Product Change Notification / CADA-20GQNA115

Date:

24-Feb-2022

Product Category:

EtherCAT, Ethernet Controllers, Ethernet Switches

PCN Type:

Manufacturing Change

Notification Subject:

CCB 4827 Initial Notice: Qualification of MTAI as a new assembly site for selected LAN925xx and LAN9353 device families available in 64L QFN (9x9x0.9mm) package.

Affected CPNs:

CADA-20GQNA115_Affected_CPN_02242022.pdf
CADA-20GQNA115_Affected_CPN_02242022.csv

Notification Text:

PCN Status: Initial Notification

PCN Type: Manufacturing Change

Microchip Parts Affected: Please open one of the files found in the Affected CPNs section.
Note: For your convenience Microchip includes identical files in two formats (.pdf and .xls)

Description of Change: Qualification of MTAI as a new assembly site for selected LAN925xx and LAN9353 device families available in 64L QFN (9x9x0.9mm) package.

Pre and Post Change Summary:

	Pre Change	Post Change

Assembly Site	ASE Inc. (ASE)	Microchip Technology Thailand (HQ) (MTAI)
Wire Material	CuPdAu	CuPdAu
Die Attach Material	EN-4900F	3280
Molding Compound Material	G631H	G700LTD
Lead-Frame Material	C194	A194
Lead-Frame Paddle Size	287x287mils	244 x 244mils
Lead Frame Design	Please refer to pre and post change comparison	

Note:C194, A194 or CDA194 Lead frame material are the same, it is just a MCHP internal labelling difference.

Impacts to Data Sheet: None

Change Impact None

Reason for Change: To improve on-time delivery performance by qualifying MTAI as a new assembly site.

Change Implementation Status: In Progress

Estimated Qualification Completion Date: March 2022

Note: Please be advised the qualification completion times may be extended because of unforeseen business conditions however implementation will not occur until after qualification has completed and a final PCN has been issued. The final PCN will include the qualification report and estimated first ship date. Also note that after the estimated first ship date guided in the final PCN customers may receive pre and post change parts.

Time Table Summary:

	February 2022				**March 2022**				
Workweek	6	7	8	9	10	11	12	13	14
Initial PCN Issue Date				x					
Qual Report Availability								x	
Final PCN Issue Date									

Method to Identify Change: Traceability code

Qualification Plan: Please open the attachments included with this PCN labeled as PCN_#_Qual_Plan.

Revision History: February 24, 2022: Issued initial notification.

The change described in this PCN does not alter Microchip's current regulatory compliance regarding the material content of the applicable products.

Attachments:

PCN_CADA-20GQNA115_Pre and Post Change_Summary.pdf
PCN_CADA-20GQNA115_Qual_Plan.pdf

Please contact your local Microchip sales office with questions or concerns regarding this notification.

Terms and Conditions:

If you wish to receive Microchip PCNs via email please register for our PCN email service at our PCN home page select register then fill in the required fields. You will find instructions about registering for Microchips PCN email service in the PCN FAQ section.

If you wish to change your PCN profile, including opt out, please go to the PCN home page select login and sign into your myMicrochip account. Select a profile option from the left navigation bar and make the applicable selections.

MICROCHIP

QUALIFICATION PLAN SUMMARY

PCN #: CADA-20GQNA115

Date:

Feb 3, 2022

Qualification of MTAI as a new assembly site for selected LAN925xx and LAN9353 device families available in 64L QFN (9x9x0.9mm) package

Purpose: Qualification of MTAI as a new assembly site for selected LAN925xx and LAN9353 device families available in 64L QFN (9x9x0.9mm) package.

CCB No.: 4827

Assembly site	MTAI
BD Number	BDM-002912-A
MP Code (MPC)	XA8011R4XA0C
Part Number (CPN)	LAN9252/ML
MSL information	MSL1
Assembly Shipping Media (T/R, Tube/Tray)	Tray
Base Quantity Multiple (BQM)	260
Reliability Site	MTAI
Paddle size	244 x 244
Lead Frame Material	A194
DAP Surface Prep	Double ring
Treatment	Roughening
Process	Etched
Lead-lock	No
Part Number	10106416
Lead Plating	Matte tin
Strip Size	N/A
Strip Density	N/A
Wire Material	CuPdAu
Die Attach Material	3280
Conductive	Yes
Mold Compound Material	G700LTD
PKG Type	QFN
Pin/Ball Count	64
PKG width/size	9x9

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	Test Site	Special Instructions
Wire Bond Pull - WBP	Mil. Std. 883-2011	5	0	1	5	0 fails after TC	5	MTAI	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5		5	MTAI	30 bonds from a min. 5 devices.
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	MTAI	
Preconditioning - Required for surface mount devices	+150°C Bake for 24 hours, moisture loading requirements per MSL level + 3X reflow at peak reflow temperature per Jedec-STD-020E for package type; Electrical test pre and post stress at +25C Perform SAM analysis using the standard sample size. MSL3/ 260	231	15	3	738	0	15	MTAI	Spares should be properly identified. 77 parts from each lot to be used for HAST, Autoclave, Temp Cycle test.
HAST	+130°C/85% RH for 96 hours. Electrical test pre and post stress at +25°C and +85	77	5	3	246	0	10	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
UHAST	+130°C/85% RH for 96 hrs. Electrical test pre and post stress at 25°C	77	5	3	246	0	10	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	Test Site	Special Instructions
Temp Cycle	-55°C to +125°C for 500 cycles. Electrical test pre and post stress at 85C; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress.	77	5	3	246	0	15	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

CCB 4827
Pre and Post Change Summary
PCN #: CADA-20GQNA115

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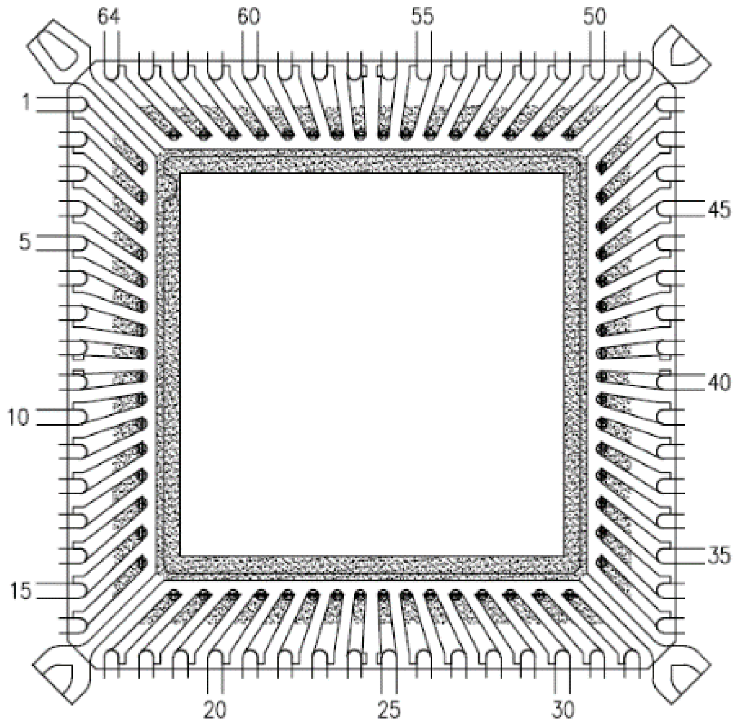
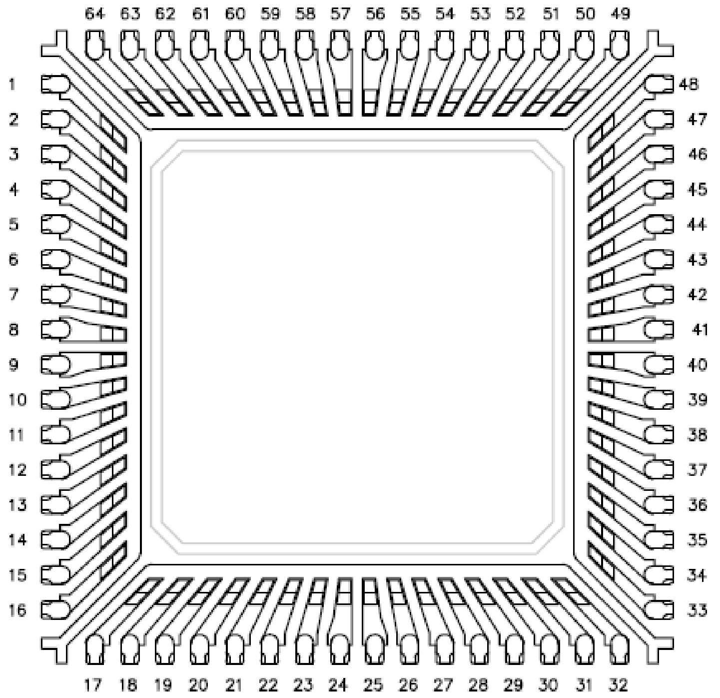
LEAD FRAME COMPARISON

ASE



Lead frame Paddle Size	287x287mils

MTAI



Lead frame Paddle Size	244 x 244mils

Affected Catalog Part Numbers (CPN)

LAN9250/ML
LAN9252/ML
LAN9353/ML
LAN9250I/ML
LAN9252I/ML
LAN9353I/ML
LAN9250V/ML
LAN9252V/ML
LAN9250TV/ML
LAN9252TV/ML
LAN9250T/ML
LAN9252T/ML
LAN9353T/ML
LAN9250TI/ML
LAN9252TI/ML
LAN9353TI/ML
LAN9253/R4X
LAN9253-I/R4X
LAN9253-V/R4X
LAN9253T-V/R4X
LAN9253T/R4X
LAN9253T-I/R4X