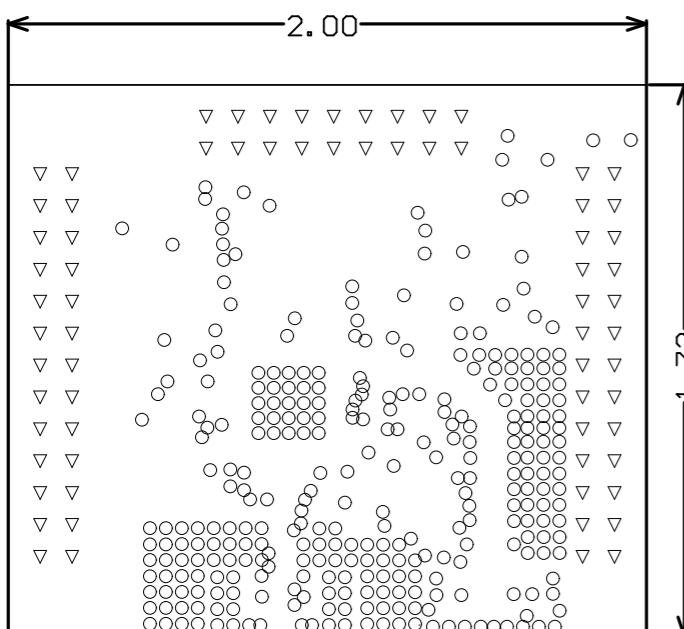


### Fabrication Notes:

1. All dimensions in inches. Tolerance = +/- 0.005 unless noted otherwise
2. All materials: laminates, resins, metallizations and soldermask to be compliant to EU RoHS directive 2002/95/EC IAW SP-12509-01.
3. 370 HR FR-4 or similar grade glass epoxy.
4. Tg > 170 degrees celcius, glass transition temperature.
5. TD > 350 degrees celcius, thermal decomposition.
6. Er = 4.0 +/- 5% @ 2.5GHz.
7. Minimum flammability rating UL94V-0, maximum dissipation factor 0.025.
8. Adjust prepreg for 0.062, +/- 0.003 finished thickness measured over soldermask.
9. Copper thickness 0.0014, (1 oz).
10. Hole size tolerance = +/- 0.003 unless noted otherwise.
11. Hole centers and pad centers to be concentric within 0.002.
12. Drill chart dimensions are drill sizes and not finished hole sizes.
13. Finish - immersion gold over nickel. No exposed bare copper permitted.
14. Thieving not allowed on layer 1.
15. Solder mask over bare copper, LPI class 2 gen. industrial registration +/- 0.004.
16. No coverage on solder pads permitted.
17. Refer to soldermask gerbers for tenting of vias.
18. White silkscreen legend over red soldermask - both sides.
19. Manufacturer icons not permitted on the silkscreen top layer.
20. PCB serialization/panel placement ID on silkscreen bottom.
21. Full electrical test against IPC-356A netlist.



Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Paste				
2	Top Overlay				
3	Top Solder	Solder Resist	0.40mil	3.5	
4	Top Layer	Copper	1.40mil		
5	Dielectric1	HR370	16.00mil	4	
6	Gnd Layer 2	Copper	1.40mil		
7	Dielectric2	HR370	24.00mil	4	
8	Power Layer 3	Copper	1.40mil		
9	Dielectric3	HR370	16.00mil	4	
10	Bottom Layer	Copper	1.40mil		
11	Bottom Solder	Solder Resist	0.40mil	3.5	
12	Bottom Overlay				
13	Bottom Paste				

Symbol	Hit Count	Tool Size	Plated	Hole Type
○	313	10mil (0.254mm)	PTH	Round
▽	70	40.157mil (1.02mm)	PTH	Round
	383 Total			

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4th Floor  
Boston, MA 02210  
www.silabs.com  
617-951-0200

TITLE:  
EM359x Ref Des, Ceramic Balun, USB, 4-layer

FILE NAME:  
EM359x\_REF\_DES\_CER\_USB.PcbDoc

Board NO.:  
EM359x\_REF\_DES\_CER\_USB

REV:  
A0

Layer:  
Drill Drawing

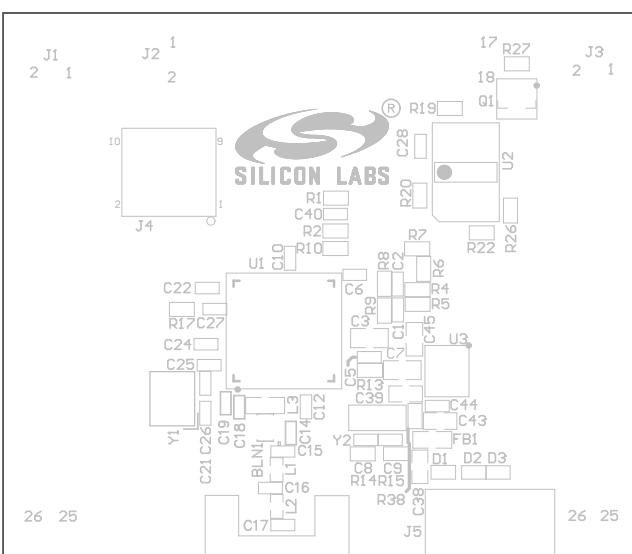
DATE:  
3/25/2015

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FILE NAME:  
EM359x\_REF\_DES\_CER\_USB.PcbDoc

Board NO.:  
EM359x\_REF\_DES\_CER\_USB

REV:  
A0

Layer:  
Top Overlay

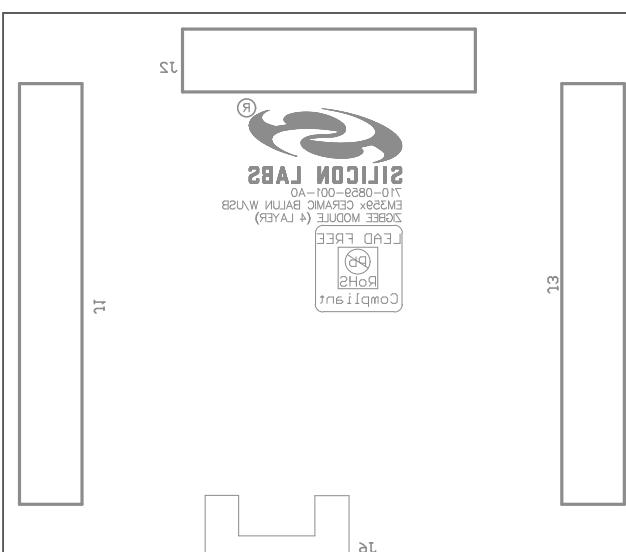
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3/25/2015

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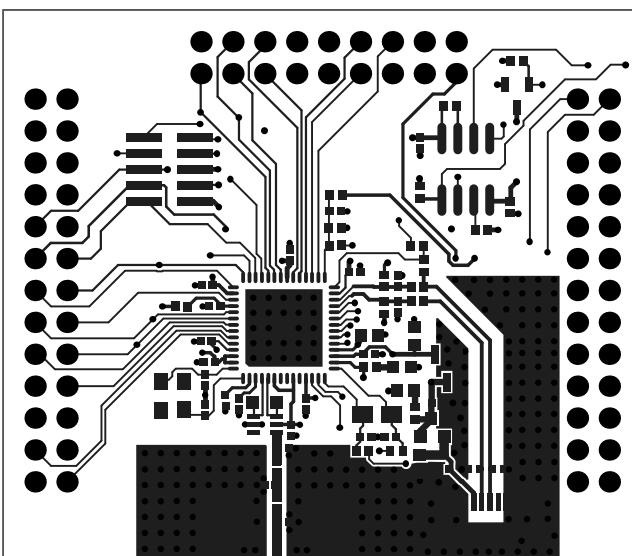


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TITLE:	EM359x Ref Des, Ceramic Balun, USB, 4-layer	
FILE NAME:	EM359x_REF DES_CER_USB.PcbDoc	
Board NO.:	EM359x_REF DES_CER_USB	REV: A0
Layer:	Bottom Overlay	DATE: 3/25/2015



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TITLE:  
EM359x Ref Des, Ceramic Balun, USB, 4-layer

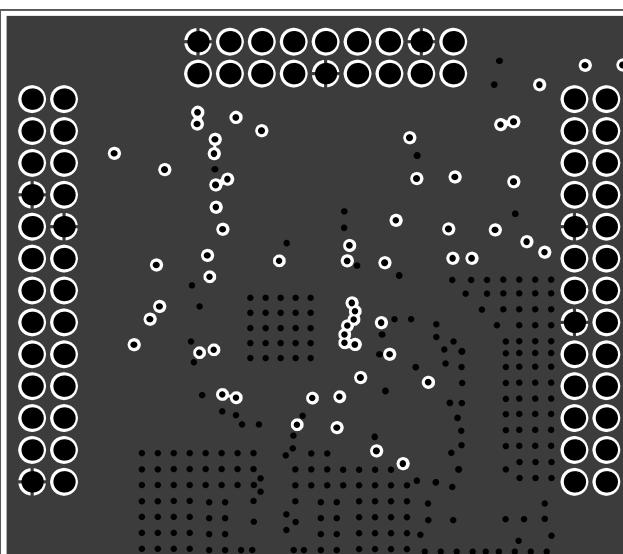
FILE NAME:  
EM359x\_REF\_DES\_CER\_USB.PcbDoc

Board NO.:  
EM359x\_REF\_DES\_CER\_USB

REV:  
A0

Layer:  
Top Layer

DATE:  
3/25/2015



D  
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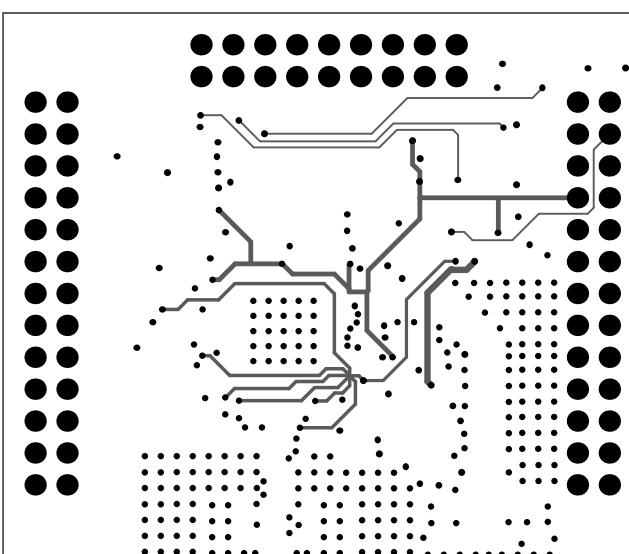
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FILE NAME:	EM359x_REF_DES_CER_USB.PcbDoc	
Board NO.:	EM359x_REF_DES_CER_USB	REV: A0
Layer:	Gnd Layer 2	DATE: 3/25/2015

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EM359x Ref Des, Ceramic Balun, USB, 4-layer

FILE NAME:  
EM359x\_REF\_DES\_CER\_USB.PcbDoc

Board NO.:  
EM359x\_REF\_DES\_CER\_USB

REV:  
A0

Layer:  
Power Layer 3

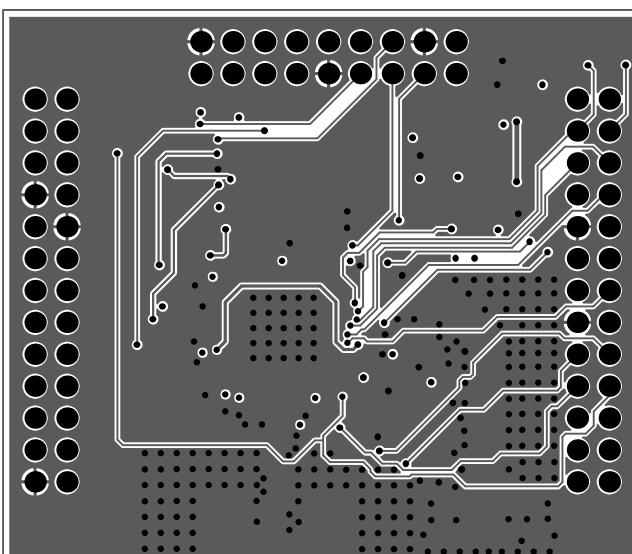
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3/25/2015

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FILE NAME:  
EM359x\_REF\_DES\_CER\_USB.PcbDoc

Board NO.:  
EM359x\_REF\_DES\_CER\_USB

REV:  
A0

Layer:  
Bottom Layer

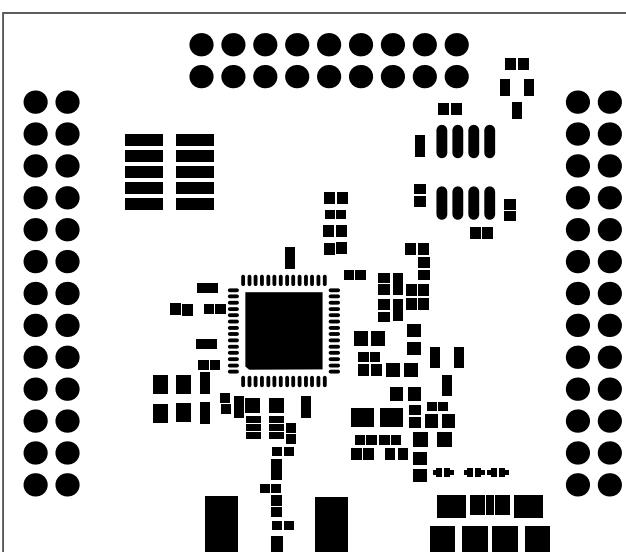
DATE:  
3/25/2015

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FILE NAME:  
EM359x\_REF\_DES\_CER\_USB.PcbDoc

Board NO.:  
EM359x\_REF\_DES\_CER\_USB

REV:  
A0

Layer:  
Top Solder

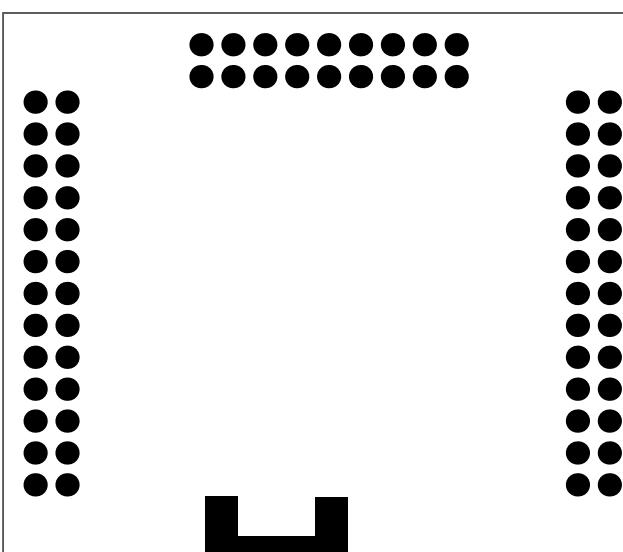
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Board NO.:  
EM359x\_REF\_DES\_CER\_USB

REV:  
A0

Layer:  
Bottom Solder

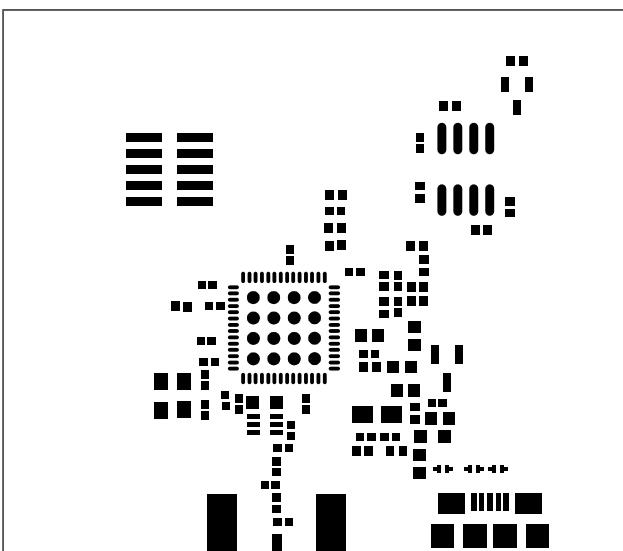
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FILE NAME:  
EM359x\_REF\_DES\_CER\_USB.PcbDoc

Board NO.:  
EM359x\_REF\_DES\_CER\_USB

REV:  
A0

Layer:  
Top Paste

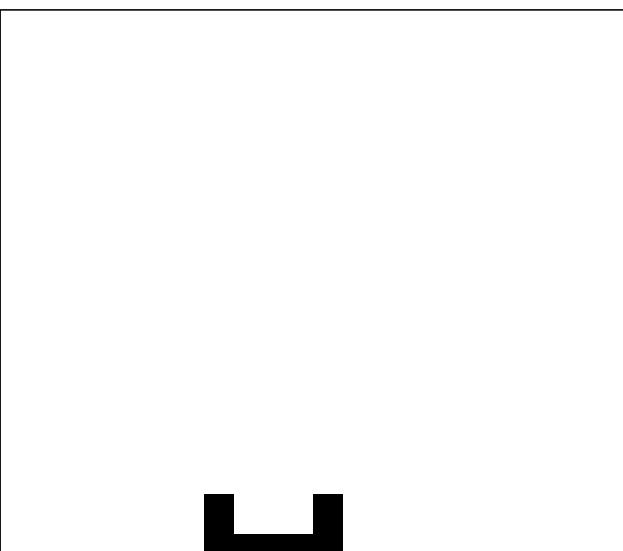
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Board NO.:  
EM359x\_REF\_DES\_CER\_USB

REV:  
A0

Layer:  
Bottom Paste

DATE:  
3/25/2015