



Product Change Notification / CAAN-20EDKO108

Date:

25-Jan-2023

Product Category:

Memory

PCN Type:

Manufacturing Change

Notification Subject:

CCB 6045 Initial Notice: Qualification of MMT as a new assembly site for selected AT28C010x and AT28LV010 device families available in 32L PLCC (11.5x14x3.37mm) package.

Affected CPNs:

[CAAN-20EDKO108_Affected_CPN_01252023.pdf](#)
[CAAN-20EDKO108_Affected_CPN_01252023.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 MMT as a new assembly site for selected AT28C010x and AT28LV010 device families available in 32L PLCC (11.5x14x3.37mm) package.

Pre and Post Change Summary:

	Pre Change	Post Change
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Method to Identify Change:Traceability code

Qualification Plan:

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

Revision History:

January 25, 2023: 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_CAAAN-20EDKO108_Qualification Plan.pdf](#)

[PCN_CAAAN-20EDKO108_Pre and Post Change_Summary.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.

Affected Catalog Part Numbers (CPN)

AT28C010-12JU
AT28C010-12JU-076
AT28C010E-12JU
AT28C010-15JU
AT28C010E-15JU
AT28LV010-20JU
AT28LV010-20JU-319
AT28C010E-12JU-341
AT28LV010-20JU-051
AT28C010-12JU-235
AT28C010E-12JU-235
AT28C010-15JU-235
AT28C010E-15JU-235
AT28LV010-20JU-235
AT28C010-12JU-T
AT28C010E-12JU-T
AT28C010-15JU-T
AT28C010E-15JU-T
AT28LV010-20JU-T
AT28LV010-20JU-630



MICROCHIP

QUALIFICATION PLAN SUMMARY

PCN#: CAAN-20EDKO108

**Date:
December 09, 2022**

**Qualification of MMT as a new assembly site for selected
AT28C010x and AT28LV010 device families available in 32L
PLCC (11.5x14x3.37mm) package.**

Purpose: Qualification of MMT as a new assembly site for selected AT28C010x and AT28LV010 device families available in 32L PLCC (11.5x14x3.37mm) package.

CCB#: 6045

<u>Misc.</u>	Assembly site	MMT
	BD Number	BD-001164 rev 01
	MP Code (MPC)	195067P3XC01
	Part Number (CPN)	AT28C010-12JU
	MSL information	MSL-2/245C
<u>Lead-Frame</u>	Paddle size	401x275 mils
	Material	A194
	Surface	Ag Ring Plated
	Treatment	BOT
	Process	Etched
	Lead-lock	No
	Part Number	10103215
	Lead Plating	Matte Tin
	Strip Size	70x222.22mm
Strip Density	24 units/strip	
<u>Bond Wire</u>	Material	Au
<u>Die Attach</u>	Part Number	3280
	Conductive	Yes
<u>MC</u>	Part Number	G600V
<u>PKG</u>	PKG Type	PLCC
	Pin/Ball Count	32
	PKG width/size	11.5x14x3.37mm

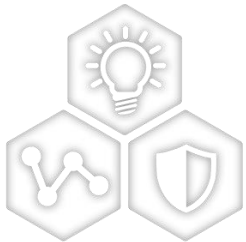
Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	Test Site	Special Instructions
Standard Pb-free Solderability	J-STD-002 ; Perform 8 hour steam aging for Matte tin finish and 1 hour steam aging for NiPdAu finish prior to testing. Standard Pb-free: Matte tin/ NiPdAu finish, SAC solder, wetting temp 245°C for both SMD & through hole packages.	22	5	1	27	> 95% lead coverage	5	MTAI	Standard Pb-free solderability is the requirement. SnPb solderability (backward solderability- SMD reflow soldering) is required for any plating related changes and highly recommended for other package BOM changes.
Wire Bond Pull - WBP	Mil. Std. 883-2011	5	0	3	15	0 fails after TC	5	MMT/MTAI	30 bonds from a minimum of 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	3	15	0	5	MMT/MTAI	30 bonds from a minimum of 5 devices.
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	MMT/MPHL	
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 +25°C. MSL-2@245°C	231	15	3	738	0	15	MPHL	Spares should be properly identified. 77 parts from each lot to be used for HAST, uHAST, Temp Cycle test.
Unbiased HAST	+130°C/85% RH for 96 hrs. Electrical test pre and post stress at +25°C.	77	5	3	246	0	10	MPHL	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	-65°C to +150°C for 500 cycles. Electrical test pre and post stress at hot temp; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress.	77	5	3	246	0	15	MPHL	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

CCB 6045
Pre and Post Change Summary
PCN #: CAAN-20EDKO108



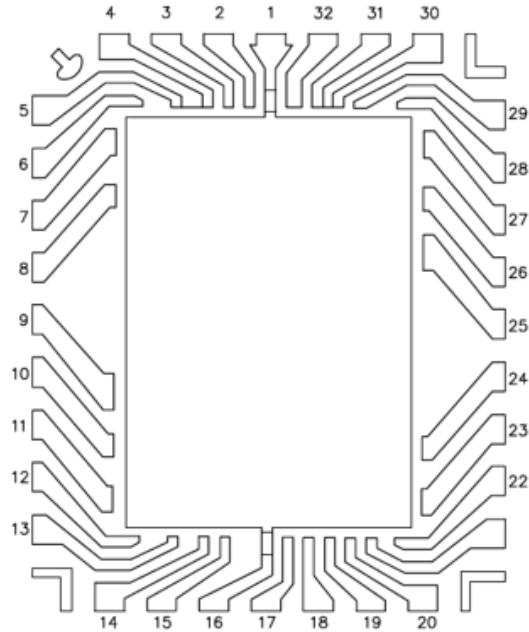
A Leading Provider of Smart, Connected and Secure Embedded Control Solutions



SMART | CONNECTED | SECURE

LEAD FRAME COMPARISON

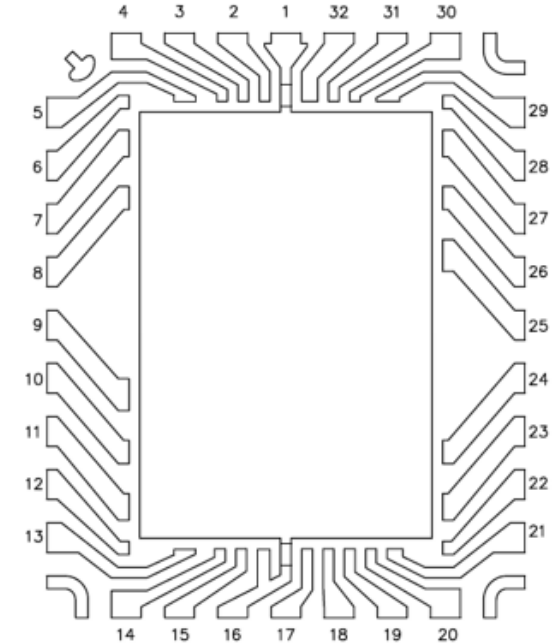
Pre change



Note: Not to scale

Lead frame DAP surface prep	Ag Spot Plated
Lead Plating	Matte Tin
Lead-Frame Paddle Size	391x275 mils

Post change



Note: Not to scale

Lead frame DAP surface prep	Ag Ring Plated
Lead Plating	Matte tin
Lead-Frame Paddle Size	401x275 mils

TUBE DIMENSION

Pre change

Post change

Tube Dimension

Length: 20.40+/-0.10 inch

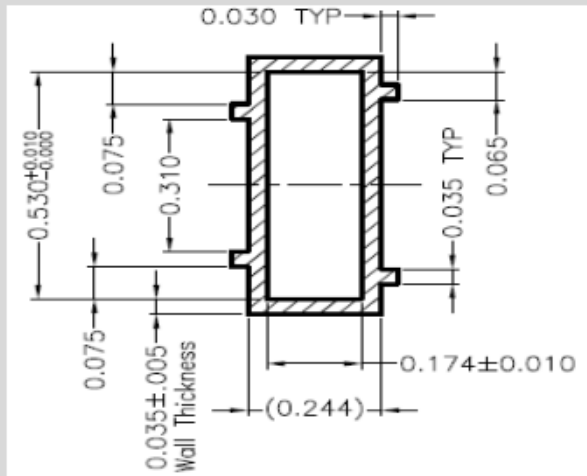
Width: 0.600+0.015/-0.005 inch

Tube Opening Length (A): 0.174 + 0.010 inch

Tube Opening Width (B): 0.530+0.010/-0.000 inch

Wall thickness (T): 0.035 + 0.005

Tube Opening:



Length: 21.70 ± 0.045 inch

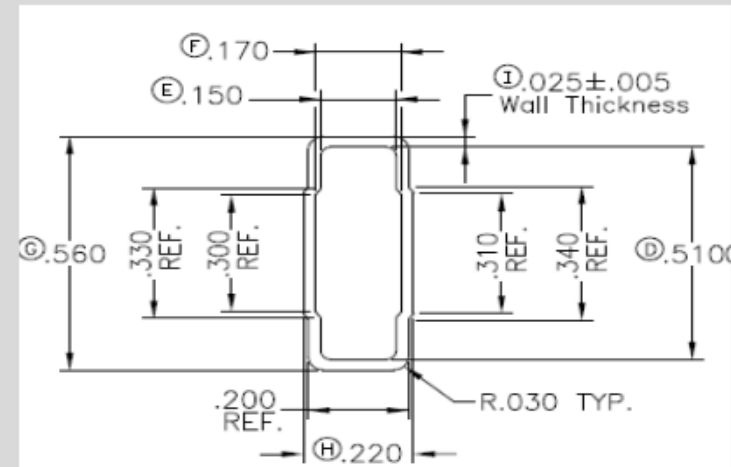
Width: 0.560 ± 0.015 inch

Tube Opening Length (A): 0.170 ± 0.010 inch

Tube Opening Width (B): 0.510 ± 0.010 inch

Wall thickness (T): 0.025 ± 0.005 inch

Tube Opening:

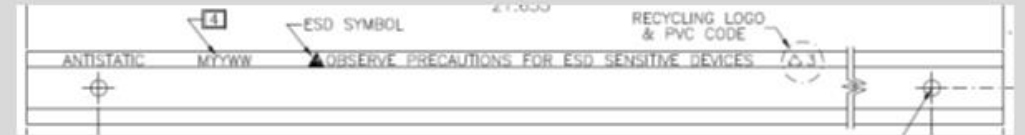


TUBE ILLUSTRATION AND STOPPER

Pre change

Post change

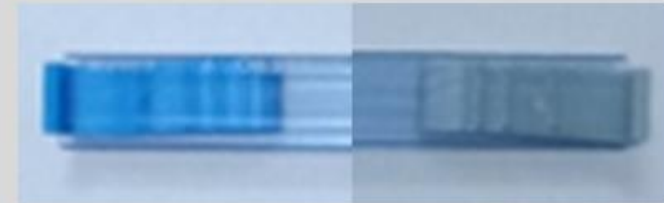
Tube Photo and Illustration



Tube Stopper



Blue colored stopper only on both ends



Blue and gray colored stopper

PIN 1 ORIENTATION

BQM 32 units/Tube (Atmel products): Pin 1 Orientation in tube

