

[Home](#)

/

[Product Change Notifications](#)

/

[RMES-22JKYM836](#)

Product Change Notification / RMES-22JKYM836

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 Atmel products available in 28L SOIC (.300in) package.

Pre Change:

Assembled at LPI using CRM-1033BF die attach, QI-4939 die coat and G600 molding compound material

Post Change:

Assembled at GTK using EN-4900GC die attach, PIX-8144 die coat and G631M molding compound material

Pre and Post Change Summary:

		Pre Change	Post Change
Assembly Site		Lingsen Precision Industries, LTD. (LPI)	GREATEK ELETRONIC INC. (GTK)
Wire material		Au	Au
Die attach material		CRM-1033BF	EN-4900GC
Molding compound material		G600	G600
Lead frame material		A194	A194
Packing media	Base Quantity Multiple (BQM)	27	27
	Plug Color	Black / Black	Blue / White
	Tube Dimension and (Length)	Minor dimensional changes. See pre and post change comparison	
	Tube Drawing	See pre and post change comparison	
MSL Classification		MSL 2	MSL 3

Date

23-Jun-2020

PCN Type

Manufacturing Change

PCN

RMES-22JKYM836

Title

CCB 4270 Initial Notice: Qualification of GTK as a new assembly site for selected Atmel products available in 28L SOIC (.300in) package.

Product Category

Memory

Affected CPNs**RMES-**[22JKYM836 Affected CPN 06232020.pdf](#)**RMES-**[22JKYM836 Affected CPN 06232020.csv](#)**Attachments**[PCN_RMES-22JKYM836_Qual_Plan.pdf](#)[PCN_RMES-22JKYM836_Packing_Pre_and_Post_Change.pdf](#)

Impacts to Data Sheet:

None

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:**Method to Identify Change:**

Traceability code

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

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.

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.

CCB 4270
Pre and Post Change Summary
PCN#: RMES-22JKYM836





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



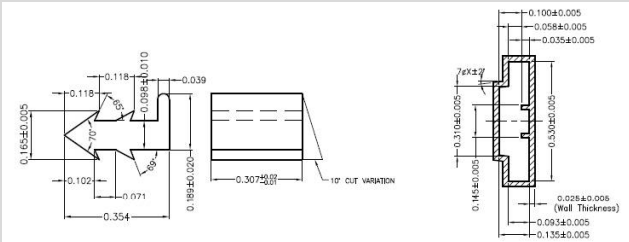
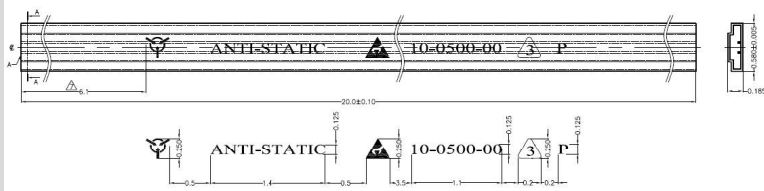
SMART | CONNECTED | SECURE

Packing Information (Tube Comparison)

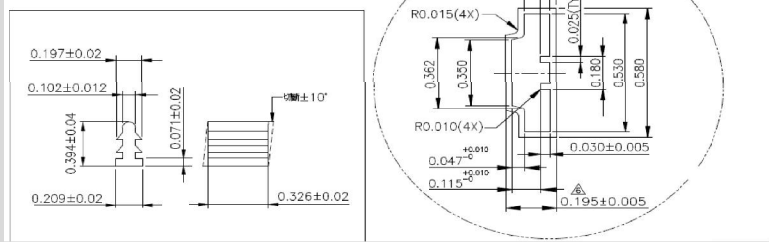
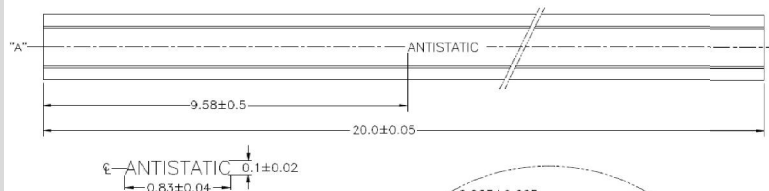
PRE-CHANGE (LPI)						POST-CHANGE (GTK)					
											
Package	Lead Count	Body Size	Units/Tube	Length (inch)	End Plugs	Package	Lead Count	Body Size	Units/Tube	Length (inch)	End Plugs
SOIC	28	300 mils	27	20+/-0.10	Black/Black	SOIC	28	300 mils	27	20 +/- 0.05	Blue/White

Tube Drawing

PRE-CHANGE (LPI)



POST-CHANGE (GTK)





MICROCHIP

QUALIFICATION REPORT SUMMARY
RELIABILITY LABORATORY

PCN#: ASER-30EHFB658

Date:
June 04, 2020

Qualification of new bill of materials (BOM) for selected Micrel products available in 4L VDFN (5.0x3.2x0.9mm) package at NSEB assembly site. This is a Q100 grade 2 qualification.



MICROCHIP PACKAGE QUALIFICATION REPORT

Purpose	Qualification of new bill of materials (BOM) for selected Micrel products available in 4L VDFN (5.0x3.2x0.9mm) package at NSEB assembly site. This is a Q100 grade 2 qualification.
CN	ES342243 / ES322636
QUAL ID	R2000293 Rev. A
MP CODE	3610R9H6A003
Part No.	D4BB-L3
Bonding No.	BDE-005830 Rev. 02
CCCB No.	3960
<u>Package</u>	
Type	4L VDFN
Package size	5.0x3.2x0.9 mm
<u>Lead Frame</u>	
Paddle size	COL
Material	A194
Pad Plating	Roughen NiPdAu
Process	Etched
Lead Lock	Yes
Part Number	FR0293
<u>Material</u>	
Epoxy	HR-5104 and 2200D
Wire	Au wire
Mold Compound	G700LTD
Die Coat	JCR6109
Plating Composition	NiPdAu



MICROCHIP PACKAGE QUALIFICATION REPORT

Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Date Code
NSEB203000616.000	GF35919404999.000	194355E
NSEB203100180.000	GF35919404999.000	194455Y
NSEB203100189.000	GF35919404999.000	194456D

Result

Pass Fail _____

4L VDFN (5.0x3.2x0.9 mm) assembled by NSEB pass reliability test per QCI-39000. This package was qualified the Moisture/Reflow Sensitivity Classification Level 1 at 260°C reflow temperature per IPC/JEDEC J-STD-020E standard.

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard / Method	Qty. (Acc.)	Def/SS	Result	Remarks
<u>Precondition</u> <u>Prior Perform</u> <u>Reliability Tests</u> (At MSL Level 1)	Electrical Test: +25°C System: Tester: D10, Handler: AET55V8/16	JESD22-A113	693 (0)	693		Good Devices
	Bake 150°C, 24 hrs System: Oven chamber	JIP/IPC/JEDEC J-STD-020E		693		
	85°C/85%RH Moisture Soak 168 hrs. System: Soak chamber			693		
	3x Convection-Reflow 265°C max System: Heat convection reflow			693		
	Electrical Test: +25°C System: Tester: D10, Handler: AET55V8/16				0/693	Pass
Temp Cycle	Stress Condition: -65°C to +150°C, 500 Cycles System: Hot and cold chamber	JESD22-A104		231		Parts had been pre-conditioned at 260°C
	Electrical Test: +105°C System: Tester: D10, Handler: AET55V8/V16		231(0)	0/231	Pass	77 units / lot
	Bond Strength: Wire Pull (> 3.00 grams)		30 (0)	0/30	Pass	
UNBIASED-HAST	Stress Condition: +130°C/85%RH, 96 hrs. System: Hot and moisture chamber	JESD22-A118		231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C System: Tester: D10, Handler: AET55V8/V16		231(0)	0/231	Pass	77 units / lot
HAST	Stress Condition: +130°C/85%RH, 96 hrs. Bias Volt: 3.3 Volts System: HAST 6000X	JESD22-A110		231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C, 105°C System: Tester: D10, Handler: AET55V8/16		231(0)	0/231	Pass	77 units / lot

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
High Temperature Storage Life	Stress Condition: Bake 150°C, 1008 hrs System: Oven chamber	JESD22-A103		45		45 units
	Electrical Test: +25°C +105°C System: Tester: D10, Handler: AET55V8/V16		45(0)	0/45	Pass	
Solderability Temp 245°C	Steam Aging: Temp 93°C,8Hrs Solder Dipping: Solder Temp.245°C Solder material:Pb Free Sn 95.5Ag3.9 Cu0.6 Visual Inspection: External Visual Inspection	J-STD-002	22 (0)	22 22 0/22	Pass	
Physical Dimensions	Physical Dimension, 10 units from 1 lot	JESD22-B100/B108	30(0) Units	0/30	Pass	
Bond Strength Data Assembly	Wire Pull (> 3.00 grams)	M2011	30 (0) Wires	0/30	Pass	
	Bond Shear (>13.00 grams)	JESD22-B116	30 (0) bonds	0/30	Pass	

RMES-22JKYM836 - CCB 4270 Initial Notice: Qualification of GTK as a new assembly site for selected Atr

Affected Catalog Part Numbers(CPN)

AT28HC256-70SU
AT28HC256-90SU
AT28HC256-12SU
AT28HC256E-90SU
AT28HC256E-12SU
AT28HC256F-90SU
AT28C256-15SU
AT28C256E-15SU
AT28C256F-15SU
AT28BV256-20SU
AT28HC256E-70SU-T
AT28HC256-70SU-T
AT28HC256-90SU-T
AT28HC256-12SU-T
AT28HC256E-90SU-T
AT28HC256E-12SU-T
AT28HC256F-90SU-T
AT28C256-15SU-T
AT28C256E-15SU-T
AT28C256F-15SU-T
AT28BV256-20SU-T