



Date: 20 Jan 2012

Product Category: 8-bit Microcontrollers; RF and Security; Analog (Linear & Mixed Signal) AND Interface; Touch Sensing Technologies; 16-bit Microcontrollers and Digital Signal Controllers

Device Family:  

Notification subject: CCB 1090 final notification: Qualification of 18L PDIP at ALPH (MMT).

Notification text: PCN Status:
Final notification

Microchip Parts Affected:
See attachments of affected catalog part numbers (CPN) labeled as...
PCN_CYER-16AOEB180_Affected_CPN.xls
PCN_CYER-16AOEB180_Affected_CPN.pdf

Description of Change:
Qualification of 18L PDIP at ALPH (MMT).

Impacts to Data Sheet:
None

Reason for Change:
To improve manufacturability

Change Implementation Status:
Complete

Estimated First Ship Date:
January 27, 2012 (date code: 1205)

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:
Traceability code

Revision History:

September 22, 2011: Issued initial notification.

January 20, 2012: Issued final notification. Revised the estimated first ship date from 12/23/2011 to 1/27/2012. Attached the qualification report.

Attachment(s):

[PCN_CYER-16AOEB180_Affected_CPN.pdf](#) [PCN_CYER-16AOEB180_Affected_CPN.xls](#)
[PCN_CYER-16AOEB180_Qual Report.pdf](#) [PCN_CYER-16AOEB180_Affected_CPN.pdf](#)

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

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Product Change Notification - CYER-16AOEB180

Parts Affected

PIC16CE625
PIC16CE624
PIC16CE623
PIC16C56
PIC16C71
PIC16HV540
PIC16C54
PIC16F83
HCS512
PIC16F84
PIC16C54A
PIC16C620
PIC16C621
PIC16C622
PIC16C554
PIC16C558
PIC16C710
PIC16C711
PIC16C715
PIC16CR54C
MCP2510
PIC16CR58B
PIC16F627
PIC16F628
MCP2150
MCP2155
PIC16F84A
PIC16C54C
PIC16C620A
PIC16C622A
HS12-100D0/12DS2F
HS12-100D0/12DS15
MCP2140
PIC16C621A
PIC16C56A
PIC16C58B
PIC16C712
PIC16C716
PIC16C717
PIC16F819
PIC16F648A
PIC16F88
PIC16F87
PIC16F627A

PIC16F628A
MCP2140A
MCP23008
MCP23S08
PIC16F818
PIC18F1320
PIC18F1220
MCP2515
PIC16F54
PIC16F716
PIC18F1230
PIC18F1330
MCP23009
MCP23S09
dsPIC30F3012
dsPIC30F2011
PIC16F1827
PIC16F1826
PIC16F1847
dsPIC33FJ16GP101
PIC24HJ12GP201
dsPIC33FJ12GP201

PCN_CYER-16AOEB180
CATALOG_PART_NBR
CF745-04/P
DSPIC30F2011-20E/P
DSPIC30F2011-20I/P
DSPIC30F2011-30I/P
DSPIC30F3012-20E/P
DSPIC30F3012-20I/P
DSPIC30F3012-30I/P
DSPIC33FJ12GP201-E/P
DSPIC33FJ12GP201-I/P
DSPIC33FJ16GP101-E/P
DSPIC33FJ16GP101-I/P
HCS512/P
HCS512-I/P
HS12-100D0/12DS15
HS12-100D0/12DS2F
MCP2140A-I/P
MCP2140-I/P
MCP2140-I/PRVB
MCP2150-I/P
MCP2150-I/PRVB
MCP2150-I/PRVC
MCP2155-I/P
MCP2155-I/PRVB
MCP2155-I/PRVC
MCP23008-E/P
MCP23009-E/P
MCP23S08-E/P
MCP23S09-E/P
MCP2510-E/P
MCP2510-I/P
MCP2515-E/P
MCP2515-E/PRB2
MCP2515-E/PRB4
MCP2515-I/P
MCP2515-I/PRB2
MCP2515-I/PRB4
MCV18A-I/P
MCV18E-I/P
PIC16C54-10/P
PIC16C54-10I/P
PIC16C54A-04/P
PIC16C54A-04/P070
PIC16C54A-04/P428
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PIC16C54C-04/P

PIC16C54C-04/P032
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PIC16C54C-04/P064
PIC16C54C-04/P091
PIC16C54C-04/P101
PIC16C54C-04/P103
PIC16C54C-04/P109
PIC16C54C-04/P132
PIC16C54C-04/P133
PIC16C54C-04/P141
PIC16C54C-04/P148
PIC16C54C-04/P154
PIC16C54C-04E/P
PIC16C54C-04I/P
PIC16C54C-04I/P096
PIC16C54C-04I/P155
PIC16C54C-20/P
PIC16C54C-20E/P
PIC16C54C-20I/P
PIC16C54C-40/P
PIC16C54-HS/P
PIC16C54-HSE/P
PIC16C54-HSI/P
PIC16C54-LP/P
PIC16C54-LPE/P
PIC16C54-LPI/P
PIC16C54-RC/P
PIC16C54-RCE/P
PIC16C54-RCI/P
PIC16C54-RCI/P028
PIC16C54-RCI/P029
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PIC16C558-20/P
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PIC16C56-10/P
PIC16C56-10I/P
PIC16C56A-04/P
PIC16C56A-04E/P
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PIC16C56-RC/P
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PIC16LC622A-04I/P
PIC16LC710-04/P
PIC16LC710-04I/P
PIC16LC71-04/P
PIC16LC71-04I/P
PIC16LC711-04/P
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PIC16LC711-04I/P
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PIC18F1230-I/PXXX
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PIC18F1320-H/P
PIC18F1320-I/P
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PIC18F1330-I/PXXX
PIC18LF1220-I/P
PIC18LF1230-I/P
PIC18LF1320-I/P
PIC18LF1330-I/P
PIC24HJ12GP201-E/P
PIC24HJ12GP201-I/P
RE272E18F
RE274E18F
RE276E18F
RE278E18F



MICROCHIP

**QUALIFICATION REPORT
RELIABILITY LABORATORY**

PCN #: CYER-16AOEB180

Date
January 11, 2012

Qualification of 18L PDIP at ALPH (MMT).

Distribution

Surasit P.
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Rangsun K.
C.K. Barlingay
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Fax (+66 38) 857149-50



MICROCHIP **PACKAGE QUALIFICATION REPORT**

Purpose Qualification of 18L PDIP at ALPH (MMT).

CN BC112845

QUAL ID Q11121

Part No. PIC16F627-20/P

MP CODE A5AB71F3XA20

Bonding No. BDM-000045 Rev. B

CCB No. 1090

Package

Type 18L PDIP

Package size 300 mils

Die thickness 15 mils

Die size 176.3 x 134.7 mils

Lead Frame

Paddle size 160 x 250 mils

Material CDA194

Surface Ag plate

Process Stamp

Lead Lock No

Part Number 10101812

Die attach material

Epoxy CRM-1064L

Wire Au wire

Mold Compound GE800

Plating Composition Matte Tin



MICROCHIP
PACKAGE QUALIFICATION REPORT

Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Trace Code
ALPH123300174	TMPE212256416.200	1147DD1
ALPH123300175	TMPE212256416.200	1147DD2
ALPH123300176	TMPE212256416.200	1147DD3

Result Pass Fail _____

18L PDIP assembled by MMT pass reliability test per QCI-39000.

Prepared By: _____ **) Date:** January 11, 2012 **(Reliability Engineer)**

(Mr.Udom Suksansakul)

Approved By: _____ **) Date:** January 11, 2012 **(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 85°C System: J750 (Test 1 lot 125°C on ALPH123300174.000)	S12/14/16 (PDC)	693(0)	12/08/11	12/12/11	693		Good Devices
	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 QCI-33003		12/13/11 12/25/11	12/25/11 12/25/11	231 0/30		
Temp Cycle	Electrical Test: + 85°C System: J750 (Test 1 lot 125°C on ALPH123300174.000)	S12/14/16 (PDC)	231(0)	12/25/11	12/25/11	0/231	Pass	77 units / lot
	Bond Strength: Bond Shear (21.10 grams) Wire Pull (> 3 grams)	QCI-91022	15 (0) 15 (0)	12/25/11 12/25/11	12/26/11 12/26/11	0/15 0/15	Pass Pass	
UNBIASED-HAST	Stress Condition: +130°C/85%RH, 96 hrs. System: HAST 6000X	PI-91261B		12/14/11	12/18/11	231		
	Electrical Test: +25°C System: J750	S12/14/16 (PDC)	231(0)	12/18/11	12/20/11	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		12/17/11	12/21/11	231		
	Electrical Test: +25°C and 85°C System: J750 (Test 1 lot 125°C on ALPH123300174.000)	S12/14/16 (PDC)	231(0)	12/21/11	12/22/11	0/231	Pass	77 units / lot
High Temperature Storage Life	Stress Condition: Bake 175°C, 504 hrs System: SHEL LAB	PI-92014B S12/14/16		12/13/11	01/06/12	135		45 units
	Electrical Test: +25°C and 85°C System: J750	(PDC)	135(0)	01/06/12	01/09/12	0/135	Pass	
Bond Strength Data Assembly	Bond Shear (21.10 grams)	QCI-91022	30 (0) bonds	-	-	0/30	Pass	
	Wire Pull (> 3 grams)		30 (0) wires	-	-	0/30	Pass	