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## Product Change Notification - CYER-19VUXW601

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**Date:** 19 Apr 2010  
**Product Category:** Memory; RF and Security; Analog (Thermal, Power Management & Safety); Analog (Linear & Mixed Signal) AND Interface; Touch Sensing Technologies; Radio Frequency Devices; 8-bit Microcontrollers; All 16-bit Microcontrollers

**Device Family:**  

**Notification subject:** CCB 956: Qualification of 8L, 14L, & 16L PDIP at GTK (GR TK) assembly site.

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

Microchip Part#s Affected:  
See attachments of Affected Part Numbers Labeled as...  
PCN\_CYER-19VUXW601\_Affected\_CPN.xls  
PCN\_CYER-19VUXW601\_Affected\_CPN.pdf

Description of Change:  
Qualification of 8L, 14L, & 16L PDIP at GTK (GR TK) assembly site.

Impacts to Data Sheet:  
None

Reason for Change:  
To improve on-time delivery performance,

Change Implementation Status:  
In Progress

Estimated First Ship Date:  
July 30, 2010 (Date code 1031)

NOTE: Please be advised that during the transition period customers may receive pre and post change parts, due to existing inventory of the pre changed parts.

Markings to Distinguish Revised from Unrevised Devices: (e.g.: Date Code, Device Marking, Ship Container Marking)  
Traceability code

**Attachment(s):** [PCN\\_CYER-19VUXW601\\_Affected\\_CPN.pdf](#)  
[PCN\\_CYER-19VUXW601\\_Affected\\_CPN.xls](#)  
[PCN\\_CYER-19VUXW601\\_Qual Plan.pdf](#)

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Parts Affected

11AA010  
11AA020  
11AA040  
11AA080  
11AA160  
11LC010  
11LC020  
11LC040  
11LC080  
11LC160  
23A256  
23A640  
23K256  
23K640  
24AA00  
24AA01  
24AA014  
24AA014H  
24AA01H  
24AA02  
24AA024  
24AA024H  
24AA025  
24AA02H  
24AA04  
24AA04H  
24AA08  
24AA08H  
24AA1025  
24AA128  
24AA16  
24AA16H  
24AA256  
24AA32A  
24AA32AF  
24AA512  
24AA515  
24AA52  
24AA64  
24AA64F  
24AA65  
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24C01C  
24C02C

24C65  
24FC1025  
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24LC512  
24LC515  
24LC64  
24LC64F  
24LC65  
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24LCS22A  
24LCS52  
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24VL024  
24VL024H  
24VL025  
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25AA020A

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25AA080A  
25AA080B  
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25AA160D  
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93AA66B  
93AA66C  
93AA76  
93AA76C  
93AA86C  
93C46A  
93C46B  
93C46C  
93C56A  
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TC7652

TC7660

TC7660H

TC7660S

TC7662A

TC7662B

TC9400

TC9401

TC9402

TC962



**MICROCHIP**

# **QUALIFICATION PLAN**

**PCN#: CYER-19VUXW601**

**Date:  
March 12, 2010**

**Qualification of 16L PDIP at GTK (GRTK) assembly site  
and the 8L & 14L PDIP will qualify by similarity**

Distribution

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**Purpose:** \_\_\_\_\_ To qualify 16L PDIP package at GTK. The 8/14L packages will qualify by similarity at GTK.

**Mask:** \_\_\_\_\_ Y4AH49D6XA00

**Part No.:** \_\_\_\_\_ TC3403VPE

**CCB#:** \_\_\_\_\_ 956

**Package:**

**Type** \_\_\_\_\_ 16L PDIP

**Die thickness:** \_\_\_\_\_ 15 mils

**Die size:** \_\_\_\_\_ 75 x 115 mils

**Lead frame:**

**Paddle size:** \_\_\_\_\_ 110x140 mils

**Material** \_\_\_\_\_ C194 / NINGBO KANGQIANG (China)

**Surface** \_\_\_\_\_ Bare Cu

**Process** \_\_\_\_\_ Stamped

**Lead Lock** \_\_\_\_\_ Yes

**Part Number** \_\_\_\_\_ 11-01016-001

**Wire:**

**Material** \_\_\_\_\_ Au / Sumitomo (Japan)

**Die Attach Epoxy:**

**Part Number** \_\_\_\_\_ CRM 1076DJ-G / Sumitomo (Japan)

**Conductive** \_\_\_\_\_ Yes

**Mold Compound:** \_\_\_\_\_ G600F / Sumitomo (Taiwan)

**Package Reliability Tests**

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Quantity of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	Special Instructions
Standard Pb-free Solderability	JESD22B-102E; Perform 8 hour steam aging for Matte tin finish and 1 hr steam aging for NiPdAu finish prior to testing.	22	5	1	27	> 95% lead coverage	5	
Backward Solderability	JESD22B-102E; Perform 8 hour steam aging for Matte tin finish and 1 hr steam aging for NiPdAu finish prior to testing.  Backward: Matte tin/ NiPdAu finish, SnPb solder, wetting temp 215°C for SMD.	22	5	1	27	> 95% lead coverage	5	

### Package Reliability Tests

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Quantity of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	Special Instructions
Wire Bond Pull - WBP	Mil. Std. 883-2011	5	0	1	5	0 fails after TC	5	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5		5	30 bonds from a min. 5 devices.
Bond Line Thickness (BLT) robustness assessment						>0.5 mils		
Wire Sweep								Required for any reduction in wire bond thickness.
Physical Dimensions	Measure per JESD22 B100 and B108	10	0	3	30	0	5	
Lead Integrity	JESD22 B105	5	0	1	5	0 (No lead breakage or cracks)	5	10 leads from each of 5 parts. Not required for SMD, only required for through-hole.
External Visual	Mil. Std. 883-2009/2010	ALL	0	3	ALL	0	5	



**Package Reliability Tests**

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Quantity of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	Special Instructions
HTSL (High Temp Storage Life)	+175°C for 504 hours or 150°C for 1008 hrs. Electrical test pre and post stress at +25C and hot temp.	45	5	3	150	0	10	

**Package Reliability Tests**

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Quantity 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 and hot temp.	77	5	3	246	0	10	Spares should be properly identified.
Autoclave *	+121° C/15 psig for 96 hours. Electrical test pre and post stress at +25° C	77	5	3	246	0	10	Spares should be properly identified.
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	Spares should be properly identified.