



**Date:** 07 Apr 2011

**Product Category:** Touch Sensing Technologies; 16-bit Microcontrollers and Digital Signal Controllers; Analog (Linear & Mixed Signal) AND Interface; Analog (Thermal, Power Management & Safety); 8-bit Microcontrollers; All 16-bit Microcontrollers; Radio Frequency Devices

**Device Family:**  

**Notification subject:** CCB 990.03: Qualification of 20 & 28L SSOP packages with SG-8300GM mold compound at MTAI assembly site.

**Notification text:** PCN Status:  
Intermediate notification

Microchip Part#s Affected:

See attachments of affected catalog part numbers (CPN) labeled as...

PCN\_CYER-22RNGO053\_Affected\_CPN.xls

PCN\_CYER-22RNGO053\_Affected\_CPN.pdf

Description of Change:

Qualification of the 20 & 28L SSOP packages with SG-8300GM mold compound at MTAI assembly site.

Pre Change:

G600V

Post Change:

SG-8300GM

Impacts to Data Sheet:

None

Reason for Change:

To improve productivity

Change Implementation Status:

In Progress

Estimated First Ship Date:

20L SSOP: June 30, 2011 (Date code 1127)

28L SSOP: June 30, 2011 (Date code 1127)

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 23, 2010: Issued the initial notification.

April 6, 2011: Issued the intermediate notification informing that the 20L SSOP qualification has completed. Revised the estimated first ship date from January 4, 2011 to June 30, 2011 and attached the 20L SSOP qual report. Please note that the 28L SSOP package qualification will conclude at a later date triggering a final notification.

**Attachment(s):** [CYER-22RNGO053\\_Affected\\_CPN.pdf](#) [CYER-22RNGO053\\_Affected\\_CPN.xls](#) [CYER-22RNGO053\\_Qual Plan.pdf](#) [CYER-22RNGO053\\_Qual Report\\_20L\\_S SOP.pdf](#)

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

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**MICROCHIP**

# **QUALIFICATION PLAN**

## **RELIABILITY LABORATORY**

**PCN#: CYER-22RNGO053**

Date:  
Aug 9, 2010

Qualification of 28L SSOP package with SG-8300GM  
mold compound at MTAI assembly site.

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**Purpose** \_\_\_\_\_ Qualification of 28L SSOP package with SG-8300GM mold compound at MTAI assembly site.

**MP Code** \_\_\_\_\_ A5AK14N2XC40

**Part No.** \_\_\_\_\_ PIC16F870

**CCB No.** \_\_\_\_\_ 990.03

**Package Type** \_\_\_\_\_ 28L SSOP

**Die Thickness** \_\_\_\_\_ 15 mils

**Lead frame** \_\_\_\_\_ A194

**Die Size** \_\_\_\_\_ 140.6 x 158.2 mils

**Paddle Size** \_\_\_\_\_ 153 x 200 mils

**Surface** \_\_\_\_\_ Ag ring plating

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

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

**Die Attach Epoxy** \_\_\_\_\_ 8390A

**Compound** \_\_\_\_\_ SG-8300GM (supplier: Samsung)

**Plating composition** \_\_\_\_\_ Matte tin

Test Name	Conditions	Reliability Stress Read Point operating range (Temp)	Pre & Post Reliability Stress Test Temperature (°C) operating range (Temp)	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Duration (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	0	5	30 bonds from a min. 5 devices.
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	500 hrs	+25 +85	45	5	1	50	0	10	Spares should be properly identified. Note 1 Note 2
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-020C for package type. Perform SAM analysis using the standard sample size. MSL-1 @ 260°C		+25	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.
HAST	+130°C/85% RH for 96 hours. 1 lot to be hot temp testing at 85 and 125C.	96 hrs	+25 +85	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Pre- conditioning.

Test Name	Conditions	Reliability Stress Read Point -40°C to +85°C datasheet operating range (Temp)	Pre & Post Reliability Stress Test Temperature (°C) -40°C to +85°C datasheet operating range (Temp)	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Duration (Days)	Special Instructions
Autoclave	+121°C/15 psig for 96 hours.	96 hrs	+25	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. 3 gram force WBP on 5 devices from 1 lot, test following Temp Cycle stress. 1 lot to be hot temp testing at 85 and 125C.	500 cycles	+85	77	5	3	246	0	15	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

PCN# - CYER-22RNGO053	PCN# - CYER-22RNGO053
20L SSOP PACKAGE	28L SSOP PACKAGE
CATALOG_PART_NBR	CATALOG_PART_NBR
AR1010-I/SS	ABDBFJ16GA002-I/SSV02
AR1010T-I/SS	DSPIC33FJ12GP202-E/SS
AR1020-I/SS	DSPIC33FJ12GP202-I/SS
AR1020T-I/SS	DSPIC33FJ12GP202T-E/SS
CFPIC-I/SSC01	DSPIC33FJ12GP202T-I/SS
CFPICT-I/SSC01	DSPIC33FJ12MC202-E/SS
DSPIC33FJ12MC201-E/SS	DSPIC33FJ12MC202-I/SS
DSPIC33FJ12MC201-I/SS	DSPIC33FJ12MC202T-E/SS
DSPIC33FJ12MC201T-E/SS	DSPIC33FJ12MC202T-I/SS
DSPIC33FJ12MC201T-I/SS	ENC28J60/SS
HA0119-I/SS	ENC28J60/SSC01
HA0120T-I/SS	ENC28J60/SSC03
HA0811T-I/SS	ENC28J60-I/SS
HA1028-I/SS	ENC28J60T/SS
HA1029-I/SS	ENC28J60T/SSC03
HA1205-I/SS	ENC28J60T-I/SS
HA1205T-I/SS	ENC28J60T-I/SSV01
HA1218-I/SS	HA0923-I/SS
HA1218T-I/SS	HA0923T-I/SS
HA1560T-I/SS020	HA1500-I/SS
HA1561-I/SS	HA1500T-I/SS
HA1561T-I/SS	HA1502-I/SS
HA1577-E/SS	HA1502T-I/SS
HA1577T-E/SS	HA1592T-I/SSV10
HA2010T-I/SS	HA1930B-I/SS
HA2015-I/SS	HA1930BT-I/SS
HA2015T-I/SS	HA1930C-I/SS
HA2022-I/SS	HA1930CT-I/SS
HA2022T-I/SS	HA1930-I/SS
HA2032-I/SS	HA1930T-I/SS
HA2032T-I/SS	HA2002T-I/SS
HA2525-I/SS	HA2002T-I/SS020
HA2525T-I/SS	HA2003-I/SS
HA2580-I/SS	HA2003T-I/SS
HA2580T-I/SS	HA2003T-I/SS021
HA98K99-I/SS	HA2005-I/SS
HA98K99T-I/SS	HA2005T-I/SS
HA98K99T-I/SS020	HA2005T-I/SS020
HB12-100P0S/12PB30	HA2006T-I/SS
HC12-100PAS/12PC51	HA2006T-I/SS020
HI12-100P0S/12PI30	HA2006T-I/SS021
HI12-100PAS/12PI30	HA2030-I/SS
HI12-100PIS/12PI30	HA2030T-I/SS
HI12-100PIS/12PI30TR	HA2034-I/SS
HS12-100P0/12PS0F	HA2034T-I/SS
HS12-100P0/12PS15	HA4314-I/SS021
HS12-100P0/12PS2FTR	HA4315T-I/SS
HS12-100P0S/12PS25	HA4315T-I/SS022
HS12-100P0S/12PS25TR	HA4450-I/SS

HS12-100P0S/12PS30	HA4450T-I/SS
HS12-100P0S/12PS30TR	MCP23016-I/SS
HS12-100PAS/12PS30TR	MCP23016T-I/SS
HS12-100PIS/12PS25	MCP23017-E/SS
HS12-100PIS/12PS30	MCP23017T-E/SS
HT12-100P0S/12PT49	MCP23S17-E/SS
HT12-100P0S/12PT49TR	MCP23S17T-E/SS
HT12-100PAS/12PT49	MCP722A-I/SSV01
HT12-100PDS/12PA49	MTA11200B/SS
MCP1631-E/SS	MTR5010-I/SS
MCP1631HV-330E/SS	MTR5010T-I/SS
MCP1631HV-500E/SS	MTR7698-I/SS
MCP1631HVT-330E/SS	MTR7698T-I/SS
MCP1631HVT-500E/SS	MTR9833-I/SS
MCP1631T-E/SS	MTR9833T-I/SS
MCP1631V-E/SS	PIC16C55-10/SS
MCP1631VHV-330E/SS	PIC16C55-10I/SS
MCP1631VHV-500E/SS	PIC16C55A-04/SS
MCP1631VHVT-330E/SS	PIC16C55A-04I/SS
MCP1631VHVT-500E/SS	PIC16C55A-04I/SSVAO
MCP1631VT-E/SS	PIC16C55A-20/SS
MCP18480-I/SS	PIC16C55A-20E/SS
MCP18480T-I/SS	PIC16C55A-20I/SS
MCP2140A-I/SS	PIC16C55A-40/SS
MCP2140AT-I/SS	PIC16C55AT-04/SS
MCP2140-I/SS	PIC16C55AT-04I/SS
MCP2140-I/SSRVB	PIC16C55AT-20/SS022
MCP2140T-I/SS	PIC16C55AT-20/SS031
MCP2140T-I/SSRVB	PIC16C55AT-20/SS036
MCP2150-I/SS	PIC16C55AT-20I/SS
MCP2150-I/SSG	PIC16C55-HS/SS
MCP2150-I/SSGRVB	PIC16C55-HSI/SS
MCP2150-I/SSRVB	PIC16C55-LP/SS
MCP2150-I/SSRVC	PIC16C55-LPI/SS
MCP2150-I/SSRVCG	PIC16C55-RC/SS
MCP2150T-I/SS	PIC16C55-RCI/SS
MCP2150T-I/SSGRVB	PIC16C55-XT/SS
MCP2150T-I/SSRVB	PIC16C55-XTI/SS
MCP2150T-I/SSRVC	PIC16C57-10/SS
MCP2150T-I/SSRVCG	PIC16C57C-04/SS
MCP2155-I/SS	PIC16C57C-04I/SS
MCP2155-I/SSG	PIC16C57C-20/SS
MCP2155-I/SSRVB	PIC16C57C-20E/SS
MCP2155-I/SSRVC	PIC16C57C-20I/SS
MCP2155T-I/SS	PIC16C57C-40/SS
MCP2155T-I/SSG	PIC16C57CT-04I/SS
MCP2155T-I/SSRVB	PIC16C57CT-04I/SS042
MCP2155T-I/SSRVC	PIC16C57CT-20/SS
MCP2155T-I/SSRVCG	PIC16C57CT-20I/SS070
MCP2200-I/SS	PIC16C57CT-20I/SSG041
MCP2200-I/SSRVB	PIC16C57CT-20I/SSG049
MCP2200T-I/SS	PIC16C57-HS/SS



MCP2200T-I/SSRVB	PIC16C57-HSI/SS
MCP23008-E/SS	PIC16C57-LP/SS
MCP23008T-E/SS	PIC16C57-LPI/SS
MCP23009-E/SS	PIC16C57-RC/SS
MCP23009T-E/SS	PIC16C57-RCI/SS
MCP23S08-E/SS	PIC16C57T-HSI/SS
MCP23S08-E/SSAPL	PIC16C57T-LP/SS
MCP23S08-E/SSV02	PIC16C57-XT/SS
MCP23S08T-E/SS	PIC16C57-XTI/SS
MCP23S08T-E/SSAPL	PIC16C62A-04/SS
MCP23S08T-E/SSV01	PIC16C62A-20/SS
MCP23S08T-E/SSV02	PIC16C62A-20I/SS
MCP3901A0-E/SS	PIC16C62B-04/SS
MCP3901A0-I/SS	PIC16C62B-04I/SS
MCP3901A0T-E/SS	PIC16C62B-20/SS
MCP3901A0T-I/SS	PIC16C62B-20I/SS
MCPAS677-I/SSV07	PIC16C62BT-04I/SS
MCV20USB/SS	PIC16C62BT-20/SS
MCV20USBT/SS	PIC16C62BT-20I/SS
OAERKE690-I/SSV07	PIC16C62BT-20I/SS040
OAERKE690T-I/SSV07	PIC16C63A-04/SS
PIC16C432-E/SS	PIC16C63A-04I/SS
PIC16C432-I/SS	PIC16C63A-20/SS
PIC16C432-I/SSVAO	PIC16C63A-20E/SS
PIC16C54-10/SS	PIC16C63A-20E/SSVAO
PIC16C54-10I/SS	PIC16C63A-20I/SS
PIC16C54A-04/SS	PIC16C63AT-04I/SS045
PIC16C54A-04I/SS	PIC16C63AT-20E/SSG080
PIC16C54A-10/SS	PIC16C63AT-20I/SS
PIC16C54A-10I/SS	PIC16C72-04/SS
PIC16C54A-20/SS	PIC16C72-04I/SS
PIC16C54A-20I/SS	PIC16C72-10/SS
PIC16C54AT-04I/SS	PIC16C72-10I/SS
PIC16C54C-04/SS	PIC16C72-20/SS
PIC16C54C-04E/SS	PIC16C72A-04/SS
PIC16C54C-04I/SS	PIC16C72A-04E/SS
PIC16C54C-04I/SS102	PIC16C72A-04I/SS
PIC16C54C-04I/SS121	PIC16C72A-20/SS
PIC16C54C-20/SS	PIC16C72A-20I/SS
PIC16C54C-20E/SS	PIC16C72AT-04/SS
PIC16C54C-20I/SS	PIC16C72AT-04/SS027
PIC16C54CT-04I/SS	PIC16C72AT-20I/SS
PIC16C54CT-04I/SS077	PIC16C72T-20I/SS
PIC16C54CT-04I/SS134	PIC16C73B-04/SS
PIC16C54CT-04I/SS135	PIC16C73B-04I/SS
PIC16C54CT-20/SS	PIC16C73B-04I/SSVAO
PIC16C54-HS/SS	PIC16C73B-20/SS
PIC16C54-LP/SS	PIC16C73B-20E/SS
PIC16C54-LPI/SS	PIC16C73B-20I/SS
PIC16C54-RC/SS	PIC16C73BT-04I/SS
PIC16C54-RCI/SS	PIC16C73BT-04I/SS052
PIC16C54T-XT/SS	PIC16C73BT-04I/SSVAO

PIC16C54-XT/SS	PIC16C73BT-20/SS
PIC16C54-XTI/SS	PIC16C773/SS
PIC16C554-04/SS	PIC16C773-E/SS
PIC16C554-04I/SS	PIC16C773-I/SS
PIC16C554-20/SS	PIC16C773T/SS
PIC16C554-20I/SS	PIC16C773T-I/SS
PIC16C554T-04/SS	PIC16CR63T-04I/SS063
PIC16C558-04/SS	PIC16CR72T-04I/SS031
PIC16C558-04E/SS	PIC16CR72T-04I/SS058
PIC16C558-04I/SS	PIC16F1516-E/SS
PIC16C558-20/SS	PIC16F1516-I/SS
PIC16C558-20I/SS	PIC16F1516T-I/SS
PIC16C56-10/SS	PIC16F1518-E/SS
PIC16C56-10I/SS	PIC16F1518-I/SS
PIC16C56A-04/SS	PIC16F1518T-I/SS
PIC16C56A-04E/SS	PIC16F1933-E/SS
PIC16C56A-04I/SS	PIC16F1933-E/SSV03
PIC16C56A-20/SS	PIC16F1933-I/SS
PIC16C56A-20E/SS	PIC16F1933-I/SSC01
PIC16C56A-20I/SS	PIC16F1933-I/SSV01
PIC16C56A-40/SS	PIC16F1933T-E/SS
PIC16C56AT-04/SS	PIC16F1933T-E/SSV03
PIC16C56AT-04I/SS	PIC16F1933T-I/SS
PIC16C56AT-20/SS	PIC16F1933T-I/SSC01
PIC16C56AT-20/SS020	PIC16F1933T-I/SSV02
PIC16C56AT-20/SS021	PIC16F1936-E/SS
PIC16C56AT-20/SS023	PIC16F1936-I/SS
PIC16C56AT-20/SS033	PIC16F1936-I/SSC01
PIC16C56-HS/SS	PIC16F1936-I/SSC02
PIC16C56-HSI/SS	PIC16F1936-I/SSC03
PIC16C56-LP/SS	PIC16F1936-I/SSV01
PIC16C56-LPI/SS	PIC16F1936T-E/SS
PIC16C56-LPI/SS043	PIC16F1936T-I/SS
PIC16C56-RC/SS	PIC16F1936T-I/SSC01
PIC16C56-RCI/SS	PIC16F1936T-I/SSC02
PIC16C56-XT/SS	PIC16F1936T-I/SSC03
PIC16C56-XTI/SS	PIC16F1938-E/SS
PIC16C58B-04/SS	PIC16F1938-I/SS
PIC16C58B-04I/SS	PIC16F1938-I/SSC01
PIC16C58B-04I/SSVAO	PIC16F1938T-I/SS
PIC16C58B-20/SS	PIC16F1938T-I/SSC01
PIC16C58B-20I/SS	PIC16F57-E/SS
PIC16C58B-40/SS	PIC16F57-I/SS
PIC16C58BT-04I/SS073	PIC16F57T-E/SS
PIC16C620-04/SS	PIC16F57T-I/SS
PIC16C620-04E/SS	PIC16F57T-I/SS024
PIC16C620-04I/SS	PIC16F57T-I/SS025
PIC16C620-20/SS	PIC16F57T-I/SS027
PIC16C620-20I/SS	PIC16F57T-I/SS030
PIC16C620A-04/SS	PIC16F722A-E/SS
PIC16C620A-04E/SS	PIC16F722A-I/SS
PIC16C620A-04I/SS	PIC16F722AT-I/SS

PIC16C620A-20/SS	PIC16F722AT-I/SS020
PIC16C620A-20E/SS	PIC16F722-E/SS
PIC16C620A-20I/SS	PIC16F722-I/SS
PIC16C620A-40/SS	PIC16F722T-E/SS
PIC16C620AT-04/SS	PIC16F722T-I/SS
PIC16C620AT-04E/SS044	PIC16F722T-I/SS021
PIC16C620AT-04I/SS	PIC16F723A-E/SS
PIC16C620AT-04I/SS032	PIC16F723A-I/SS
PIC16C620AT-04I/SS042	PIC16F723AT-E/SS
PIC16C620AT-04I/SS043	PIC16F723AT-I/SS
PIC16C620AT-04I/SS057	PIC16F723-E/SS
PIC16C620AT-04I/SS060	PIC16F723-I/SS
PIC16C620AT-04I/SS062	PIC16F723-I/SSC01
PIC16C620AT-04I/SS063	PIC16F723-I/SSC02
PIC16C620AT-04I/SS068	PIC16F723T-E/SS
PIC16C620AT-04I/SS069	PIC16F723T-I/SS
PIC16C620AT-04I/SS071	PIC16F723T-I/SSC01
PIC16C620AT-04I/SS072	PIC16F723T-I/SSC02
PIC16C620AT-04I/SS073	PIC16F726-E/SS
PIC16C620AT-04I/SS074	PIC16F726-I/SS
PIC16C621-04/SS	PIC16F726-I/SS020
PIC16C621-04I/SS	PIC16F726-I/SSC01
PIC16C621-20/SS	PIC16F726-I/SSC02
PIC16C621-20I/SS	PIC16F726-I/SSC03
PIC16C621A-04/SS	PIC16F726-I/SSC06
PIC16C621A-04E/SS	PIC16F726T-E/SS
PIC16C621A-04E/SSGVAO	PIC16F726T-I/SS
PIC16C621A-04I/SS	PIC16F726T-I/SS020
PIC16C621A-04I/SSVAO	PIC16F726T-I/SS021
PIC16C621A-20/SS	PIC16F726T-I/SS022
PIC16C621A-20E/SS	PIC16F726T-I/SS023
PIC16C621A-20I/SS	PIC16F726T-I/SS024
PIC16C621AT-04/SS	PIC16F726T-I/SS025
PIC16C621AT-04E/SSGVAO	PIC16F726T-I/SS026
PIC16C621AT-04I/SS082	PIC16F726T-I/SSC01
PIC16C621AT-04I/SS083	PIC16F726T-I/SSC02
PIC16C621AT-04I/SSVAO	PIC16F726T-I/SSC03
PIC16C621AT-20I/SS	PIC16F726T-I/SSC06
PIC16C621T-20/SS	PIC16F72-E/SS
PIC16C622-04/SS	PIC16F72-E/SSVAO
PIC16C622-04E/SS	PIC16F72-I/SS
PIC16C622-04I/SS	PIC16F72-I/SSC05
PIC16C622-20/SS	PIC16F72-I/SSG
PIC16C622-20E/SS	PIC16F72T-E/SS
PIC16C622-20I/SS	PIC16F72T-E/SS038
PIC16C622A-04/SS	PIC16F72T-E/SS050
PIC16C622A-04E/SS	PIC16F72T-E/SS051
PIC16C622A-04E/SSGVAO	PIC16F72T-E/SS052
PIC16C622A-04E/SSVAO	PIC16F72T-E/SS053
PIC16C622A-04I/SS	PIC16F72T-E/SS056
PIC16C622A-20/SS	PIC16F72T-E/SS059
PIC16C622A-20E/SS	PIC16F72T-E/SS060

PIC16C622A-20I/SS	PIC16F72T-E/SS061
PIC16C622A-20I/SSHXX	PIC16F72T-E/SS064
PIC16C622AT-04/SS	PIC16F72T-E/SSG045
PIC16C622AT-04E/SS	PIC16F72T-E/SSV01
PIC16C622AT-04E/SS042	PIC16F72T-E/SSVAO
PIC16C622AT-04E/SS079	PIC16F72T-I/SS
PIC16C622AT-04E/SS082	PIC16F72T-I/SS027
PIC16C622AT-04E/SS086	PIC16F72T-I/SS072
PIC16C622AT-04E/SSGVAO	PIC16F72T-I/SSC12
PIC16C622AT-04I/SS	PIC16F737-I/SS
PIC16C622AT-04I/SS032	PIC16F737T-I/SS
PIC16C622AT-04I/SS065	PIC16F73-E/SS
PIC16C622AT-04I/SS068	PIC16F73-E/SSVAO
PIC16C622AT-04I/SS069	PIC16F73-I/SS
PIC16C622AT-04I/SS080	PIC16F73-I/SSG
PIC16C622AT-04I/SS081	PIC16F73-I/SSVAO
PIC16C622AT-04I/SS088	PIC16F73T-E/SS
PIC16C622AT-04I/SS089	PIC16F73T-E/SS075
PIC16C622AT-04I/SS090	PIC16F73T-E/SS121
PIC16C622AT-20/SS066	PIC16F73T-E/SS140
PIC16C622AT-20E/SS027	PIC16F73T-E/SS151
PIC16C622AT-20E/SS031	PIC16F73T-E/SS158
PIC16C622AT-20E/SS046	PIC16F73T-E/SSVAO
PIC16C622AT-20E/SS087	PIC16F73T-I/SS
PIC16C622AT-20I/SS	PIC16F73T-I/SS092
PIC16C622T-20I/SS	PIC16F73T-I/SS134
PIC16C710-04/SS	PIC16F73T-I/SS135
PIC16C710-04I/SS	PIC16F73T-I/SS155
PIC16C710-20/SS	PIC16F73T-I/SSC05
PIC16C710-20I/SS	PIC16F73T-I/SSC10
PIC16C710T-04/SS	PIC16F73T-I/SSC15
PIC16C711-04/SS	PIC16F73T-I/SSVAO
PIC16C711-04E/SS	PIC16F767-E/SS
PIC16C711-04I/SS	PIC16F767-I/SS
PIC16C711-04I/SSVAO	PIC16F767T-E/SS
PIC16C711-20/SS	PIC16F767T-I/SS
PIC16C711-20E/SS	PIC16F76-E/SS
PIC16C711-20I/SS	PIC16F76-E/SSG067
PIC16C711T-04/SS	PIC16F76-E/SSG068
PIC16C711T-04I/SS	PIC16F76-E/SSVAO
PIC16C711T-04I/SSVAO	PIC16F76-I/SS
PIC16C711T-20I/SS	PIC16F76-I/SS081
PIC16C712-04/SS	PIC16F76T-E/SS
PIC16C712-04/SS051	PIC16F76T-E/SS084
PIC16C712-04E/SS	PIC16F76T-E/SSG067
PIC16C712-04I/SS	PIC16F76T-E/SSG068
PIC16C712-20/SS	PIC16F76T-E/SSGC15
PIC16C712-20E/SS	PIC16F76T-E/SSVAO
PIC16C712-20I/SS	PIC16F76T-I/SS
PIC16C712T-04/SS	PIC16F76T-I/SS032
PIC16C712T-20I/SS	PIC16F76T-I/SS079
PIC16C715-04/SS	PIC16F76T-I/SS080

PIC16C715-04E/SS	PIC16F76T-I/SS081
PIC16C715-04I/SS	PIC16F76T-I/SS095
PIC16C715-20/SS	PIC16F76T-I/SSG076
PIC16C715-20I/SS	PIC16F76T-I/SSVAO
PIC16C715T-04/SS	PIC16F870-E/SS
PIC16C715T-04E/SS	PIC16F870-I/SS
PIC16C715T-04I/SS	PIC16F870T-E/SS
PIC16C715T-20/SS	PIC16F870T-I/SS
PIC16C715T-20I/SS	PIC16F872-E/SS
PIC16C716-04/SS	PIC16F872-E/SSG
PIC16C716-04E/SS	PIC16F872-I/SS
PIC16C716-04E/SSGVAO	PIC16F872-I/SSG
PIC16C716-04I/SS	PIC16F872-I/SSVAO
PIC16C716-20/SS	PIC16F872T-I/SS
PIC16C716-20E/SS	PIC16F872T-I/SSG
PIC16C716-20E/SSGVAO	PIC16F872T-I/SSVAO
PIC16C716-20E/SSVAO	PIC16F873A-E/SS
PIC16C716-20I/SS	PIC16F873A-I/SS
PIC16C716T-04E/SS	PIC16F873A-I/SSVAO
PIC16C716T-04E/SSGVAO	PIC16F873AT-I/SS
PIC16C716T-04E/SSVAO	PIC16F876A-E/SS
PIC16C716T-20E/SS040	PIC16F876A-E/SSV01
PIC16C716T-20E/SS041	PIC16F876A-E/SSVAO
PIC16C716T-20E/SSVAO	PIC16F876A-H/SSVAO
PIC16C716T-20I/SS	PIC16F876A-I/SS
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PIC16C717-E/SS	PIC16F876A-I/SSGVAO
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PIC16C717T-I/SS	PIC16F876A-I/SSVAO
PIC16C717T-I/SS030	PIC16F876AT-E/SS
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PIC16C770-E/SS	PIC16F876AT-E/SSV01
PIC16C770-I/SS	PIC16F876AT-H/SSVAO
PIC16C770T/SS	PIC16F876AT-I/SS
PIC16C770T-I/SS	PIC16F876AT-I/SSC25
PIC16C771/SS	PIC16F876AT-I/SSC36
PIC16C771-E/SS	PIC16F876AT-I/SSG
PIC16C771-E/SSGVAO	PIC16F876AT-I/SSGVAO
PIC16C771-I/SS	PIC16F876AT-I/SSVAO
PIC16C771T/SS	PIC16F882-E/SS
PIC16C771T-E/SSD41	PIC16F882-E/SSVAO
PIC16C771T-E/SSGVAO	PIC16F882-I/SS
PIC16C771T-I/SS	PIC16F882-I/SSV02
PIC16C781-I/SS	PIC16F882T-E/SS
PIC16C781T-I/SS	PIC16F882T-E/SSVAO
PIC16C782-I/SS	PIC16F882T-I/SS
PIC16C782T-I/SS	PIC16F882T-I/SS026
PIC16CE623-04/SS	PIC16F882T-I/SS029
PIC16CE623-04E/SS	PIC16F882T-I/SSV02
PIC16CE623-04I/SS	PIC16F883-E/SS
PIC16CE623-20/SS	PIC16F883-E/SSVAO
PIC16CE623-20I/SS	PIC16F883-I/SS

PIC16CE624-04/SS	PIC16F883-I/SS020
PIC16CE624-04E/SS	PIC16F883-I/SS021
PIC16CE624-04I/SS	PIC16F883-I/SS023
PIC16CE624-20/SS	PIC16F883-I/SS026
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PIC16CE624T-04/SS021	PIC16F883-I/SS032
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PIC16CE625-04/SS	PIC16F883-I/SS037
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PIC16CE625-20/SS	PIC16F883-I/SS046
PIC16CE625-20E/SS	PIC16F883-I/SSC02
PIC16CE625-20E/SSVAO	PIC16F883-I/SSV01
PIC16CE625-20I/SS	PIC16F883-I/SSV04
PIC16CE625T-04/SS	PIC16F883-I/SSVAO
PIC16CE625T-04I/SS	PIC16F883T-E/SS
PIC16CE625T-20/SS	PIC16F883T-E/SSVAO
PIC16CE625T-20E/SS031	PIC16F883T-I/SS
PIC16CE625T-20E/SS032	PIC16F883T-I/SS022
PIC16CE625T-20E/SSVAO	PIC16F883T-I/SS032
PIC16CE625T-20I/SS	PIC16F883T-I/SS041
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PIC16CR620AT-04I/SS026	PIC16F883T-I/SS043
PIC16F1826-E/SS	PIC16F883T-I/SS047
PIC16F1826-I/SS	PIC16F883T-I/SSC02
PIC16F1826-I/SSC03	PIC16F883T-I/SSV03
PIC16F1826T-I/SS	PIC16F883T-I/SSV04
PIC16F1826T-I/SSC03	PIC16F883T-I/SSVAO
PIC16F1827-E/SS	PIC16F886-E/SS
PIC16F1827-I/SS	PIC16F886-E/SS033
PIC16F1827-I/SSC02	PIC16F886-E/SS034
PIC16F1827-I/SSC05	PIC16F886-E/SSV03
PIC16F1827T-E/SS	PIC16F886-E/SSV11
PIC16F1827T-I/SS	PIC16F886-E/SSVAO
PIC16F1827T-I/SSC02	PIC16F886-I/SS
PIC16F1827T-I/SSC05	PIC16F886-I/SSV04
PIC16F1828-E/SS	PIC16F886-I/SSVAO
PIC16F1828-I/SS	PIC16F886T-E/SS
PIC16F1828-I/SSC01	PIC16F886T-E/SS033
PIC16F1828T-I/SS	PIC16F886T-E/SS034
PIC16F1828T-I/SSC01	PIC16F886T-E/SSV02
PIC16F1828T-I/SSV01	PIC16F886T-E/SSV08
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PIC16F1829-I/SS	PIC16F886T-E/SSVAO
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PIC16F54-I/SS	PIC16F886T-I/SSV09
PIC16F54-I/SS032	PIC16F886T-I/SSV13
PIC16F54-I/SSC02	PIC16F886T-I/SSVAO
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PIC16F54T-I/SS	PIC16F913-I/SS

PIC16F54T-I/SS027	PIC16F913-I/SSV02
PIC16F54T-I/SS032	PIC16F913-I/SSVAO
PIC16F54T-I/SSC02	PIC16F913T-E/SS
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PIC16F627-20/SS	PIC16F913T-I/SSVAO
PIC16F627-20E/SS	PIC16F916-E/SS
PIC16F627-20I/SS	PIC16F916-I/SS
PIC16F627A-E/SS	PIC16F916T-I/SS
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PIC16F627AT-E/SS	PIC16F916T-I/SS025
PIC16F627AT-E/SS033	PIC16F916T-I/SS027
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PIC16F627AT-I/SS028	PIC16F916T-I/SS029
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PIC16F627T-20I/SS	PIC16LC57CT-04I/SS
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PIC16F628-04I/SS040	PIC16LC62B-04I/SS
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PIC16F628-20E/SSVAO	PIC16LC62BT-04I/SS050
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PIC16F628A-E/SS	PIC16LC63A-04I/SS
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PIC16F628AT-E/SS	PIC16LC72-04/SS
PIC16F628AT-I/SS	PIC16LC72A-04/SS
PIC16F628AT-I/SS050	PIC16LC72A-04I/SS
PIC16F628AT-I/SSVAO	PIC16LC72AT-04/SS
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PIC16F628T-20/SS	PIC16LC73B-04I/SS
PIC16F628T-20E/SS042	PIC16LC773/SS
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PIC16F631-I/SS	PIC16LF1516-I/SS
PIC16F631-I/SSVAO	PIC16LF1516T-I/SS
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PIC16F631T-E/SSV02	PIC16LF1518-I/SS
PIC16F631T-I/SS	PIC16LF1518T-I/SS
PIC16F631T-I/SS020	PIC16LF1902-E/SS
PIC16F631T-I/SS021	PIC16LF1902-I/SS
PIC16F631T-I/SSVAO	PIC16LF1902T-I/SS
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PIC16F639T-I/SS	PIC16LF1903-I/SS

PIC16F648A-E/SS	PIC16LF1903T-I/SS
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PIC16F648AT-I/SSGC11	PIC16LF722A-E/SS
PIC16F648AT-I/SSGVAO	PIC16LF722A-I/SS
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PIC16F648AT-I/SSVAO	PIC16LF722-E/SS
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PIC16F677-I/SS	PIC16LF722T-I/SS023
PIC16F677-I/SSC01	PIC16LF723A-E/SS
PIC16F677-I/SSC02	PIC16LF723A-I/SS
PIC16F677-I/SSV03	PIC16LF723AT-I/SS
PIC16F677T-E/SS	PIC16LF723AT-I/SS020
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PIC16F677T-E/SS028	PIC16LF723-I/SS
PIC16F677T-E/SSV02	PIC16LF723-I/SSC01
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PIC16F677T-I/SS031	PIC16LF726-I/SS
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PIC16F677T-I/SSC01	PIC16LF726T-I/SS020
PIC16F677T-I/SSC02	PIC16LF726T-I/SSC01
PIC16F677T-I/SSV01	PIC16LF726T-I/SSC02
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PIC16F677T-I/SSV04	PIC16LF72-I/SSC14
PIC16F677T-I/SSV05	PIC16LF72T-I/SS
PIC16F685-E/SS	PIC16LF72T-I/SS022
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PIC16F685-E/SSVAO	PIC16LF737-I/SS
PIC16F685-I/SS	PIC16LF737T-I/SS
PIC16F685-I/SS024	PIC16LF737T-I/SS020
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PIC16F685T-E/SSGV01	PIC16LF767T-I/SS
PIC16F685T-E/SSV03	PIC16LF76-I/SS
PIC16F685T-E/SSV04	PIC16LF76T-I/SS



PIC16F685T-E/SSVAO	PIC16LF76T-I/SS060
PIC16F685T-H/SSVAO	PIC16LF76T-I/SS063
PIC16F685T-I/SS	PIC16LF870-I/SS
PIC16F685T-I/SS021	PIC16LF870-I/SSGVAO
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PIC16F685T-I/SSVAO	PIC16LF870T-I/SSGVAO
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PIC16F687-I/SS038	PIC16LF873AT-I/SS
PIC16F687-I/SSVAO	PIC16LF876A-I/SS
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PIC16F687T-I/SS	PIC16LF876AT-I/SS028
PIC16F687T-I/SS020	PIC16LF876AT-I/SSC26
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PIC16F687T-I/SS026	PIC18F2221-I/SS
PIC16F687T-I/SS035	PIC18F2321-E/SS
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PIC16F687T-I/SSVAO	PIC18F2321-E/SS023
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PIC16F689-I/SS	PIC18F2321T-E/SS
PIC16F689-I/SS045	PIC18F2321T-E/SS020
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PIC16F689-I/SSVAO	PIC18F2321T-E/SS022
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PIC16F689T-E/SSVAO	PIC18F2321T-E/SSV01
PIC16F689T-I/SS	PIC18F2321T-E/SSVAO
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PIC16F689T-I/SS032	PIC18F23K20-I/SS
PIC16F689T-I/SS034	PIC18F23K20T-I/SS
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PIC16F689T-I/SSV03	PIC18F23K22T-I/SS
PIC16F689T-I/SSV04	PIC18F24J10-I/SS
PIC16F689T-I/SSVAO	PIC18F24J10T-I/SS
PIC16F690-E/SS	PIC18F24J11-I/SS
PIC16F690-E/SSVAO	PIC18F24J11T-I/SS
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PIC16F690-I/SS025	PIC18F24J50T-I/SS
PIC16F690-I/SS029	PIC18F24K20-E/SS
PIC16F690-I/SS030	PIC18F24K20-I/SS
PIC16F690-I/SSC05	PIC18F24K20-I/SS021
PIC16F690-I/SSC06	PIC18F24K20-I/SSC01
PIC16F690-I/SSC09	PIC18F24K20-I/SSC03
PIC16F690-I/SSVAO	PIC18F24K20-I/SSLPR
PIC16F690T-E/SS	PIC18F24K20-I/SSVAO
PIC16F690T-E/SSV01	PIC18F24K20T-E/SS

PIC16F690T-E/SSV06	PIC18F24K20T-I/SS
PIC16F690T-E/SSVAO	PIC18F24K20T-I/SS020
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PIC16F690T-I/SS028	PIC18F24K20T-I/SSLPR
PIC16F690T-I/SS029	PIC18F24K20T-I/SSVAO
PIC16F690T-I/SS030	PIC18F24K22-E/SS
PIC16F690T-I/SS032	PIC18F24K22-I/SS
PIC16F690T-I/SS033	PIC18F24K22T-I/SS
PIC16F690T-I/SS036	PIC18F25J10-I/SS
PIC16F690T-I/SS038	PIC18F25J10T-I/SS
PIC16F690T-I/SS039	PIC18F25J11-I/SS
PIC16F690T-I/SSC06	PIC18F25J11T-I/SS
PIC16F690T-I/SSC09	PIC18F25J50-I/SS
PIC16F690T-I/SSV02	PIC18F25J50-I/SSLS
PIC16F690T-I/SSV03	PIC18F25J50T-I/SS
PIC16F690T-I/SSV05	PIC18F25J50T-I/SSLS
PIC16F690T-I/SSV08	PIC18F25K20-E/SS
PIC16F690T-I/SSVAO	PIC18F25K20-E/SSC04
PIC16F716-E/SS	PIC18F25K20-E/SSV01
PIC16F716-E/SSGVAO	PIC18F25K20-E/SSVAO
PIC16F716-E/SSVAO	PIC18F25K20-I/SS
PIC16F716-I/SS	PIC18F25K20-I/SS021
PIC16F716-I/SSVAO	PIC18F25K20-I/SSC01
PIC16F716T-E/SS	PIC18F25K20-I/SSC06
PIC16F716T-E/SS051	PIC18F25K20-I/SSC09
PIC16F716T-E/SS052	PIC18F25K20-I/SSLPR
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PIC16F716T-E/SS054	PIC18F25K20T-E/SS
PIC16F716T-E/SSGVAO	PIC18F25K20T-E/SS023
PIC16F716T-E/SSVAO	PIC18F25K20T-E/SS025
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PIC16F716T-I/SS045	PIC18F25K20T-I/SS
PIC16F716T-I/SS058	PIC18F25K20T-I/SSC01
PIC16F716T-I/SSV02	PIC18F25K20T-I/SSC06
PIC16F716T-I/SSVAO	PIC18F25K20T-I/SSC09
PIC16F720-E/SS	PIC18F25K20T-I/SSLPR
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PIC16F721T-I/SS	PIC18F25K22T-E/SS
PIC16F785-E/SS	PIC18F25K22T-E/SSVAO
PIC16F785-E/SSVAO	PIC18F25K22T-I/SS
PIC16F785-I/SS	PIC18F25K80-E/SS
PIC16F785T-E/SS	PIC18F25K80-I/SS
PIC16F785T-E/SS026	PIC18F25K80T-E/SS

PIC16F785T-E/SS027	PIC18F25K80T-I/SS
PIC16F785T-E/SS030	PIC18F26J11-I/SS
PIC16F785T-E/SS031	PIC18F26J11T-I/SS
PIC16F785T-E/SS033	PIC18F26J13-I/SS
PIC16F785T-E/SS038	PIC18F26J13T-I/SS
PIC16F785T-E/SSV01	PIC18F26J50-I/SS
PIC16F785T-E/SSV02	PIC18F26J50-I/SS020
PIC16F785T-E/SSVAO	PIC18F26J50T-I/SS
PIC16F785T-I/SS	PIC18F26J50T-I/SS020
PIC16F785T-I/SS020	PIC18F26J50T-I/SS021
PIC16F818-E/SS	PIC18F26J53-I/SS
PIC16F818-E/SSC30	PIC18F26J53T-I/SS
PIC16F818-E/SSVAO	PIC18F26K20-E/SS
PIC16F818-I/SS	PIC18F26K20-I/SS
PIC16F818-I/SSTSL	PIC18F26K20-I/SSLPR
PIC16F818T-E/SS	PIC18F26K20T-E/SS
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PIC16F819-E/SS	PIC18F26K22-E/SS
PIC16F819-E/SSGV01	PIC18F26K22-I/SS
PIC16F819-E/SSGVAO	PIC18F26K22-I/SSVAO
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PIC16F819-I/SSC26	PIC18F26K80T-E/SS
PIC16F819-I/SSTSL	PIC18F26K80T-I/SS
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PIC16F819T-E/SSC19	PIC18F27J53-I/SS
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PIC16LC622A-04/SS	PIC24FJ32GA002T-I/SSC10

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PIC18F1220T-I/SSVAO	
PIC18F1230-E/SS	

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PIC18F1230T-E/SS	
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RFPIC12F675KT-I/SS	

Parts Affected

AR1010  
AR1020  
dsPIC33FJ12GP202  
dsPIC33FJ12MC201  
dsPIC33FJ12MC202  
ENC28J60  
HB12-100P0s/12PB30  
HC12-100PAs/12PC51  
HI12-100POS/12PI30  
HI12-100PAS/12PI30  
HI12-100PIs/12PI30  
HS12-100P0/12PS0F  
HS12-100P0/12PS15  
HS12-100P0S/12PS25  
HS12-100P0S/12PS30  
HS12-100PIs/12PS25  
HS12-100PIs/12PS30  
HT12-100P0s/12PT49  
HT12-100PAs/12PT49  
HT12-100PDs/12PA49  
MCP1631  
MCP1631HV  
MCP1631V  
MCP1631VHV  
MCP18480  
MCP2140  
MCP2140A  
MCP2150  
MCP2155  
MCP23008  
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MCP23016  
MCP23017  
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MCP23S17  
MCP3901  
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PIC16F73  
PIC16F737  
PIC16F76  
PIC16F767  
PIC16F785  
PIC16F818  
PIC16F819  
PIC16F84A  
PIC16F87  
PIC16F870  
PIC16F872  
PIC16F873A  
PIC16F876A  
PIC16F88  
PIC16F882  
PIC16F883  
PIC16F886  
PIC16F913  
PIC16F916  
PIC16HV540  
PIC18F1220  
PIC18F1230  
PIC18F1320  
PIC18F1330  
PIC18F13K22

PIC18F13K50  
PIC18F14K22  
PIC18F14K50  
PIC18F2221  
PIC18F2321  
PIC18F23K20  
PIC18F23K22  
PIC18F24J10  
PIC18F24J11  
PIC18F24J50  
PIC18F24K20  
PIC18F24K22  
PIC18F25J10  
PIC18F25J11  
PIC18F25J50  
PIC18F25K20  
PIC18F25K22  
PIC18F26J11  
PIC18F26J13  
PIC18F26J50  
PIC18F26J53  
PIC18F26K20  
PIC18F27J13  
PIC18F27J53  
PIC24F04KA201  
PIC24F08KA101  
PIC24F08KA102  
PIC24F16KA101  
PIC24F16KA102  
PIC24FJ16GA002  
PIC24FJ32GA002  
PIC24FJ48GA002  
PIC24FJ64GA002  
PIC24HJ12GP202  
PS501  
rfPIC12F675F  
rfPIC12F675H  
rfPIC12F675K



**MICROCHIP**

**QUALIFICATION REPORT  
RELIABILITY LABORATORY**

**PCN: CYER-22RNGO053**

Date  
February 03, 2011

**Qualification of the 20L SSOP package with SG-8300GM mold compound at  
MTAI assembly site.**

Distribution

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## MICROCHIP PACKAGE QUALIFICATION REPORT

<b>Purpose</b>	Qualification of the 20L SSOP package with SG-8300GM mold compound at MTAI assembly site.
<b>CN</b>	BC103138
<b>QUAL ID</b>	Q10136
<b>MP CODE</b>	A5AB77G3XAL4
<b>Part No.</b>	PIC16LF627-04I/SS
<b>Bonding No.</b>	A-028481 Rev. F
<b>CCB No.</b>	990.03
<b><u>Package</u></b>	
<b>Type</b>	20L SSOP
<b>Package size</b>	209 mils
<b>Die thickness</b>	15 mils
<b>Die size</b>	134.70 x 176.30 mils
<b><u>Lead Frame</u></b>	
<b>Paddle size</b>	154 x 200 mils
<b>Material</b>	CDA194
<b>Surface</b>	Ag Spot
<b>Process</b>	stamped
<b>Part Number</b>	10102006
<b><u>Die attach material</u></b>	
<b>Epoxy</b>	8390A
<b>Wire</b>	Au wire
<b>Mold Compound</b>	SG-8300GM
<b>Plating Composition</b>	Matte Tin



# MICROCHIP PACKAGE QUALIFICATION REPORT

## Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Trace Code
MTA1113603828	TMPE211176418.C00	10494CP
MTA1113604002	TMPE211176418.C00	10495HQ
MTA1113604003	TMPE211176418.C00	10495HR

### Result

Pass  Fail  \_\_\_\_\_

20L SSOP assembled by MTAI pass reliability test per QCI-39000. This package was qualified the Moisture/Reflow Sensitivity Classification Level 1 at 260°C reflow temperature per IPC/JEDEC J-STD-020C standard.

**Prepared By:** \_\_\_\_\_ **Date:** February 03, 2011 **(Reliability Engineer)**

(Mr.Udom Suksansakul)

**Approved By:** \_\_\_\_\_ **Date:** February 03, 2011 **(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
<b><u>MSL</u></b>								
MSL Level 1/260°C	85°C/ 85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH 3x Convection-Reflow 260°C max System: Vitronics Soltec MR1243 ( IPC/JEDEC J-STD-020C)	S12/14/16 (PDC)	135	12/21/10	01/04/11	0/135	Pass	
<b><u>Precondition</u></b>								
Electrical Test	Electrical Test : +25°C and 85°C System: J750 (Test 1 lot 125°C on MTA113603828.000)	S12/14/16 (PDC)	693(0)	12/17/10	12/21/10	693		Good Devices
Bake	Bake 150°C, 24 hrs System: CHINEE	PI-92014B		12/27/10	12/28/10	693		
Moisture Soak	85°C/85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH	PI-91173B		12/28/10	01/04/11	693		
Convection-Reflow	3x Convection-Reflow 260°C max System: Vitronics Soltec MR1243	PI-91160B		01/04/11	01/04/11	693		
Electrical Test	Electrical Test : +25°C and 85°C System: J750 (Test 1 lot 125°C on MTA113603828.000)	S12/14/16 (PDC)		01/04/11	01/07/11	0/693	Pass	

# PACKAGE QUALIFICATION REPORT

Qual Report : Q10136

Test Number (Reference)	Test Condition	Microchip Spec	Qty. (Acc.)	Date in	Date Out	Def/SS	Result	Remarks
<b>Temp Cycle</b>	<b>Stress Condition:</b> -65°C to +150°C, 500 Cycles System : TABAI ESPEC TSA-70H Inspection: External crack inspection all units under 40X Optical magnification	PI-91020B		01/07/11	01/19/11	231		Parts had been pre-conditioned at 260°C
	<b>Electrical Test: + 85°C</b> System: J750 (Test 1 lot 125°C on MTA113603828.000)	S12/14/16 (PDC)	231(0)	01/19/11	01/25/11	0/231	Pass	77 units / lot
	<b>Bond Strength:</b> Bond Shear (15.60 grams) Wire Pull (> 3 grams)	QCI-91022	15 (0) 15 (0)	01/25/11 01/25/11	01/25/11 01/25/11	0/15 0/15	Pass Pass	
	<b>Stress Condition:</b> +130°C/85%RH, 96 hrs. System: HAST 6000X	PI-91261B		01/07/11	01/12/11	231		Parts had been pre-conditioned at 260°C
<b>UNBIASED-HAST</b>	<b>Electrical Test: +25°C</b> System: J750	S12/14/16 (PDC)	231(0)	01/12/11	01/14/11	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
<b>HAST</b>	<b>Stress Condition:</b> +130°C/85%RH, 96 hrs. System: HAST 6000X	PI-92010B		01/07/11	01/12/11	231		Parts had been pre-conditioned at 260°C
	<b>Electrical Test:</b> +25°C and 85°C System: J750 (Test 1 lot 125°C on MTA113603828.000)	S12/14/16 (PDC)	231(0)	01/12/11	01/14/11	0/231	Pass	77 units / lot
<b>High Temperature Storage Life</b>	<b>Stress Condition:</b> Bake 175°C, 504 hrs System: CHINEE	PI-92014B S12/14/16		12/21/10	01/13/11	45		45 units
	<b>Electrical Test:</b> +25°C and 85°C System: J750	(PDC)	45(0)	01/13/11	01/14/11	0/45	Pass	
<b>Bond Strength Data Assembly</b>	Bond Shear (15.60 grams)		30 (0) bonds	-	-	0/30	Pass	
	Wire Pull (> 3 grams)	QCI-91022	30 (0) wires	-	-	0/30	Pass	