
SI4011-C1001GT
SI4011-C1001GTR
SI4011-C100EGT
SI4011-C100EGTR
SI4011-C100GGT
SI4011-C100GGTR
SI4011-C100JGT
SI4011-C100JGTR
SI4011-C100KGT
SI4011-C100KGTR
SI4011-C100LGT
SI4011-C100LGTR
SI4011-C100MGT
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SI4011-C100MGTR
SI4011-C100NGT
SI4011-C100NGTR
SI4011-C1X-GT
SI4012-C1001AT
SI4012-C1001ATR
SI4012-C1001GT
SI4012-C1001GTR
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Last Date of Unchanged Product: 3/17/2020

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

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Qualification Data

Qualification report attached.

Si401x AEC-Q100 Qualification for ASM Leadframe 10-MSOP

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Part Rev C, TSMC Fabrication, UNISEM Assembly except as noted

Test Name	Test Condition	Qualification	Lot ID or Start	Fail/Pass or End	Notes	Summary	Status
Test Group A – Accelerated Environment Stress Tests							
UHAST	JA110 130°C, 85%RH 96 hours	3 lots, N=>77	Q045709 Q045080 Q045081	0/80 0/80 0/80		3 lots 0/240	Pass
Temp Cycle	JA104 Cond C: -65°C to 150°C 500 cycles	3 lots, N=>77	Q045068 Q045069 Q045070	0/81 0/77 0/79		3 lots 0/237	Pass
HTSL	JA103 150°C, 1000hr	1 lot, N=>45	Q045075 Q045076 Q045077	0/80 0/80 0/80		3 lots 0/240	Pass
Test Group C – Package Assembly Integrity Tests							
Wire Bond Pull	M-STD-883 Performed post-TC	5 units, N=>30	Q045071 Q045072 Q045073	0/30 0/30 0/30		3 lots 0/90	Pass
Physical Dimensions	JB100	3 lots, N=>10	979826.1 979827.1 979828.1	0/10 0/10 0/10		3 lots 0/30	Pass
Solderability	JB102	1 lot, N=>15	979826.1 979827.1 979828.1	0/15 0/15 0/15		3 lots 0/45	Pass

Notes:
1. Parts are Pre-conditioned at MSL2/260°C

This report applies to the following part numbers:
Si4010-Cx Si4011-Cx Si4012-Cx

1 silabs.com | Si401x-C_UNISEM_LF_ASM

Prepared on: 28-Nov-2019 by Wilson Choy

Si401x-C_AEC_Qual_Report_UNISEM_LF_ASM

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Energy-Friendly.

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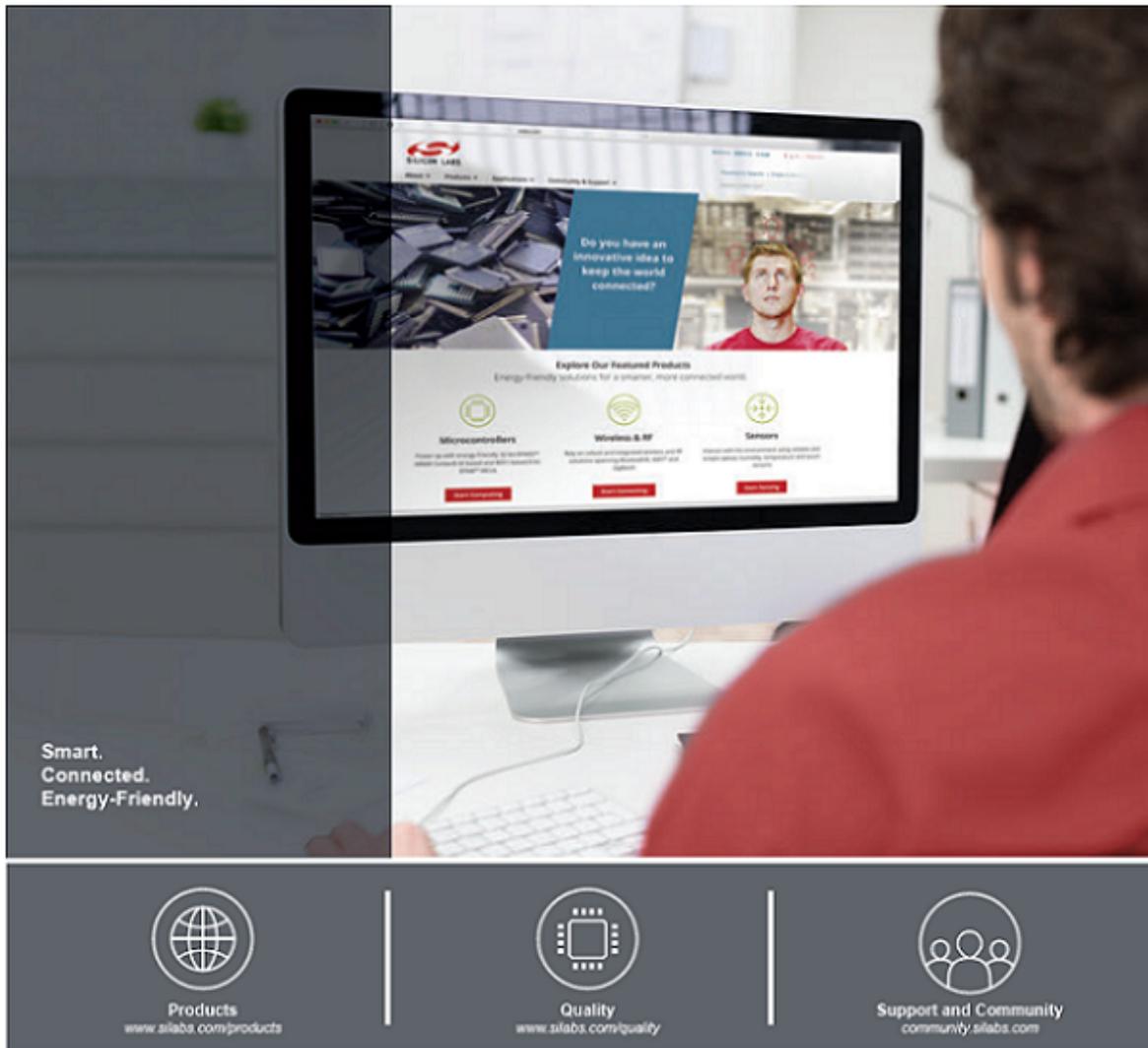
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