

Microsemi Corporation

August 29, 2016

Product/Process Change Notification No: PCN1672

Change Classification: Major

Subject: Change in the package thickness of RTAX2000D/DL-CQ352 and RTAX4000D/DL-CQ352 devices

Description of Change:

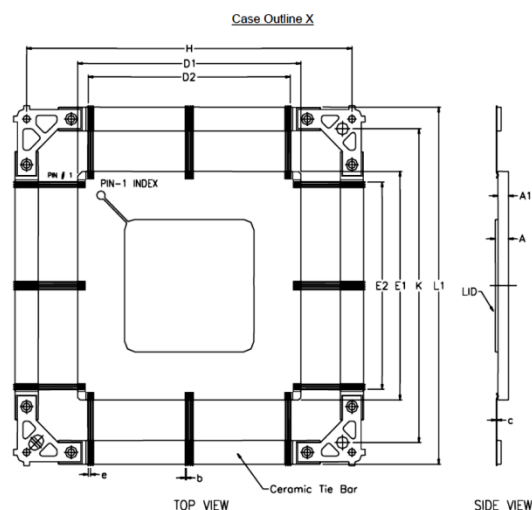
PCN1672 notifies that the Standard Microcircuit Drawings (SMD) for Microsemi's RTAX2000D/DL-CQ352 and RTAX4000D/DL-CQ352 FPGAs are in the process of amendment to show an increase to the package thickness of 0.5 mm. There is no change in the actual products.

There are no changes to the SMD or CQ352 package for the RTAX2000S/SL or RTAX4000S/SL FPGAs. The increase in the thickness of the packages applies only to the SMD for the RTAX-DSP parts with D and DL suffix.

Reason for Change:

The designed nominal thickness of the CQ352 package used with RTAX2000D/DL and RTAX4000D/DL FPGAs is thicker by 0.5 mm than the dimension shown in the SMD. This change updates the SMD to show the correct dimension.

Case Outline



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From

Symbol	Dimension (mm)		
	Min.	Nom.	Max.
A	2.43	---	3.11
A1	2.05	2.29	2.52
b	0.15	0.2	0.25
c	0.1	0.15	0.2
D1/E1	47.75	48	48.25
D2/E2	43.5 BSC		
e	0.5 BSC		
H	70 BSC		
K	65.9 BSC		
L1	74.6	75	75.4

To

Symbol	Dimension (mm)		
	Min.	Nom.	Max.
A	2.96	-	3.69
A1	2.50	2.79	3.08
b	0.15	0.20	0.25
c	0.10	0.15	0.20
D1/E1	47.75	48.00	48.25
D2/E2	43.50 BSC		
e	0.50 BSC		
H	70.00 BSC		
K	65.9 BSC		
L1	74.6	75	75.4

Application Impact:

Customers are recommended to

- Review the design of their lead trim and form tools to ensure that the 0.5 mm additional nominal package thickness does not cause any issues with the dimensions of the final formed leads.
- Review mechanical clearances in their flight model equipment design to ensure that the 0.5 mm additional nominal package thickness does not cause any issues with the dimensions of their flight model hardware.

Products Affected by this Change:

Device Names	SMD Parts
RTAX2000D	
RTAX2000D-CQ352Proto	N/A
RTAX2000D-CQ352B	5962-0422109QXC
RTAX2000D-CQ352V	5962-0422109VXC
RTAX2000D-1CQ352B	5962-0422110QXC
RTAX2000D-1CQ352V	5962-0422110VXC
RTAX2000D-CQ352E	5962-0422111QXC
RTAX2000D-1CQ352E	5962-0422112QXC
RTAX2000D-1CQ352PROTO	NA
RTAX2000DL	
RTAX2000DL-CQ352B	5962-0422113QXC
RTAX2000DL-CQ352V	5962-0422113VXC
RTAX2000DL-1CQ352B	5962-0422114QXC

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Device Names	SMD Parts
RTAX2000DL-1CQ352V	5962-0422114VXC
RTAX2000DL-CQ352E	5962-0422115QXC
RTAX2000DL-1CQ352E	5962-0422116QXC
RTAX2000DL-1CQ352PROTO	NA
RTAX2000DL-CQ352PROTO	NA
RTAX4000D	
RTAX4000D-CQ352PROTO	N/A
RTAX4000D-CQ352B	5962-0822409QXC
RTAX4000D-1CQ352B	5962-0822410QXC
RTAX4000D-CQ352V	5962-0822409VXC
RTAX4000D-1CQ352V	5962-0822410VXC
RTAX4000D-CQ352E	5962-0822411QXC
RTAX4000D-1CQ352E	5962-0822412QXC
RTAX4000D-1CQ352PROTO	NA
RTAX4000DL	
RTAX4000DL-CQ352B	5962-0822413QXC
RTAX4000DL-1CQ352B	5962-0822414QXC
RTAX4000DL-CQ352V	5962-0822413VXC
RTAX4000DL-1CQ352V	5962-0822414VXC
RTAX4000DL-CQ352E	5962-0822415QXC
RTAX4000DL-1CQ352E	5962-0822416QXC
RTAX4000DL-1CQ352PROTO	NA
RTAX4000DL-CQ352PROTO	NA

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Contact Information:

If you have further questions related to this topic, contact Microsemi's Technical Support at soc_tech@microsemi.com.

Regards,

Microsemi Corporation

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