

Product Change Notification - GBNG-11QSQB476

Date: 08 Aug 2017

Product Category: Power Management - System Supervisors/Voltage Detectors; Power MOSFET Drivers; Sigma - Delta A/D Converters; Digital Potentiometers; System D/A Converters; Linear Op Amps; Linear Comparators; Linear Selectable Gain Amplifiers; Temperature Sensors; Charge Pump DC-to-DC Converters; Brushless DC Fan Controllers & Fan Fault Detectors

Notification subject: CCB 3010 and 3010.001 Initial Notice: Qualification of MMT as an additional assembly site for selected products available in 5L and 6L SOT-23 package.

Notification text: **PCN Status:**
Initial notification.

Microchip Parts Affected:

Please open the attachments found in the attachments field below labeled as PCN_#_Affected_CPN.

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

Description of Change:

Qualification of MMT as an additional assembly site for selected products available in 5L and 6L SOT-23 package.

Pre Change:

Assembled at MTAI assembly site.

Post Change:

Assembled at MTAI or MMT assembly site.

Pre and Post Change Summary:

	Pre Change	Post Change	
Assembly Site	MTAI	MTAI	MMT
Wire material	Au	Au	
Die attach material	84-3J/8006NS	84-3J/8006NS	
Molding compound material	G600	G600	
Lead frame material	CDA194	CDA194	

Impacts to Data Sheet:

None

Change Impact:

None

Reason for Change:

To improve productivity by qualifying MMT as an additional assembly site.

Change Implementation Status:

In Progress

Estimated Qualification Completion Date:

October 2017

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:

Workweek	August 2017					-->	October 2017				
	31	32	33	34	35		40	41	42	43	44
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:
August 08, 2017: 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_GBNG-11QSQB476_Affected CPN.pdf](#)
 - [PCN_GBNG-11QSQB476_Qual Plan.pdf](#)
 - [PCN_GBNG-11QSQB476_Affected CPN.xlsx](#)

Please contact your local [Microchip sales office](#) with questions or concerns regarding this notification.

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GBNG-11QSQB476 - CCB 3010 and 3010.001 Initial Notice: Qualification of MMT as an additional assembly site for selected products available in 5L and 6L SOT-23 package using 84-3J/8006NS die attach material.

Affected Catalog Part Numbers (CPN)

PCN_GBNG-11QSQB476
Catalog Part Numbers
MCP111T-360E/OT
MCP111T-370E/OT
MCP1415RT-E/OT
MCP1416RT-E/OT
MCP14A0051T-E/CH
MCP14A0052T-E/CH
MCP14A0151T-E/CH
MCP14A0152T-E/CH
MCP3421A0T-E/CH
MCP3421A0T-E/CHV02
MCP3421A0T-E/OT
MCP3421A1T-E/CH
MCP3421A2T-E/CH
MCP3421A3T-E/CH
MCP3421LA0T-E/CH
MCP3425A0T-E/CH
MCP3425A1T-E/CH
MCP3425A2T-E/CH
MCP3425A3T-E/CH
MCP4012T-103E/CH
MCP4012T-202E/CH
MCP4012T-502E/CH
MCP4012T-503E/CH
MCP4013T-103E/CH
MCP4013T-202E/CH
MCP4013T-502E/CH
MCP4013T-503E/CH
MCP4022T-103E/CH
MCP4022T-202E/CH
MCP4022T-502E/CH
MCP4022T-503E/CH
MCP4023T-103E/CH
MCP4023T-202E/CH
MCP4023T-502E/CH
MCP4023T-503E/CH
MCP4706A0T-E/CH
MCP4706A1T-E/CH
MCP4706A2T-E/CH
MCP4706A3T-E/CH
MCP4716A0T-E/CH
MCP4716A1T-E/CH
MCP4716A2T-E/CH
MCP4716A3T-E/CH

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Affected Catalog Part Numbers (CPN)

MCP4725A0T-E/CH
MCP4725A1T-E/CH
MCP4725A2T-E/CH
MCP4725A3T-E/CH
MCP4726A0T-E/CH
MCP4726A1T-E/CH
MCP4726A2T-E/CH
MCP4726A3T-E/CH
MCP47DA1T-A0E/OT
MCP47DA1T-A1E/OT
MCP6001RT-E/OT
MCP6001RT-I/OT
MCP6001T-E/OT
MCP6001T-I/OT
MCP6001T-I/OTHAZ
MCP6001UT-E/OT
MCP6001UT-I/OT
MCP601RT-E/OT
MCP601RT-I/OT
MCP6021RT-E/OT
MCP603T-E/CH
MCP603T-I/CH
MCP6043T-E/CH
MCP6043T-I/CH
MCP6143T-E/CH
MCP6231RT-E/OT
MCP6241RT-E/OT
MCP6271RT-E/OT
MCP6271T-E/OT
MCP6273T-E/CH
MCP6281RT-E/OT
MCP6281T-E/OT
MCP6283T-E/CH
MCP6291RT-E/OT
MCP6291T-E/OT
MCP6293T-E/CH
MCP6401RT-E/OT
MCP6541RT-E/OT
MCP6541RT-I/OT
MCP6541T-E/OT
MCP6541T-I/OT
MCP6546RT-E/OT
MCP6546RT-I/OT
MCP6546T-E/OT
MCP6546T-I/OT

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Affected Catalog Part Numbers (CPN)

MCP6561RT-E/OT
MCP6566RT-E/OT
MCP6G01RT-E/OT
MCP6L01RT-E/OT
MCP6L01T-E/OT
MCP6L01UT-E/OT
MCP6L1RT-E/OT
MCP6L71RT-E/OT
MCP6L71T-E/OT
MCP6L91RT-E/OT
MCP6L91T-E/OT
MCP9510CT-E/CH
MCP9510HT-E/CH
MCP9510HT-E/CHBAA
TC1220ECH718
TC1220ECHTR
TC1240AECHTR
TC1240ECHTR
TC1270ALAVCTTR
TC1270ALBVCTTR
TC1270ALVCTTR
TC1270AMAVCTTR
TC1270AMBVCTTR
TC1270AMVCTTR
TC1270ANLAVCTTR
TC1270ANLBVCTTR
TC1270ANLVCTTR
TC1270ANMAVCTTR
TC1270ANMBVCTTR
TC1270ANMVCTTR
TC1270ANRAVCTTR
TC1270ANRBVCTTR
TC1270ANRVCTTR
TC1270ANSVCTTR
TC1270ANSBVCTTR
TC1270ANSVCTTR
TC1270ANTAVCTTR
TC1270ANTBVCTTR
TC1270ANTVCTTR
TC1270ARAVCTTR
TC1270ARBVCTTR
TC1270ARVCTTR
TC1270ASAVCTTR
TC1270ASBVCTTR
TC1270ASVCTTR

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Affected Catalog Part Numbers (CPN)

TC1270ATAVCTTR
TC1270ATBVCTTR
TC1270ATVCTTR
TC1271ALAVCTTR
TC1271ALBVCTTR
TC1271ALVCTTR
TC1271AMAVCTTR
TC1271AMBVCTTR
TC1271AMVCTTR
TC1271ARAVCTTR
TC1271ARBVCTTR
TC1271ARVCTTR
TC1271ASAVCTTR
TC1271ASBVCTTR
TC1271ASVCTTR
TC1271ATAVCTTR
TC1271ATBVCTTR
TC1271ATVCTTR
TC670ECHTR



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QUALIFICATION PLAN SUMMARY

PCN #: GBNG-11QSQB476

June 15, 2017

Qualification of MMT as an additional assembly site for selected products available in 5L and 6L SOT-23 package using 84-3J/8006NS die attach material. The 5L SOT-23 package will qualify by similarity.

Purpose: Qualification of MMT as an additional assembly site for selected products available in 5L and 6L SOT-23 package using 84-3J/8006NS die attach material. The 5L SOT-23 package will qualify by similarity.

CCB: 3010 and 3010.001

<u>Misc.</u>	Assembly site	MMT
	BD Number	BDM-001367 rev A
	MP Code (MPC)	DFBE1YC8XAA0
	Part Number (CPN)	MCP4706A0T-E/CH
<u>Lead-Frame</u>	Paddle size	72x41 mils
	Material	CDA194
	Surface	Ag Spot Plated
	Treatment	None
	Process	Stamped
	Lead-lock	No
	Part Number	10100602
	Lead Plating	Matte Tin
	LF Matrix (RowxColumn)	6x32 (192 units/strip)
Strip test capable	Yes	
<u>Bond Wire</u>	Material	Au
<u>Die Attach</u>	Part Number	84-3J/8006NS
	Conductive	No
<u>MC</u>	Part Number	G600V
<u>PKG</u>	PKG Type	SOT-23
	Pin/Ball Count	6
<u>Die</u>	Die Thickness	8 mils
	Die Size	53.0x33.0 mils
MSL Classification		L1/260C

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	Special Instructions
Wire Bond Pull - WBP	Mil. Std. 883-2011	5	0	3	24	0 fails after TC	5	30 bonds from a minimum of 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	3	24		5	30 bonds from a minimum of 5 devices.
Wire Sweep		5	0	3	15	0		Required for any reduction in wire bond thickness.
Physical Dimensions	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	
HTSL (High Temp Storage Life)	+175 C for 504 hours. Electrical test pre and post stress at +25°C and hot temp.85°C. 1 lot to be tested at 125C	45	5	1	50	0	25	
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-020D for package type; Electrical test pre and post stress at +25°C. MSL1 @ 260°C	231	15	3	738	0	15	Spares should be properly identified. 77 parts from each lot to be used for HAST, Autoclave, Temp Cycle test.

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	Special Instructions
HAST	+130°C/85% RH for 96 hours. Electrical test pre and post stress at +25°C and hot temp. 1 lot to be tested at 125C	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Unbiased HAST	+130°C/85% RH for 96 hrs. Electrical test pre and post stress at +25°C.	77	5	3	246	0	10	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; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress. 1 lot to be tested at 125C	77	5	3	246	0	15	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.