

Process Change Notice #1412032

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PCN Date: 12/3/2014			Effective Date: 3/9/2015			
Title: Si5010, Si5020 & Si5310_QFN-4x4_Punch to Saw type						
Originator:Paranidharan Rengarajan		Phone: +65 6511 7735		Dept: Supplier Management		
Customer Contact: Kathy Hagga	ar	Phone	e: (512) 532-5261	Dept: Inside Sales		
PCN Type:						
☐ Datasheet	☐ Found	dry 🗆 Packing				
☐ Product Revision		nbly		☐ Labeling		
☐ Discontinuance	☐ Test			Other		
Last Order Date: Not Applicable	e					
		PCN	Details			
Description of Change: Silicon Labs is pleased to announce a change in package type from punch to saw type for Si5010, Si5020 and Si5310 devices. The foot print for both punch and saw package types are identical; no critical package dimensions are impacted. The package drawings and critical dimensions are listed in the Appendix.						
Reason for Change:						
The assembly supplier is no longer able to support punch type QFN 4x4 packages. Impact on Form, Fit, Function, Quality, Reliability: No impact to fit, function, quality and reliability. The form of the package no longer has the chamfered corners from the mold cap and the molding compound extends to the edge of the package. There is no taper on the mold cap; the mold cap is now vertical. There are no changes to the recommended PCB layout of the affected device.						
Product Identification: Si5010-B-GM Si5010-B-GMR Si5020-B-GM Si5020-B-GMR Si5310-C-GM						
Last Date of Unchanged Product: 3/9/2015						
Qualification Samples: Samples are available now.						



Available upon request.

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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 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:

Company:

Email your early Acceptance approval to: katherine.haggar@silabs.com

Qualification Data:



Appendix

Punch type (Existing):

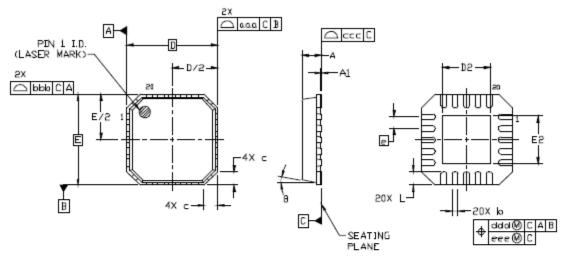


Figure 11. 20-pin Quad Flat No-Lead (QFN)

Table 10. Package Dimensions

Symbol	Millimeters				
	Min	Nom	Max		
Α	0.80	0.85	0.90		
A1	0.00	0.02	0.05		
b	0.18	0.25	0.30		
С	_	_	0.60		
D	4.00 BSC				
D2	1.95	2.10	2.25		
е	0.50 BSC				
E	4.00 BSC				

Symbol	Millimeters				
	Min	Nom	Max		
E2	1.95	2.10	2.25		
L	0.50	0.60	0.70		
θ	0°	_	12°		
aaa		0.10			
bbb		0.10			
ccc	0.08				
ddd	0.10				
eee	0.05				

Notes:

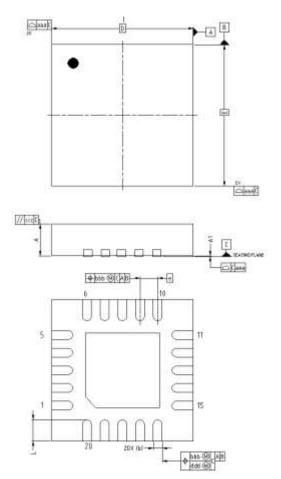
- 1. All dimensions shown are in millimeters (mm) unless otherwise noted.
- 2. Dimensioning and Tolerancing per ANSI Y14.5M-1994.
- 3. This drawing conforms to JEDEC outline MO-220, variation VGGD-1.
- Recommended card reflow profile is per the JEDEC/IPC J-STD-020C specification for Small Body Components.



Appendix Continued

Saw type (New):

Dimension	MIN	NOM	MAX	
Α	0.80	0.85	0.90	
A1	0.00	0.02	0.05	
b	0.18	0.25	0.30	
D	4.00 BSC.			
D2	2.0	2.10	2.20	
е	0.50 BSC.			
Е	4.00 BSC.			
E2	2.0	2.10	2.20	
L	0.50	0.60	0.70	
aaa	0.15			
bbb	0.10			
ccc	0.10			
ddd	0.05			
eee	0.08			





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Comparison of key dimensions (Punch vs Saw type):

SI.No Symbol	Combal	Discounting.	Punch type			Saw type		
	Dimension	Min	Nom	Max	Min	Nom	Max	
1	Α	Overall package Height	0.80	0.85	0.90	0.80	0.85	0.90
2	A1	(Refer drawing)	0.00	0.02	0.05	0.00	0.02	0.05
3	b	Lead width	0.18	0.25	0.30	0.18	0.25	0.30
4	D/E	Package size	4.00 BSC			3.90	4.00	4.10
5	D1/E1	(Refer drawing)	3.75 BSC			N/A		
6	D2/E2	ePAD size	1.95	2.10	2.25	2.00	2.10	2.20
7	e	Lead pitch	0.50 BSC			0.50 BSC		
8	L	Lead length	0.50	0.60	0.70	0.50	0.60	0.70