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Product Change Notification - CYER-23CQOF679

Date: 08 Nov 2010

Product Category: 16-bit Microcontrollers and Digital Signal Controllers; Analog (Linear & Mixed Signal) AND Interface; 8-bit Microcontrollers; All 16-bit Mic

Device Family: 

Notification subject: CCB 992: Qualification of 28L SPDIP (.300) packages at GTK assembly site.

Notification text:

PCN Status:
Final notification

Microchip Part#s Affected:
See attachments of affected catalog part numbers (CPN) labeled as...
[PCNCYER-23CQOF679_Affected_CPN.xls](#)
[PCNCYER-23CQOF679_Affected_CPN.pdf](#)

Description of Change:
Qualification of 28L SPDIP (.300) packages at GTK 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:
November 12, 2010 (Date code 1046)

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

Markings to Distinguish Revised from Unrevised Devices:
Traceability code

Attachment(s): [PCN_23CYER-CQOF679_Affected_CPN.pdf](#)
[PCN_23CYER-CQOF679_Affected_CPN.xls](#)
[PCN_CYER-23CQOF679_Qual Report.pdf](#)

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

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MICROCHIP

**QUALIFICATION REPORT
RELIABILITY LABORATORY**

PCN#: CYER-23CQOF679

Date
October 25, 2010

**Qualification of 28L SPDIP (.300) packages at
GTK assembly site**

Distribution

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MICROCHIP PACKAGE QUALIFICATION REPORT

Purpose	Qualification of 28L SPDIP (.300) packages at GTK assembly site
CN	BC102489
QUAL ID	Q10098
Part No.	DSPIC30F2010-20E/S
MP CODE	DFAB14M3XA20
Bonding No.	A-018243 Rev. C
CCB No.	992
<u>Package</u>	
Type	28L SPDIP
Package size	300 mils
Die thickness	15 mils
Die size	127.50 x 176.00 mils
<u>Lead Frame</u>	
Paddle size	140 x 235 mils
Material	Cu 194 / Fu Cheng (China)
Surface	Bare Cu
Process	Stamped
Lead Lock	Yes
Part Number	11-0128K-003
<u>Die attach material</u>	
Epoxy	CRM1076DJ-G / Sumitomo (Japan)
Wire	Au wire / MK Electron (Korea)
Mold Compound	GE600F / Sumitomo (Taiwan)
Plating Composition	Matte Tin



MICROCHIP PACKAGE QUALIFICATION REPORT

Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Trace Code
GTK-112300003	TMPE211105020.400	1036U0H
GTK-112300004	TMPE211105020.400	1036U0K
GTK-112300005	TMPE211105020.400	1036U0M

Result Pass Fail _____

28L SPDIP assembled by GTK pass reliability test per QCI-39000.

Prepared By: _____) Date: October 25, 2010 (Reliability Engineer)

(Mr.Thinnapol Nakkasun)

Approved By: _____) Date: October 25, 2010 (Reliability Manager)

(Mr. Surasit Phurikhup)

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Microchip Spec	Qty. (Acc.)	Date in	Date Out	Def/SS.	Result	Remarks
Electrical Test	Electrical Test: +25°C and 125°C System: J750 (Test 1 lot 125°C on GTK-112300003.000)	S12/14/16 (PDC)	693(0)	09/23/10	09/28/10	693		Good Devices
Temp Cycle	Stress Condition: -65°C to +150°C, 500 Cycles System : TABAI ESPEC TSA-70H Inspection: External crack inspection all units under 40X Optical magnification	PI-91020B		09/28/10	10/10/10	231		
	Electrical Test: +125°C System: J750 (Test 1 lot 125°C on GTK-112300003.000)	QCI-33003 (PDC)	30(0)	10/10/10	10/10/10	0/30		
	Bond Strength: Bond Shear (9.50 grams)	QCI-91022	15 (0)	10/11/10	10/11/10	0/15	Pass	
	Wire Pull (> 3 grams)		15 (0)	10/11/10	10/11/10	0/15	Pass	
Pressure Cooker	Stress Condition: +121°C, 100% RH, 15 PSI, 96 hrs. System: HIRAYAMA TPC-422R	PI-92013B		09/28/10	10/02/10	231		
	Electrical Test: +25°C System: J750	S12/14/16 (PDC)	231(0)	10/02/10	10/04/10	0/231	Pass	77 units / lot

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Microchip Spec	Qty. (Acc.)	Date in	Date Out	Def/SS.	Result	Remarks
HAST	Stress Condition: +130°C/85%RH, 96 hrs. System: HAST 6000X	PI-92010B		09/30/10	10/04/10	231		
	Electrical Test: +25°C and 125°C System: J750 (Test 1 lot 125°C on GTK-112300003.000)	S12/14/16 (PDC)	231(0)	10/04/10	10/06/10	0/231	Pass	77 units / lot
Solderability	Steam Aging: Temp 93°C,8Hrs System: SAS-3000 Solder Dipping: Solder Temp.245°C System: ERSA RA 2200D Visual Inspection: External Visual Inspection	QCI-31003	22 (0)	09/28/10 09/29/10 09/29/10	09/269/10 09/29/10 09/29/10	22 22 0/22	Pass	
Physical Dimensions	Physical Dimension, 30 units from 1 lot	QCI-30017	30(0) Units	-	-	0/30	Pass	
Lead Integrity	45 Leads from a minimum of 5 units, 1 lot. System: Strain	QCI-31004	45(0) Leads	09/29/10	09/29/10	0/45	Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Microchip Spec	Qty. (Acc.)	Date in	Date Out	Def/SS.	Result	Remarks
High Temperature Storage Life	Stress Condition: Bake 175°C, 504 hrs System: CHINEE Electrical Test: +25°C and 85°C System: J750	PI-92014B		09/28/10	10/21/10	45		45 units
		S12/14/16 (PDC)	45(0)	10/21/10	10/22/10	0/45	Pass	
Bond Strength Data Assembly	Bond Shear (9.50 grams)		30 (0) bonds	-	-	0/30	Pass	
	Wire Pull (> 3 grams)	QCI-91022	30 (0) wires	-	-	0/30	Pass	

PCN# CYER-23CQOF679
CATALOG_PART_NBR
CF775-04/SP
DSPIC30F1010-20E/SP
DSPIC30F1010-30I/SP
DSPIC30F2010-20E/SP
DSPIC30F2010-20I/SP
DSPIC30F2010-30I/SP
DSPIC30F2010-30I/SPG
DSPIC30F2012-20E/SP
DSPIC30F2012-20I/SP
DSPIC30F2012-30I/SP
DSPIC30F2020-20E/SP
DSPIC30F2020-30I/SP
DSPIC30F3010-20E/SP
DSPIC30F3010-20I/SP
DSPIC30F3010-30I/SP
DSPIC30F3013-20E/SP
DSPIC30F3013-20I/SP
DSPIC30F3013-30I/SP
DSPIC30F4012-20E/SP
DSPIC30F4012-20I/SP
DSPIC30F4012-30I/SP
DSPIC33FJ06GS102-E/SP
DSPIC33FJ06GS102-I/SP
DSPIC33FJ06GS202-E/SP
DSPIC33FJ06GS202-I/SP
DSPIC33FJ128GP202-E/SP
DSPIC33FJ128GP202-I/SP
DSPIC33FJ128GP802-E/SP
DSPIC33FJ128GP802-I/SP
DSPIC33FJ128MC202-E/SP
DSPIC33FJ128MC202-I/SP
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DSPIC33FJ12GP202-E/SP
DSPIC33FJ12GP202-I/SP
DSPIC33FJ12MC202-E/SP
DSPIC33FJ12MC202-I/SP
DSPIC33FJ16GS402-E/SP
DSPIC33FJ16GS402-I/SP
DSPIC33FJ16GS502-E/SP
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DSPIC33FJ64MC802-I/SP
ENC28J60/SP
ENC28J60-I/SP
HA1126/SP
HA3078-I/SP
HA3089-I/SP
HA3099/SP
MCP23017-E/SP
MCP23018-E/SP
MCP23S17-E/SP
MCP23S18-E/SP
MCP722C-I/SPV03
MCV28A-I/SP
PIC14000-04/SP
PIC14000-04I/SP
PIC14000-20/SP
PIC14000-20I/SP
PIC16C55-10/SP
PIC16C55-10I/SP
PIC16C55A-04/SP
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PIC16C55-RC/SP
PIC16C55-RCI/SP
PIC16C55-XT/SP
PIC16C55-XTE/SP
PIC16C55-XTI/SP
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PIC16F72-I/SP063
PIC16F72-I/SP065
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PIC16LC73B-04I/SPG
PIC16LC76-04/SP
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PIC18F2580-E/SP
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PIC18F2585-E/SP
PIC18F2585-H/SP
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PIC18F2680-I/SP
PIC18F2682-E/SP
PIC18F2682-I/SP
PIC18F2685-E/SP
PIC18F2685-I/SP
PIC18F26J11-I/SP
PIC18F26J13-I/SP
PIC18F26J50-I/SP
PIC18F26J53-I/SP
PIC18F26K20-E/SP
PIC18F26K20-I/SP
PIC18F27J13-I/SP
PIC18F27J53-I/SP
PIC18LC252-I/SP
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PIC18LF2320-I/SP
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PIC18LF23K22-E/SP

PIC18LF23K22-I/SP
PIC18LF2410-I/SP
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PIC18LF2431-I/SP
PIC18LF2450-I/SP
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PIC18LF248-I/SP
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PIC18LF24K22-E/SP
PIC18LF24K22-I/SP
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PIC18LF2515-I/SP
PIC18LF2520-I/SP
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PIC18LF2525-I/SP
PIC18LF252-I/SP
PIC18LF2539-I/SP
PIC18LF2550-I/SP
PIC18LF2553-I/SP
PIC18LF2580-I/SP
PIC18LF2585-I/SP
PIC18LF258-I/SP
PIC18LF25J10-I/SP
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PIC18LF25J50-I/SP
PIC18LF25K22-E/SP
PIC18LF25K22-I/SP
PIC18LF2610-I/SP
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PIC18LF2680-I/SP
PIC18LF2682-I/SP
PIC18LF2685-I/SP
PIC18LF26J11-I/SP
PIC18LF26J13-I/SP
PIC18LF26J50-I/SP
PIC18LF26J53-I/SP
PIC18LF27J13-I/SP
PIC18LF27J53-I/SP
PIC24F08KA102-E/SP
PIC24F08KA102-I/SP
PIC24F16KA102-E/SP
PIC24F16KA102-I/SP
PIC24FJ16GA002-E/SP
PIC24FJ16GA002-I/SP
PIC24FJ32GA002-E/SP
PIC24FJ32GA002-I/SP

PIC24FJ32GA002-I/SPB5
PIC24FJ32GA102-I/SP
PIC24FJ32GB002-I/SP
PIC24FJ48GA002-E/SP
PIC24FJ48GA002-I/SP
PIC24FJ64GA002-E/SP
PIC24FJ64GA002-I/SP
PIC24FJ64GA002-I/SPB5
PIC24FJ64GA102-I/SP
PIC24FJ64GB002-I/SP
PIC24HJ128GP202-E/SP
PIC24HJ128GP202-I/SP
PIC24HJ128GP502-E/SP
PIC24HJ128GP502-I/SP
PIC24HJ12GP202-E/SP
PIC24HJ12GP202-I/SP
PIC24HJ32GP202-E/SP
PIC24HJ32GP202-I/SP
PIC24HJ32GP302-E/SP
PIC24HJ32GP302-I/SP
PIC24HJ64GP202-E/SP
PIC24HJ64GP202-I/SP
PIC24HJ64GP502-E/SP
PIC24HJ64GP502-I/SP
TC514CPJ
TC514EPJ
TC530CPJ