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PCN Date: 4/16/2013		Effective Date: 7/19/2013						
Title: Add assembly site for EM357 / EM351								
Originator: KF Lee	Phone: 65 6511 6428	Dept: SLI QA						
Customer Contact: Kathy Haggar	Phone: 1-512-532-5261	Dept: Sales						
PCN Type: <input type="checkbox"/> Datasheet <input type="checkbox"/> Foundry <input type="checkbox"/> Packing <input type="checkbox"/> Product Revision <input checked="" type="checkbox"/> Assembly <input type="checkbox"/> Labeling <input type="checkbox"/> Discontinuance <input type="checkbox"/> Test <input type="checkbox"/> Other								
Last Order Date: Not Applicable.								
PCN Details								
Description of Change: Silicon Laboratories is pleased to announce the successful qualification of a second assembly site, ASE Chung Li, Taiwan (ASECL), for EM357 and EM351 products. Product assembled at ASECL will have a different marking from the product assembled at the original assembly site, Stats Chippac Malaysia (SCM). Please see Appendix A for details of the marking differences. There is a slight difference in the dimensions of the package from ASECL, however packages from both assembly sites fall within the JEDEC specification for the 7x7 QFN (JEDEC ref: MO-220). See Appendix C for details. The new dimensions will be reflected in revision 1.3 of the datasheet.								
Reason for Change: The new assembly location will provide additional capacity.								
Impact on Form, Fit, Function, Quality, Reliability: There is no impact to form, fit, function, quality or reliability of the product. The marking layout change as described in Appendix A.								
Product Identification: <table> <tr> <td>Part number</td> <td>Package</td> </tr> <tr> <td>EM357-RT/R</td> <td>48QFN 7X7</td> </tr> <tr> <td>EM351-RT/R</td> <td>48QFN 7X7</td> </tr> </table>			Part number	Package	EM357-RT/R	48QFN 7X7	EM351-RT/R	48QFN 7X7
Part number	Package							
EM357-RT/R	48QFN 7X7							
EM351-RT/R	48QFN 7X7							
Last Date of Unchanged Product: N/A								
Qualification Samples: Assembled samples are available upon request. Please contact your Silicon Labs Sales Representative. A list of Silicon Labs Sales Representatives is available at www.silabs.com								

Customer Early Acceptance Sign Off:

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

Early Acceptance: Date: _____

Name: _____

Company: _____

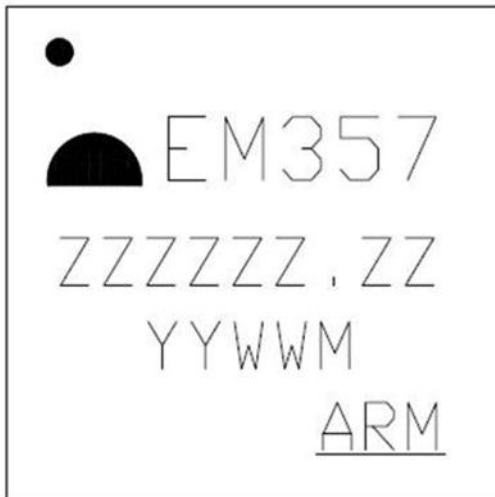
Email your early Acceptance approval to: katherine.haggard@silabs.com

Qualification Data:

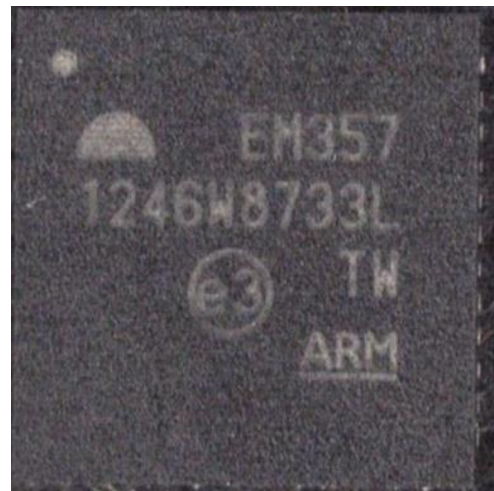
Please see Appendix B.

Embed File(s): Appendix A

Sample Marking Layout for STATS Chippac Malaysia



Sample Marking Layout for ASE Chung Li (ASECL)



Appendix B

EM35X Qualification Report, ASECL Assembly



W7101F1 Product Qualification Plan and Report Rev. E

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Part Rev B, TSMC Fabrication, ASECL 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							
HAST	JA110 130°C, 85%RH Vcc=3.6V, 96 hours	3 lots, N=>25	Q33675 Q33674 Q33667	0/25 0/25 0/25	1	3 lots 0/75	Pass
Temp Cycle	JA104 Cond C: -65°C to 150°C 500 cycles	3 lots, N=>25	Q33669 Q33668 Q33667 Q33677	0/25 0/25 0/25 0/77	1	4 lots 0/152	Pass
uHAST	JA118 130°C, 85%RH 96 hours	3 lots, N=>25	Q33666 Q33665 Q33670	0/25 0/25 0/25	1	3 lots 0/75	Pass
HTSL	JA103 150°C, 1000hr	3 lots, N=>25	Q33672 Q33671 Q33678 Q33670	0/25 0/25 0/25 0/25	1	4 lots 0/100	Pass

Notes:

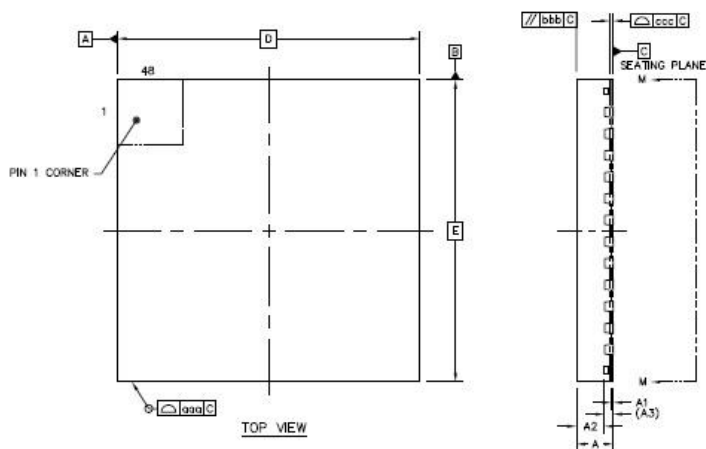
- Parts are Pre-conditioned at MSL2/260°C

This report applies to the following part numbers:
EM357-RT EM351-RT

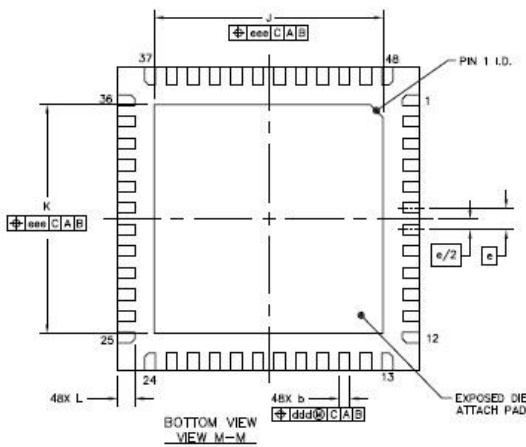
Appendix C

Package type	SCM 48QFN 7x7			ASECL 48QFN 7x7		
Dimensions	Minimum (mm)	Maximum (mm)	Nominal (mm)	Minimum (mm)	Maximum (mm)	Nominal (mm)
Package thickness	0.80	1.00	0.90	0.80	0.90	0.85
Lead Length	0.40	0.60	0.50	0.35	0.45	0.40

POD for ASECL 48QFN 7x7



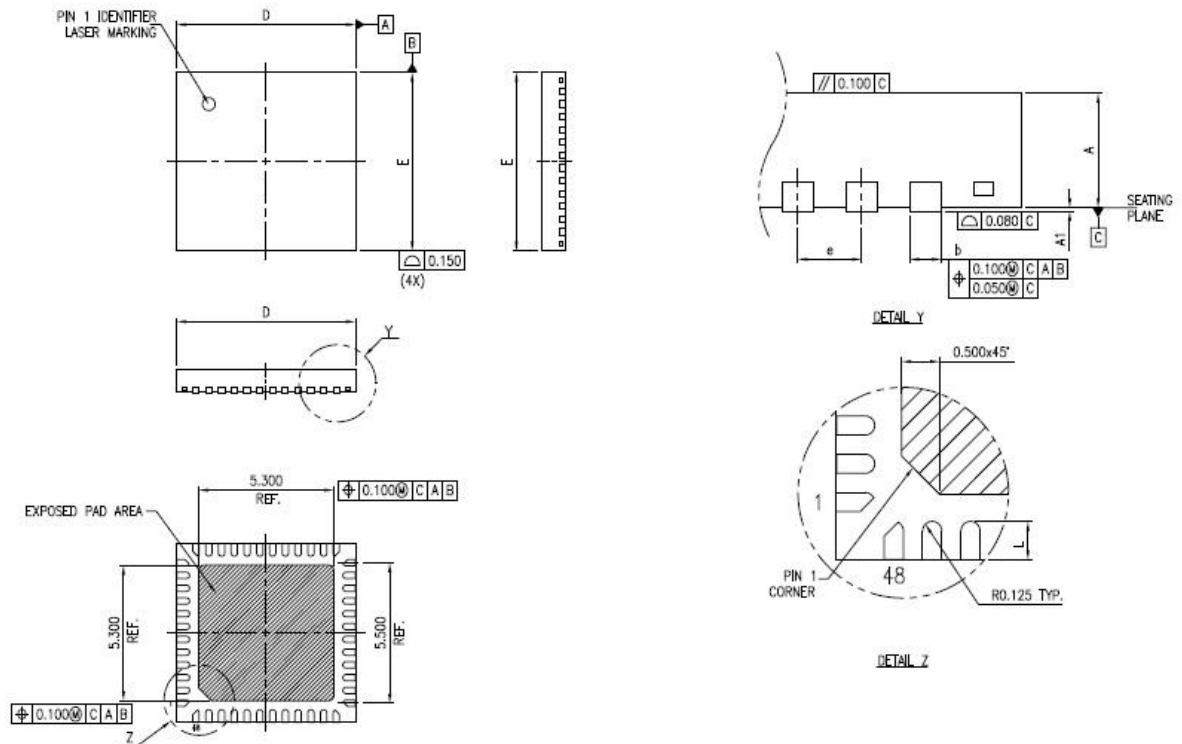
		SYMBOL	MIN	NOM	MAX
TOTAL THICKNESS		A	0.8	0.85	0.9
STAND OFF		A1	0	0.035	0.05
MOLD THICKNESS		A2	----	0.65	0.67
L/F THICKNESS		A3	0.203 REF		
LEAD WIDTH		b	0.2	0.25	0.3
BODY SIZE	X	D	7 BSC		
	Y	E	7 BSC		
LEAD PITCH		e	0.5 BSC		
EP SIZE	X	J	5.2	5.3	5.4
	Y	K	5.2	5.3	5.4
LEAD LENGTH		L	0.35	0.4	0.45
PACKAGE EDGE TOLERANCE		aaa	0.1		
MOLD FLATNESS		bbb	0.1		
COPLANARITY		ccc	0.08		
LEAD OFFSET		ddd	0.1		
EXPOSED PAD OFFSET		eee	0.1		
		</			



NOTES

1.0 COPLANARITY APPLIES TO LEADS, CORNER LEADS AND DIE ATTACH PAD.

POD for SCM 48QFN 7x7



DIMENSION LIST (FOOTPRINT: 1.00)

S/N	SYM	DIMENSIONS	REMARKS
1	A	0.900±0.10	OVERALL HEIGHT
2	A1	0.020 ±0.005	STANDOFF
3	D	7.000±0.100	PKG. LENGTH
4	E	7.000±0.100	PKG. WIDTH
5	L	0.500±0.100	FOOT LENGTH
6	b	0.250±0.050	LEAD WIDTH
7	e	0.500	LEAD PITCH

NOTES :

S/N	DESCRIPTION	SPEC.
1	GENERAL TOLERANCE	DISTANCE ±0.100 ANGLE ±2.5°
2	MATTE FINISH ON PACKAGE BODY SURFACE EXCEPT EJECTION AND PIN 1 MARKING.	Ro 0.3~1.2 um
3	FRAME BASE METAL THICKNESS	0.203 BASE
4	ALL MOLDED BODY SHARP CORNER RADI UNLESS OTHERWISE SPECIFIED.	MAX. R0.200
5	DRAWING DOES NOT INCLUDE PLASTIC OR METAL PROTRUSION OR CUTTING BURR.	
6	COMPLIANT TO JEDEC STANDARD: MO-220	