



Product Change Notification / ALAN-20AYEA392

Date:

22-Nov-2023

Product Category:

Clock and Timing - High Speed Communication, Linear Regulators, Low-Med Voltage Power Modules, Power Management - PMIC, Power Management - Power Switches, Power MOSFET Drivers, Switching Regulators

PCN Type:

Manufacturing Change

Notification Subject:

CCB 6621 Initial Notice: Qualification of UNIG as a new assembly site for selected UCS21xx, MIC23xx, MIC24xx, SPN01xx, MIC28xx, MIC33xx, MIC53xx, MIC50xx, MIC94xx, MIC74xx, SPN02xx, MIC44xx, MIC95xx, MIC30xx, and SPN95xx device families available in multiple packages.

Affected CPNs:

[ALAN-20AYEA392_Affected_CPN_11222023.pdf](#)

[ALAN-20AYEA392_Affected_CPN_11222023.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 UNIG as a new assembly site for selected UCS21xx, MIC23xx, MIC24xx, SPN01xx, MIC28xx, MIC33xx, MIC53xx, MIC50xx, MIC94xx, MIC74xx, SPN02xx, MIC44xx, MIC95xx, MIC30xx, and SPN95xx device families available in multiple packages.

Pre and Post Change Summary:

Method to Identify Change:Traceability code

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

Revision History:November 22, 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_ALAN-20AYEA392 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.

Affected Catalog Part Numbers (CPN)

UCS2114-1-V/LX
UCS2114-1A-V/LX
UCS2114T-1-V/LX
MIC23650YFT-TR
MIC23656YFT-TR
MIC23656-FAYFT-TR
MIC23656-HAYFT-TR
MIC23656-SAYFT-TR
MIC23350YFT-TR
MIC23356YFT-TR
MIC23356-FAYFT-TR
MIC23356-HAYFT-TR
MIC23356-SAYFT-TR
MIC24045-KDYFL
MIC24045-KDYFL-TR
SPN015011-TR
MIC2877-AYFT-TR
MIC2877-4.75YFT-TR
MIC23451-AAAYFL-T5
MIC23451-AAAYFL-TR
MIC33264YGK-T5
MIC33264YGK-TR
MIC5380-PPYFT-TR
MIC5019YFT-T5
MIC5019YFT-TR
MIC5381-PPYFT-TR
MIC2877-5.25YFT-TR
MIC2877-5.5YFT-TR
MIC28513-2YFL-T5
MIC28513-2YFL-TR
MIC94043YFL-TR
MIC94045YFL-TR
MIC33263YGK-T5
MIC33263YGK-TR
MIC5380-MGYFT-TR
MIC94040YFL-TR
MIC24045-DIYFL
MIC24045-DIYFL-TR
MIC7400
MIC7400YFL-T5
MIC7400YFL-TR
MIC7400-0001YFL-TR
MIC7400-0004YFL-TR
MIC7400-0011YFL-TR
MIC7400-0012YFL-TR
MIC7400-0001YFL-T5

ALAN-20AYEA392 - CCB 6621 Initial Notice: Qualification of UNIG as a new assembly site for selected UCS21xx, MIC23xx, MIC24xx, SPN01xx, MIC28xx, MIC33xx, MIC53xx, MIC50xx, MIC94xx, MIC74xx, SPN02xx, MIC44xx, MIC95xx, MIC30xx, and SPN95xx device families available in multiple packages.

MIC7401

MIC7401YFL-T5

MIC7401YFL-TR

MIC7401-0001YFL-TR

MIC7401-0006YFL-T5

MIC7401-0006YFL-TR

MIC7401-0007YFL-T5

MIC7401-0007YFL-TR

MIC7401-0008YFL-T5

MIC7401-0008YFL-TR

MIC7401-0010YFL-TR

MIC7401-0009YFL-T5

MIC7401-0009YFL-TR

MIC5381-G4YFT-TR

MIC7401-0001YFL-T5

MIC7401-0002YFL-T5

MIC7401-0002YFL-TR

MIC7401-0003YFL-T5

MIC7401-0003YFL-TR

MIC7401-0004YFL-T5

MIC7401-0004YFL-TR

MIC28511-2YFL-T5

MIC28511-2YFL-TR

MIC5380-LLYFT-TR

MIC5380-SSYFT-TR

MIC94082YFT-TR

MIC94085YFT-TR

SPN025013-TR

MIC24045-EIYFL

MIC24045-EIYFL-TR

MIC33M350YMP-TR

MIC33M356-FAYMP-TR

MIC33M356-HAYMP-TR

MIC33M356-SAYMP-TR

MIC28512-1YFL-T5

MIC28512-1YFL-TR

MIC94080YFT-TR

MIC5380-M4YFT-TR

MIC94041YFL-TR

MIC5380-NGYFT-TR

MIC4415YFT-TR

MIC4415YFT-T5

MIC7400-0005YFL

MIC7400-0006YFL

MIC7400-0007YFL

MIC7400-0008YFL

MIC7400-0009YFL

MIC7400-0020YFL

MIC7400-0011YFL

ALAN-20AYEA392 - CCB 6621 Initial Notice: Qualification of UNIG as a new assembly site for selected UCS21xx, MIC23xx, MIC24xx, SPN01xx, MIC28xx, MIC33xx, MIC53xx, MIC50xx, MIC94xx, MIC74xx, SPN02xx, MIC44xx, MIC95xx, MIC30xx, and SPN95xx device families available in multiple packages.

MIC7400-0012YFL
MIC7400-0002YFL-T5
MIC7400-0002YFL-TR
MIC7400-0003YFL-T5
MIC7400-0003YFL-TR
MIC7400-0004YFL-T5
MIC7400-0005YFL-T5
MIC7400-0005YFL-TR
MIC7400-0006YFL-T5
MIC7400-0006YFL-TR
MIC7400-0007YFL-T5
MIC7400-0007YFL-TR
MIC7400-0008YFL-T5
MIC7400-0008YFL-TR
MIC7400-0009YFL-T5
MIC7400-0009YFL-TR
MIC7400-0020YFL-T5
MIC7400-0020YFL-TR
MIC7400-0011YFL-T5
MIC7400-0012YFL-T5
MIC94044YFL-TR
MIC28513-1YFL-T5
MIC28513-1YFL-TR
MIC5380-G4YFT-TR
MIC5381-MGYFT-TR
MIC5381-M4YFT-TR
MIC24045-JFYFL
MIC24045-JFYFL-TR
MIC2877-5.0YFT-TR
MIC94083YFT-TR
MIC5380-KHYFT-TR
MIC95410YFL-TR
MIC95410YFL-T5
MIC94081YFT-TR
MIC94084YFT-TR
SPN025012-TR
MIC28512-2YFL-T5
MIC28512-2YFL-TR
MIC33163YGJ-T5
MIC33163YGJ-TR
MIC3003GFL
MIC3003GFL-TR
SPN950003
SPN950003-TR
MIC24046YFL-TR
MIC24046YFL-T5
MIC33164YGJ-T5
MIC33164YGJ-TR
MIC4414YFT-TR

ALAN-20AYEA392 - CCB 6621 Initial Notice: Qualification of UNIG as a new assembly site for selected UCS21xx, MIC23xx, MIC24xx, SPN01xx, MIC28xx, MIC33xx, MIC53xx, MIC50xx, MIC94xx, MIC74xx, SPN02xx, MIC44xx, MIC95xx, MIC30xx, and SPN95xx device families available in multiple packages.

MIC4414YF1-T5

MIC24045-2ZYFL

MIC24045-2ZYFL-TR

MIC28511-1YFL-T5

MIC28511-1YFL-TR

MIC94042YFL-TR

MIC24046-HYFL-TR

MIC5381-SSYFT-TR



QUALIFICATION PLAN SUMMARY

PCN#: ALAN-20AYEA392

**Date:
October 12, 2023**

Qualification of UNIG as a new assembly site for selected UCS21xx, MIC23xx, MIC24xx, SPN01xx, MIC28xx, MIC33xx, MIC53xx, MIC50xx, MIC94xx, MIC74xx, SPN02xx, MIC44xx, MIC95xx, MIC30xx, and SPN95xx device families available in multiple packages.

Purpose:

Qualification of UNIG as a new assembly site for selected UCS21xx, MIC23xx, MIC24xx, SPN01xx, MIC28xx, MIC33xx, MIC53xx, MIC50xx, MIC94xx, MIC74xx, SPN02xx, MIC44xx, MIC95xx, MIC30xx, and SPN95xx device families available in multiple packages.

CCB No:

6621

<u>Misc.</u>	Assembly site	UNIG
	BD Number	D-013440
	MP Code (MPC)	3600NYNNAA09
	Part Number (CPN)	MIC7401-0001YFL-TR
	MSL information	MSL 2, 260°C
	Assembly Shipping Media (T/R, Tube/Tray)	T&R
	Base Quantity Multiple (BQM)	5000
	Reliability Site	UNIS
<u>Lead-Frame</u>	Paddle size	67x67mils
	Material	A194FH
	DAP Surface Prep	Ag selective
	Treatment	No
	Process	Etch
	Lead-lock	Yes
	Part Number	40500064
	Lead Plating	Matte Sn
	Strip Size	70x250mm
	Strip Density	440
<u>Bond Wire</u>	Material	Au
<u>Die Attach</u>	Part Number	SAC035
	Conductive	Yes
<u>MC</u>	Part Number	G770HCD
<u>PKG</u>	Package Type	VQFN
	Pin/Ball Count	36
	PKG width/size	4.5x4.5x0.9mm

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	ATE Test Site	REL Test Site	Special Instructions
Standard Pb-free Solderability	J-STD-002D ; Perform 8 hour steam aging for Matte tin 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			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	5			30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5	0	5			30 bonds from a min. 5 devices.
Wire Sweep										Required for any reduction in wire bond thickness.
Physical Dimmensions	Measure per JESD22 B100 and B108	10	0	3	30	0	5			
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5			
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, 260°C	231	15	3	738	0	15	UNIG	UNIS	Spares should be properly identified. 77 parts from each lot to be used for HAST, uHAST, Temp Cycle test.
UHASt	+130°C/85% RH for 192hrs Electrical test pre and post stress at +25°C	77	5	3	246	0	10	UNIG	UNIS	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 hot temp +125°C; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress.	77	5	3	246	0	15	UNIG	UNIS	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.