Product Change Notification - JAON-05VXDE987

Date:

23 Jun 2020

Product Category:

Simple and Complex Programmable Logic

Affected CPNs:

Notification subject:

CCB 4257 Initial Notice: Qualification of GTK as a new assembly site for selected ATF22Lxx, ATF22Vxx, and ATF750xx Atmel device families available in 24L SOIC (300mils) package.

Notification text:

PCN Status:

Initial notification

PCN Type:

Manufacturing Change

Microchip Parts Affected:

Please open one of the icons found in the Affected CPNs section above.

NOTE: For your convenience Microchip includes identical files in two formats (.pdf and .xls).

Description of Change:

Qualification of GTK as a new assembly site for selected ATF22Lxx, ATF22Vxx, and ATF750xx Atmel device families available in 24L SOIC (300mils) package.

Pre Change:

Assembled at LPI using CRM-1033BF die attach material with MSL 2 classification

Post Change:

Assembled at GTK using EN-4900GC die attach material with MSL 3 classification

Pre and Post Change Summary:

		Pre Change	Post Change
Assembly Site		Lingsen Precision Industries, LTD. (LPI)	Greatek Electronic Inc. (GTK)
Bond Wire material		Gold (Au)	Gold (Au)
Die attach material		CRM-1033BF	EN-4900GC
Molding compound material		G600	G600
Lead frame material		A194	A194
MSL Classification		MSL 2	MSL 3
Packing Media: Tube	Tube Color	Clear	Clear
	Plug Color	Black/Black	Blue/White
	Tube Dimensions	Minor dimensional changes. See pre and post change comparison	

Impacts to Data Sheet:

No

Change Impact:

None

Reason for Change:

To improve on-time delivery performance by qualifying GTK as a new assembly site.

Change Implementation Status:

In Progress

Estimated Qualification Completion Date:

November 2020

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:

	June 2020					-->	November 2020				
Workweek	23	24	25	26	27		45	46	47	48	49
Initial PCN Issue Date				X							
Qual Report Availability											X
Final PCN Issue Date											X

Method to Identify Change:

Traceability code

Qualification Plan:

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

Revision History:

June 23, 2020: 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.

Attachment(s):

PCN_JAON-05VXDE987_Qual_Plan.pdf
PCN_JAON-05VXDE987_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)

ATF750C-7SX
ATF750LVC-15SU
ATF750CL-15SU
ATF750C-10SU
ATF750C-10SU-T
ATF22V10C-7SX
ATF22V10C-10SU
ATF22LV10C-10SU
ATF22V10C-10SU-T
ATF22V10CQZ-20SU
ATF22LV10CQZ-30SU
ATF22V10CQZ-20SU-T

JAON-05VXDE987 - CCB 4257 Initial Notice: Qualification of GTK as a new assembly site for selected ATF22Lxx, ATF22Vxx, and ATF750xx Atmel device families available in 24L SOIC (300mils) package.

Affected Catalog Part Numbers(CPN)

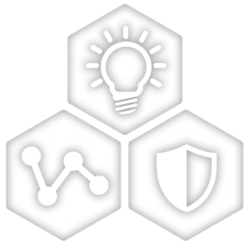
ATF750C-7SX
ATF750LVC-15SU
ATF750CL-15SU
ATF750C-10SU
ATF750C-10SU-T
ATF22V10C-7SX
ATF22V10C-10SU
ATF22LV10C-10SU
ATF22V10C-10SU-T
ATF22V10CQZ-20SU
ATF22LV10CQZ-30SU
ATF22V10CQZ-20SU-T

CCB 4257

Pre and Post Change Summary

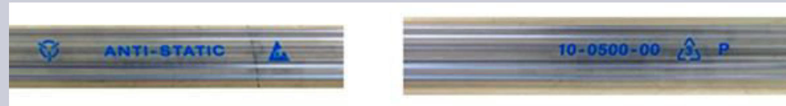
PCN# JAON-05VXDE987

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

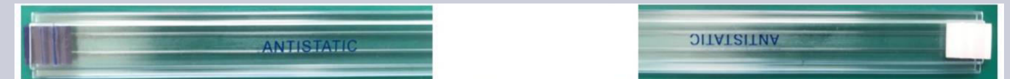


Pre and Post Change – Tube Packing Media

Pre-Change / LPI	Post Change / GTK



Package	Lead Count	Body Size	Units/ Tube	Length (inch)	End Plugs
SOIC	24	300 mils	31	20+/-0.10	Black/Black



Package	Lead Count	Body Size	Units /Tube	Length (inch)	End Plugs
SOIC	24	300 mils	31	20 +/- 0.05	Blue/White

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QUALIFICATION PLAN SUMMARY

PCN #: JAON-05VXDE987

Date:
May 28, 2020

Qualification of GTK as a new assembly site for selected ATF22Lxx, ATF22Vxx, and ATF750xx Atmel device families available in 24L SOIC (300mils) package.

Purpose: Qualification of GTK as a new assembly site for selected ATF22Lxx, ATF22Vxx, and ATF750xx Atmel device families available in 24L SOIC (300mils) package.

CCB No.: 4257

Misc.	Assembly site	GTK
	MP Code (MPC)	197117K3XC02
	Part Number (CPN)	ATF750CL-15SU
	MSL information	MSL 3 / 260
	Assembly Shipping Media (T/R, Tube/Tray)	Tube
	Base Quantity Multiple (BQM)	31units/tube
	Reliability Site	MPHIL
Lead-Frame	Paddle size	190 x 220
	Material	A194
	DAP Surface Prep	DOUBLE RING
	Treatment	None
	Process	Stamped
	Lead-lock	No
	Part Number	11-0224W-007
	Lead Plating	Matte Sn
	Strip Size (mm)	4X10
	Strip Density	40
Bond Wire	Material	Au
Die Attach	Part Number	EN-4900GC
	Conductive	Yes
MC	Part Number	G600
PKG	PKG Type	SOIC
	Pin/Ball Count	24
	PKG width/size	300mils

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Special Instructions
Standard Pb-free Solderability	J-STD-002D ; 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	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	1	5	0 fails after TC	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5		30 bonds from a min. 5 devices.
Physical Dimensions	Measure per JESD22 B100 and B108	10	0	3	30		
Lead Integrity	JESD22 B105	5	0	1	5	0 (No lead breakage or cracks)	10 leads from each of 5 parts. Not required for SMD, only required for through-hole.
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	
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. MSL3 260°C	231	15	3	738	0	Spares should be properly identified. 77 parts from each lot to be used for HAST, uHAST, Temp Cycle test.
HAST	+130°C/85% RH for 96 hours or 110°C/85%RH for 264 hours. Electrical test pre and post stress at +25°C	77	5	3	246	0	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
UHAST	+130°C/85% RH for 96 hrs or +110°C/85% RH for 264 hrs. Electrical test pre and post stress at +25°C	77	5	3	246	0	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Temp Cycle	-65°C to +150°C for 500 cycles. Electrical test pre and post stress at room temp (25c); 3-gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress.	77	5	3	246	0	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.