



PCN# : P4C2AAB
Issue Date : Dec. 03, 2015

DESIGN/PROCESS CHANGE NOTIFICATION

This is to inform you that a change is being made to the products listed below.

Unless otherwise indicated in the details of this notification, the identified change will have no impact on product quality, reliability, electrical, visual or mechanical performance and affected products will remain fully compliant to all published specifications. Products incorporating this change may be shipped interchangeably with existing unchanged products.

This change is planned to take effect in 90 calendar days from the date of this notification. Please work with your local Fairchild Sales Representative to manage your inventory of unchanged product if your evaluation of this change will require more than 90 calendar days.

Please contact your local Customer Quality Engineer within 30 days of receipt of this notification if you require any additional data or samples.

Implementation of change:

Expected First Shipment Date for Changed Product :Mar. 02, 2016

Expected First Date Code of Changed Product :1610

Description of Change (From) :

Existing manufacture source located at Weihai China, Shantou China, Suzhou,China

Description of Change (To) :

Adding a manufacturing site located at Shanwei China for increased flexibility.

Reason for Change:

All the equipment for affected devices will be transferred from Suzhou to new location at Shanwei,China. Package outline drawings of the affected products remain unchanged. All of the affected products are fully compliant to all published data sheet and this change will have no impact on their electrical performance. Quality and reliability will remain at the highest standards already demonstrated with Fairchild's existing. Please do not delay in requesting any samples required to approved within the time frame noted. Please contact your local Fairchild Sales representative to place orders for a sufficient volume of unchanged product if your approval process will require more than 90 days.

Affected Product(s): Please refer to the list of affected products in the addendum attached in the PCN email you received. This list is based on an analysis of your companys procurement history.

Qualification Plan	Device	Package	Process	No. of Lots
Q20140407	KA7805AETU	TO220	BHB2A	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=20V	JESD22-A101B	1000 hrs	0/77
High Temperature Op Life	125C, Vin=30V	NA	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Solder Dip (Resistance to Solder Heat)	270C	JESD22-B106	15 sec	0/30
-65C, 150C (Temperature Cycle)	-65C, 150C	JESD22-A104	500 Cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140407	KSA940TU	TO220	HP BJT	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=80% of rated BV, max 100V	JESD22-A101B	1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% ratedBV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Medium Size Pkg's (TO-220, D2) (Power Cycle)	Delta 100C, 3.5 Min On/Off	MIL-STD-750 M1037	8572 Cycles	0/77
Solder Dip (Resistance to Solder Heat)	270C	JESD22-B106	15 sec	0/30
-65C, 150C (Temperature Cycle)	-65C, 150C	JESD22-A104	500 Cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140407	FCP36N60N	TO220	SUPREMOS	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=80% of rated BV, max 100V	JESD22-A101B	1000 hrs	0/77
High Temperature Gate Bias	150C, 100% Rated VGSV	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% ratedBV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Medium Size Pkg's (TO-220, D2) (Power Cycle)	Delta 100C, 3.5 Min On/Off	MIL-STD-750 M1037	8572 Cycles	0/77
Solder Dip (Resistance to Solder Heat)	270C	JESD22-B106	15 sec	0/30
-65C, 150C (Temperature Cycle)	-65C, 150C	JESD22-A104	500 Cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140407	TIP42CTU	TO220	HP BJT	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=80% of rated BV, max 100V	JESD22-A101B	1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% ratedBV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Medium Size Pkg's (TO-220, D2) (Power Cycle)	Delta 100C, 3.5 Min On/Off	MIL-STD-750 M1037	8572 Cycles	0/77
Solder Dip (Resistance to Solder Heat)	270C	JESD22-B106	15 sec	0/30
-65C, 150C (Temperature Cycle)	-65C, 150C	JESD22-A104	500 Cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140407	FQP4N90C	TO220	C-FET	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=80% of rated BV, max 100V	JESD22-A101B	1000 hrs	0/77
High Temperature Gate Bias	150C, 100% Rated VGSV	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% ratedBV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Medium Size Pkg's (TO-220, D2) (Power Cycle)	Delta 100C, 3.5 Min On/Off	MIL-STD-750 M1037	8572 Cycles	0/77
Solder Dip (Resistance to Solder Heat)	270C	JESD22-B106	15 sec	0/30
-65C, 150C (Temperature Cycle)	-65C, 150C	JESD22-A104	500 Cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140409A	FQD17N08LTM	DIPAK	Q-FET	1

Test Description:	Condition:	Standard:	Duration:	Results:
MSL(1), PKG(Small), (Precondition), Before TMCL/H3TRB test	PeakTemp(260c), Cycles(3)	JESD22-A113	24 hrs 168hrs	0/154
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=80% of rated BV, max 100V	JESD22-A101B	1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% ratedBV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle	MIL-STD-750-1036	10000 Cycles	0/77
Solder Dip (Resistance to Solder Heat)	270C	JESD22-B106	15 sec	0/30
-65C, 150C (Temperature Cycle)	-65C, 150C	JESD22-A104	500 Cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140409A	MJD47TF	DIPAK	HP BJT	1

Test Description:	Condition:	Standard:	Duration:	Results:
MSL(1), PKG(Small), (Precondition), Before TMCL/H3TRB test	PeakTemp(260c), Cycles(3)	JESD22-A113	24 hrs 168hrs	0/154
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=80% of rated BV, max 100V	JESD22-A101B	1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% ratedBV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle	MIL-STD-750-1036	10000 Cycles	0/77
Solder Dip = 260C, 10 sec (Resistance to Solder Heat)	270C,	JESD22-B106	15 sec	0/30
-65C, 150C (Temperature Cycle)	-65C, 150C	JESD22-A104	500 Cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140409A	LM317MDTX	DIPAK	BSP1	1

Test Description:	Condition:	Standard:	Duration:	Results:
MSL(1), PKG(Small), (Precondition), Before TMCL/THBT test	PeakTemp(260c), Cycles(3)	JESD22-A113	24 hrs 168hrs	0/154
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=13V	JESD22-A101B	1000 hrs	0/77
High Temperature Op Life	Vin=19V Ta=125C	NA	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Solder Dip = 260C, 10 sec (Resistance to Solder Heat)	270C,	JESD22-B106	15 sec	0/30
-65C, 150C (Temperature Cycle)	-65C, 150C	JESD22-A104	500 Cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140409A	FQU13N10LTU	DIPAK	Q-FET	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=80% of rated BV, max 100V	JESD22-A101B	1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% ratedBV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle	MIL-STD-750-1036	10000 Cycles	0/77
Solder Dip = 260C, 10 sec (Resistance to Solder Heat)	270C,	JESD22-B106	15 sec	0/30
-65C, 150C (Temperature Cycle)	-65C, 150C	JESD22-A104	500 Cycles	0/77



Title : Qualification Report for PCN : P4C2AAB

Date : Dec. 03, 2015

Affected devices :

Customer Name : DIGI-KEY CORPORATION

Customer Code : 0003948101

Product	Customer Part Number	BBB	Drawing
FCP36N60N		Y	N
FDP025N06		Y	N
FDP18N20F		Y	N
FDP18N50		Y	N
FDP22N50N		Y	N
FDP24N40		Y	N
FDP26N40		Y	N
FQD10N20LTM		Y	N
FQP20N06L		Y	N
FQP2N90		Y	N
FQP30N06		Y	N
FQP30N06L		Y	N
FQP32N20C		Y	N
FQP3N30		Y	N
FQP3N80C		Y	N
FQP3P20		Y	N
FQP3P50		Y	N
FQP44N10		Y	N
FQP4N90C		Y	N
FQP4P40		Y	N
FQP65N06		Y	N
FQP7P06		Y	N
FQP85N06		Y	N
FQP8N80C		Y	N
FQP8P10		Y	N
FQP9N30		Y	N
FQU20N06LTU		Y	N
IRF644B_FP001		Y	N
IRL640A		Y	N

Customer Name : DIGI-KEY CONSIGNMENT

Customer Code : 0003948144

Product	Customer Part Number	BBB	Drawing
FDPO23N08B_F102		Y	N
FQD17N08LTM		Y	N

FQD9N25TM_F080		Y	N
FQP11P06		Y	N
FQP12P10		Y	N
FQP15P12		Y	N
FQP2P40_F080		Y	N
FQP4N20L		Y	N
FQP6N40C		Y	N
FQP8N90C		Y	N
FQP9N90C		Y	N
FQU1N80TU		Y	N
FQU5P20TU		Y	N
FQU8P10TU		Y	N
FQU9N25TU		Y	N

Qualification Test Summary :

Qualification Plan	Device	Package	Process	No. of Lots
Q20140407	KA7805AETU	TO220	BHB2A	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=20V	JESD22-A101B	1000 hrs	0/77
High Temperature Op Life	125C, Vin=30V	NA	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Solder Dip (Resistance to Solder Heat)	270C	JESD22-B106	15 sec	0/30
-55C, 150C (Temperature Cycle)	-55C, 150C	JESD22-A104	500 Cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140407	KSA9401U	TO220	HPBJT	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=80% of rated BV, max 100V	JESD22-A101B	1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% ratedBV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Medium Size Pkg's (TO-220, D2) (Power Cycle)	Delta 100C, 3.5 Min On/Off	MIL-STD-750 M1037	8572 Cycles	0/77
Solder Dip (Resistance to Solder Heat)	270C	JESD22-B106	15 sec	0/30
-55C, 150C (Temperature Cycle)	-55C, 150C	JESD22-A104	500 Cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140407	FCP36N50N	TO220	SUPREMOS	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=80% of rated BV, max 100V	JESD22-A101B	1000 hrs	0/77
High Temperature Gate Bias	150C, 100% Rated VGSV	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% ratedBV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Medium Size Pkg's (TO-220, D2) (Power Cycle)	Delta 100C, 3.5 Min On/Off	MIL-STD-750 M1037	8572 Cycles	0/77
Solder Dip (Resistance to Solder Heat)	270C	JESD22-B106	15 sec	0/30
-55C, 150C (Temperature Cycle)	-55C, 150C	JESD22-A104	500 Cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140407	TIP42CTU	TO220	HP BJT	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Humidity, High Temp. Rev. Bias	85C, 85%RH, Vin=80% of rated BV, max 100V	JESD22-A101B	1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% ratedBV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Medium Size Pkg's (TO-220, D2) (Power Cycle)	Delta 100C, 3.5 Min On/Off	MIL-STD-750 M1037	8572 Cycles	0/77
Solder Dip (Resistance to Solder Heat)	270C	JESD22-B106	15 sec	0/30
-55C, 150C (Temperature Cycle)	-55C, 150C	JESD22-A104	500 Cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140407	FQP4N90C	TO220	C-FET	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Humidity, High Temp. Rev. Bias	85C, 85%RH, Vin=80% of rated BV, max 100V	JESD22-A101B	1000 hrs	0/77
High Temperature Gate Bias	150C, 100% Rated VGSV	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% ratedBV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Medium Size Pkg's (TO-220, D2) (Power Cycle)	Delta 100C, 3.5 Min On/Off	MIL-STD-750 M1037	8572 Cycles	0/77
Solder Dip (Resistance to Solder Heat)	270C	JESD22-B106	15 sec	0/30
-55C, 150C (Temperature Cycle)	-55C, 150C	JESD22-A104	500 Cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140409A	FQD17N08LTM	DIPAK	Q-FET	1

Test Description:	Condition:	Standard:	Duration:	Results:
MSL(1), PKG(Small), (Precondition), Before TMCL/H3TRB test	PeakTemp(250c), Cycles(3)	JESD22-A113	24 hrs 168hrs	0/154
High Humidity, High Temp. Rev. Bias	85C, 85%RH, Vin=80% of rated BV, max 100V	JESD22-A101B	1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% ratedBV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle	MIL-STD-750-1036	10000 Cycles	0/77
Solder Dip (Resistance to Solder Heat)	270C	JESD22-B106	15 sec	0/30
-55C, 150C (Temperature Cycle)	-55C, 150C	JESD22-A104	500 Cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140409A	MJD47TF	DIPAK	HP BJT	1

Test Description:	Condition:	Standard:	Duration:	Results:
MSL(1), PKG(Small), (Precondition), Before TMCL/H3TRB test	Peak Temp(260c), Cycles(3)	JESD22-A113	24 hrs 168hrs	0/154
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=80% of rated BV, max 100V	JESD22-A101B	1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% ratedBV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle	MIL-STD-750-1036	10000 Cycles	0/77
Solder Dip = 260C, 10 sec (Resistance to Solder Heat)	270C,	JESD22-B106	15 sec	0/30
-65C, 150C (Temperature Cycle)	-65C, 150C	JESD22-A104	500 Cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140409A	LM317MDTX	DIPAK	BSP1	1

Test Description:	Condition:	Standard:	Duration:	Results:
MSL(1), PKG(Small), (Precondition), Before TMCL/THBT test	Peak Temp(260c), Cycles(3)	JESD22-A113	24 hrs 168hrs	0/154
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=13V	JESD22-A101B	1000 hrs	0/77
High Temperature Op Life	Vin=19V Ta=125C	NA	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Solder Dip = 260C, 10 sec (Resistance to Solder Heat)	270C,	JESD22-B106	15 sec	0/30
-65C, 150C (Temperature Cycle)	-65C, 150C	JESD22-A104	500 Cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140409A	FQU13N10LTU	DIPAK	Q-FET	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=80% of rated BV, max 100V	JESD22-A101B	1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% ratedBV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle	MIL-STD-750-1036	10000 Cycles	0/77
Solder Dip = 260C, 10 sec (Resistance to Solder Heat)	270C,	JESD22-B106	15 sec	0/30
-65C, 150C (Temperature Cycle)	-65C, 150C	JESD22-A104	500 Cycles	0/77

The selection methodology of qualification vehicles is aligned with JESD47 and if automotive devices are impacted by the PCN the selection of qualification vehicles is also align with the requirements in AEC-Q100 or AEC-Q101

Please contact your local Customer Quality Engineer if you have any questions concerning this data.