170713111 FAB 9 Tower Jazz Foundry Qualification

PCN Issue Date: 7/13/2017 **Effective Date:** 10/18/2017

PCN Type: Foundry

Description of Change

In order to meet the growing business demand of the below products, Silicon Labs is qualifying an additional wafer back end process at the FAB 9 Tower Jazz foundry. This new process is the processing of metal layers only with no impact to the overall circuit design. To assure quality, all assembly DOEs, control plans and other quality checks will be performed on production material produced at either location.

Upon the effective date of this PCN, wafer supply will be from either FAB 3 (Full process) or FAB 3 and Fab 9 (Front End and Back End). The qualification data will be provided by Silicon Labs when the full plan is completed (target is the end of September). Customer evaluations must begin immediately to assure supply continuity of the product.

Reason for Change

Capacity expansion.

Impact on Form, Fit, Function, Quality, Reliability

There is no impact on Form, Fit, Function, Quality and Reliability. There will be no change to RF performance and there will be no change needed to external BOM.

Product Identification

```
Si4030-B1-FM Si4030-B1-FMR
Si4031-B1-FM Si4031-B1-FMR
Si4032-B1-FM Si4032-B1-FMR
Si4313-B1-FM Si4313-B1-FMR
Si4330-B1-FM Si4330-B1-FMR
Si4430-B1-FM Si4430-B1-FMR
Si4431-B1-FM Si4431-B1-FMR
Si4432-B1-FM Si4432-B1-FMR
```

Last Date of Unchanged Product: 10/18/2017

Qualification Samples

Samples are available upon request.

Specific conditions of acceptance of this change will be considered on a case by case basis if written notice is submitted within 30 days of this notice. To request further data or inquire about this notification, please contact your local Silicon Labs sales representative. A list of Silicon Labs sales representatives is available at http://www.silabs.com.

In some cases rejection of a change notice may impact Silicon Labs product pricing, delivery, quality, or reliability.

Customer Early Acceptance Sign Off

Customers may approve early PCN acceptance by completing the information below:

Early Acceptance:

Date: _____

Name:_____

Company:_____

Email your early Acceptance approval 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

See Appendix.

Si4xxx Family of Devices
Qualification Report

SILICON LABS

W7101F1 - Product Qualification Report Record **Rev. J**

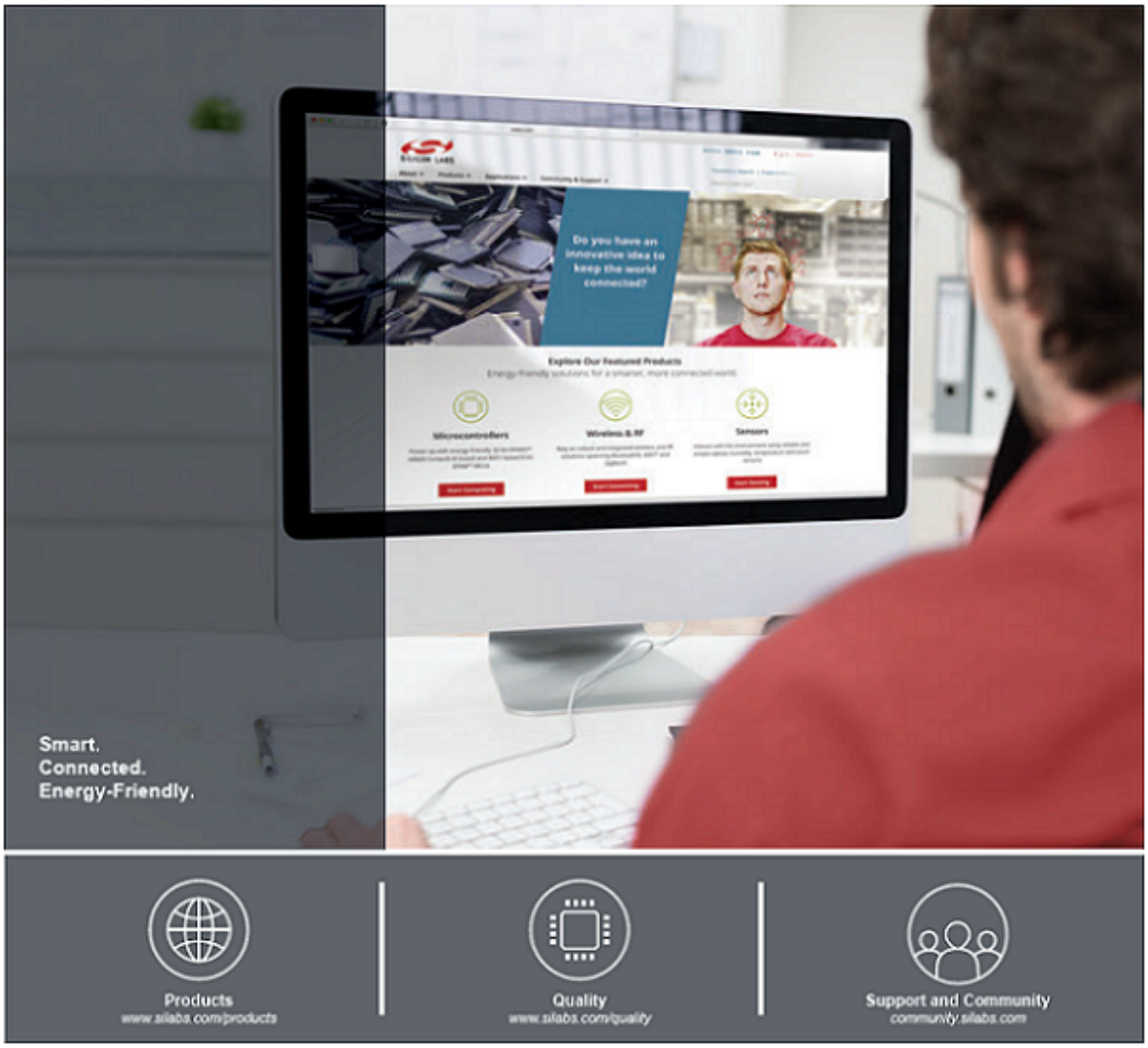
Part Rev B, Tower Jazz Fab 9 Fabrication, SPIL Assembly

Test Name	Test Condition	Qualification	Lot ID or Start	Fail/Pass or End	Notes	Summary	Status
Test Group A – Accelerated Environment Stress Tests							
UHAST	JA118 130°C, 85%RH 96 Hours	1 lots, N=>77	QP01482-4		1	TBD	In Progress
Temp Cycle	JA104 Cond C: -65°C to 150°C 500 cycles	1 lots, N=>77	QP01482-5		1	TBD	In Progress
Test Group B – Accelerated Lifetime Simulation Tests							
HTOL	JA108 T_J ≥ 125°C, Dynamic Vcc=5.5V, 1000 hours	3 lots, N=>77	QP01482-1 QP01482-2 QP01482-3			TBD	In Progress
ELFR	AEC-Q100-008 T_J ≥ 125°C, Dynamic Vcc=5.5V, 48 hours	1 lots, N=>800	Q041579	**0/800**		**1 lot** **0/800**	**Passed**

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

This report applies to the following part numbers:	
Si4030-B1-FM	Si4030-B1-FMR
Si4031-B1-FM	Si4031-B1-FMR
Si4032-B1-FM	Si4032-B1-FMR
Si4313-B1-FM	Si4313-B1-FMR
Si4330-B1-FM	Si4330-B1-FMR
Si4430-B1-FM	Si4430-B1-FMR
Si4431-B1-FM	Si4431-B1-FMR
Si4432-B1-FM	Si4432-B1-FMR

Approved by: Ramon Ponsones 1 of 1 Prepared on: 10-July-17



Disclaimer
Silicon Labs intends to provide customers with the latest, accurate, and in-depth documentation of all peripherals and modules available for system and software implementers using or intending to use the Silicon Labs products. Characterization data, available modules and peripherals, memory sizes and memory addresses refer to each specific device, and "Typical" parameters provided can and do vary in different applications. Application examples described herein are for illustrative purposes only. Silicon Labs reserves the right to make changes without further notice and limitation to product information, specifications, and descriptions herein, and does not give warranties as to the accuracy or completeness of the included information. Silicon Labs shall have no liability for the consequences of use of the information supplied herein. This document does not imply or express copyright licenses granted hereunder to design or fabricate any integrated circuits. The products are not designed or authorized to be used within any Life Support System without the specific written consent of Silicon Labs. A "Life Support System" is any product or system intended to support or sustain life and/or health, which, if it fails, can be reasonably expected to result in significant personal injury or death. Silicon Labs products are not designed or authorized for military applications. Silicon Labs products shall under no circumstances be used in weapons of mass destruction including (but not limited to) nuclear, biological or chemical weapons, or missiles capable of delivering such weapons.

Trademark Information
Silicon Laboratories Inc.® , Silicon Laboratories®, Silicon Labs®, SiLabs® and the Silicon Labs logo®, Bluegiga®, Bluegiga Logo®, Clockbuilder®, CMEMS®, DSPLL®, EFM®, EFM32®, EFR, Ember®, Energy Micro, Energy Micro logo and combinations thereof, "the world's most energy friendly microcontrollers", Ember®, EZLink®, EZRadio®, EZRadioPRO®, Gecko®, ISOmodem®, Micrium, Precision32®, ProSLIC®, Simplicity Studio®, SiPHY®, Telegesis, the Telegesis Logo®, USBXpress®, Zentri and others are trademarks or registered trademarks of Silicon Labs. ARM, CORTEX, Cortex-M3 and THUMB are trademarks or registered trademarks of ARM Holdings. Keil is a registered trademark of ARM Limited. All other products or brand names mentioned herein are trademarks of their respective holders.

Silicon Laboratories Inc.
400 West Cesar Chavez
Austin, TX 78701

http://www.silabs.com