

**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. Alternatively, you may send an email request for data, samples or other information to [PCNSupport@fairchildsemi.com](mailto:PCNSupport@fairchildsemi.com).

**Implementation of change:**

Expected First Shipment Date for Changed Product : Apr. 21, 2014

Expected First Date Code of Changed Product :1422

**Description of Change (From) :**

TO252/TO251/TO263 packages assembled in the following sites, which currently use these qualified mold compounds.

**Fairchild Suzhou:**

EME6600CS (Sumitomo Bakelite)  
KTMC5400SM (KCC)  
KTMC5900GM - Halogen Free (KCC)

**Fairchild Cebu:**

MP-195 (Nitto Denko)  
EME6600CS (Sumitomo Bakelite)

**Description of Change (To) :**

TO252/TO251/TO263 packages assembled in the following sites will use these alternatively qualified mold compounds.

**Fairchild Suzhou:**

CEL8240HF10 - Halogen Free (Hitachi Chemical)

**Fairchild Cebu:**

KTMC5900GM - Halogen Free (KCC)

Reason for Change:

This is a change to mold compounds used for Fairchild products assembled in TO252/TO251/TO263 packages. There are no changes to the currently approved assembly facilities or any other materials used to produce these products. Package outline drawings of the affected products remain un-changed. Affected products will be fully compliant to all published data sheet specifications. Quality and reliability will remain at the highest standards already demonstrated with Fairchild's existing TO252/TO251/TO263 products. If you require data or samples to evaluate this change, please contact Fairchild Semiconductor within 30 days of receipt of this notification.

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 company's procurement history.

Qualification Plan	Device	Package	Description	No. of Lots
F20100058A	FQD6N60CTM_WS	TO252 (Suzhou)	NCH, MOSFET	1

Test Description & Condition:	Standard :	Duration:	Results:
HTRB @ 150C, 80% Rated BV	JESD22-A108	168, 500, 1k hrs	0/77
HTGB @ 150C, 100% Rated VGSV	JESD22-A103	168, 500, 1k hrs	0/77
PRCL @ DeltaTj 100 C; DPAK: 2 min on/off	JESD22-A122	5k, 10k Cycles	0/77
H3TRB @ 85C, 85%RH, 80% rated BV	JESD22-A110	168, 500, 1k hrs	0/77
TMCL @ -65C to 150 C, 30 min/cycle	JESD22-A104	200, 500 cycles	0/77

Qualification Plan	Device	Package	Description	No. of Lots
F20100058A	FDD8880	TO252 (Suzhou)	N-Channel PowerTrench MOSFET	1

Test Description & Condition:	Standard :	Duration:	Results:
HTRB @ 175C, 80% Rated BV	JESD22-A108	168, 500, 1k hrs	0/77
HTGB @ 175C, 100% Rated VGSV	JESD22-A103	168, 500, 1k hrs	0/77
PRCL @ DeltaTj 100 C; DPAK: 2 min on/off	JESD22-A122	5k, 10k Cycles	0/77
H3TRB @ 85C, 85%RH, 80% rated BV	JESD22-A110	168, 500, 1k hrs	0/77
TMCL @ -65C to 150 C, 30 min/cycle	JESD22-A104	200, 500 cycles	0/77

Qualification Plan	Device	Package	Description	No. of Lots
F20100058A	HGTD7N60C3S9A	TO252 (Suzhou)	UFS Series N-Channel IGBT	1

Test Description & Condition:	Standard :	Duration:	Results:
HTRB @ 150C, 80% Rated BV	JESD22-A108	168, 500, 1k hrs	0/77
HTGB @ 150C, 100% Rated VGSV	JESD22-A103	168, 500, 1k hrs	0/77
PRCL @ DeltaTj 100 C; DPAK: 2 min on/off	JESD22-A122	5k, 10k Cycles	0/77
H3TRB @ 85C, 85%RH, 80% rated BV	JESD22-A110	168, 500, 1k hrs	0/77
TMCL @ -65C to 150 C, 30 min/cycle	JESD22-A104	200, 500 cycles	0/77

Qualification Plan	Device	Package	Description	No. of Lots
F20100058A	RURD4120S9A	TO252 (Suzhou)	Ultrafast Diode	1

Test Description & Condition:	Standard :	Duration:	Results:
HTRB @ 175C, 80% Rated BV	JESD22-A108	168, 500, 1k hrs	0/77
PRCL @ DeltaTj 100 C DPAK: 2 min on/off	JESD22-A122	5k, 10k Cycles	0/77
H3TRB @ 85C, 85%RH, 80% rated BV	JESD22-A110	168, 500, 1k hrs	0/77
TMCL @ -65C to 150 C, 30 min/cycle	JESD22-A104	200, 500 cycles	0/77

Qualification Plan	Device	Package	Description	No. of Lots
F20100058A	FDD8424H	TO252 (Suzhou)	Dual N & P-Channel PowerTrench® MOSFET	1

Test Description & Condition:	Standard :	Duration:	Results:
HTRB @ 150C, 80% Rated BV	JESD22-A108	168, 500, 1k hrs	0/77
HTGB @ 150C, 100% Rated VGSV	JESD22-A103	168, 500, 1k hrs	0/77
PRCL @ DeltaTj 100 C; DPAK: 2 min on/off	JESD22-A122	5k, 10k Cycles	0/77
H3TRB @ 85C, 85%RH, 80% rated BV	JESD22-A110	168, 500, 1k hrs	0/77
TMCL @ -65C to 150 C, 30 min/cycle	JESD22-A104	200, 500 cycles	0/77

Qualification Plan	Device	Package	Description	No. of Lots
F20120151	HGT1S10N120BNST	TO263 (Suzhou)	NPT IGBT	1

Test Description & Condition:	Standard :	Duration:	Results:
HTRB @ 150C, 80% Rated BV	JESD22-A108	168, 500, 1k hrs	0/77
HTGB @ 150C, 100% Rated VGSV	JESD22-A103	168, 500, 1k hrs	0/77
PRCL @ DeltaTj 100 C; DPAK: 3.5 min on/off	JESD22-A122	5k, 8572 Cycles	0/77
H3TRB @ 85C, 85%RH, 80% rated BV	JESD22-A110	168, 500, 1k hrs	0/77
TMCL @ -65C to 150 C, 30 min/cycle	JESD22-A104	200, 500 cycles	0/77

Qualification Plan	Device	Package	Description	No. of Lots
F20120151	FQB8N60CTM_WS	TO263 (Suzhou)	N-Channel QFET MOSFET	1

Test Description & Condition:	Standard :	Duration:	Results:
HTRB @ 150C, 80% Rated BV	JESD22-A108	168, 500, 1k hrs	0/77
HTGB @ 150C, 100% Rated VGSV	JESD22-A103	168, 500, 1k hrs	0/77
PRCL @ DeltaTj 100 C; DPAK: 3.5 min on/off	JESD22-A122	5k, 8572 Cycles	0/77
H3TRB @ 85C, 85%RH, 80% rated BV	JESD22-A110	168, 500, 1k hrs	0/77
TMCL @ -65C to 150 C, 30 min/cycle	JESD22-A104	200, 500 cycles	0/77

Qualification Plan	Device	Package	Description	No. of Lots
F20120151	FFB20UP30DNTM	TO263 (Suzhou)	Ultrafast Dual Diode	1

Test Description & Condition:	Standard :	Duration:	Results:
HTRB @ 150C, 80% Rated BV	JESD22-A108	168, 500, 1k hrs	0/77
PRCL @ DeltaTj 100 C; DPAK: 3.5 min on/off	JESD22-A122	5k, 8572 Cycles	0/77
H3TRB @ 85C, 85%RH, 80% rated BV	JESD22-A110	168, 500, 1k hrs	0/77
TMCL @ -65C to 150 C, 30 min/cycle	JESD22-A104	200, 500 cycles	0/77

Qualification Plan	Device	Package	Description	No. of Lots
F20120151	FCB20N60TM	TO263 (Suzhou)	N-Channel SuperFET	1

Test Description & Condition:	Standard :	Duration:	Results:
HTRB @ 150C, 80% Rated BV	JESD22-A108	168, 500, 1k hrs	0/77
HTGB @ 150C, 100% Rated VGSV	JESD22-A103	168, 500, 1k hrs	0/77
PRCL @ DeltaTj 100 C; DPAK: 3.5 min on/off	JESD22-A122	5k, 8572 Cycles	0/77
H3TRB @ 85C, 85%RH, 80% rated BV	JESD22-A110	168, 500, 1k hrs	0/77
TMCL @ -65C to 150 C, 30 min/cycle	JESD22-A104	200, 500 cycles	0/77

Qualification Plan	Device	Package	Description	No. of Lots
F20120151	FDB6670AS	TO263 (Suzhou)	POWER TRENCH SYNCFET	1

Test Description & Condition:	Standard :	Duration:	Results:
HTRB @ 150C, 80% Rated BV	JESD22-A108	168, 500, 1k hrs	0/77
HTGB @ 150C, 100% Rated VGSV	JESD22-A103	168, 500, 1k hrs	0/77
PRCL @ DeltaTj 100 C; DPAK: 3.5 min on/off	JESD22-A122	5k, 8572 Cycles	0/77
H3TRB @ 85C, 85%RH, 80% rated BV	JESD22-A110	168, 500, 1k hrs	0/77
TMCL @ -65C to 150 C, 30 min/cycle	JESD22-A104	200, 500 cycles	0/77

Qualification Plan	Device	Package	Description	No. of Lots
F20120378	FQD5N50CTM	TO252 (Suzhou)	Green EMC CEL8240HF10FC	3

Test Description & Condition:	Standard :	Duration:	Results:
HTRB @ 150C, 80% Rated BV	JESD22-A108	168, 500, 1k hrs	0/231

Qualification Plan	Device	Package	Description	No. of Lots
F20120378	FQD5N60CTM_WS	TO252 (Suzhou)	Green EMC CEL8240HF10FC	3

Test Description & Condition:	Standard :	Duration:	Results:
HTRB @ 150C, 80% Rated BV	JESD22-A108	168, 500, 1k hrs	0/231

Qualification Plan	Device	Package	Description	No. of Lots
F20120378	FDB12N50TM	TO263 (Suzhou)	Green EMC CEL8240HF10FC	3

Test Description & Condition:	Standard :	Duration:	Results:
HTRB @ 150C, 80% Rated BV	JESD22-A108	168, 500, 1k hrs	0/231

Qualification Plan	Device	Package	Description	No. of Lots
F20120378	FGB20N60SFD	TO263 (Suzhou)	Green EMC CEL8240HF10FC	3

Test Description & Condition:	Standard :	Duration:	Results:
HTRB @ 150C, 80% Rated BV	JESD22-A108	168, 500, 1k hrs	0/231
HAST @ 130C, 85%RH, 80%rated BV, max=42V	JESD22-A110	96 hours	0/231
TMCL @ -65C to 150 C, 30 min/cycle	JESD22-A104	200,500 cycles	0/231

Qualification Plan	Device	Package	Description	No. of Lots
F20120378	ISL9R18120S3ST	TO263 (Suzhou)	Green EMC CEL8240HF10FC	3

Test Description & Condition:	Standard :	Duration:	Results:
HTRB @ 150C, 80% Rated BV	JESD22-A108	168, 500, 1k hrs	0/231

Qualification Plan	Device	Package	Description	No. of Lots
F20120378	RFD16N05LSM	TO252 (Suzhou)	Green EMC CEL8240HF10FC	3

Test Description & Condition:	Standard :	Duration:	Results:
HTRB @ 150C, 80% Rated BV	JESD22-A108	168, 500, 1k hrs	0/231
HAST @ 130C, 85%RH, 80%rated BV, max=42V	JESD22-A110	96 hours	0/231
TMCL @ -65C to 150 C, 30 min/cycle	JESD22-A104	200,500 cycles	0/231

Qualification Plan	Device	Package	Description	No. of Lots
F20120378	FQB5N90TM	TO263 (Suzhou)	Green EMC CEL8240HF10FC	3

Test Description & Condition:	Standard :	Duration:	Results:
HTRB @ 150C, 80% Rated BV	JESD22-A108	168, 500, 1k hrs	0/231
HAST @ 130C, 85%RH, 80%rated BV, max=42V	JESD22-A110	96 hours	0/231
TMCL @ -65C to 150 C, 30 min/cycle	JESD22-A104	200,500 cycles	0/231

Qualification Plan	Device	Package	Description	No. of Lots
F20120378	FQD4N50TM_WS	TO252 (Suzhou)	Green EMC CEL8240HF10FC	3

Test Description & Condition:	Standard :	Duration:	Results:
HTRB @ 150C, 80% Rated BV	JESD22-A108	168, 500, 1k hrs	0/231
HAST @ 130C, 85%RH, 80%rated BV, max=42V	JESD22-A110	96 hours	0/231
TMCL @ -65C to 150 C, 30 min/cycle	JESD22-A104	200,500 cycles	0/231

Qualification Plan	Device	Package	Description	No. of Lots
Q20120358	KSC5502DTM	TO252 (Suzhou)	Green EMC CEL8240HF10FC	3

Test Description & Condition:	Standard :	Duration:	Results:
HTRB @ 125C, 80% Rated BV	JESD22-A108	168, 500, 1k hrs	0/231
HTSL @ 150°C	JESD22-A103	168, 500, 1k hrs	0/231
PRCL @ DeltaTj 100 C DPAK: 3.5 min on/off	JESD22-A122	5k, 8572 Cycles	0/231
HAST @ 130C, 85%RH, 80% rated BV, max Vds=42V	JESD22-A110	96 hours	0/231
TMCL @ -65C to 150 C, 30 min/cycle	JESD22-A104	200,500 cycles	0/231

Qualification Plan	Device	Package	Description	No. of Lots
Q20120358	FJB3307DTM	TO263 (Suzhou)	Green EMC CEL8240HF10FC	3

Test Description & Condition:	Standard :	Duration:	Results:
HTRB @ 125C, 80% Rated BV	JESD22-A108	168, 500, 1k hrs	0/231
HTSL @ 150°C	JESD22-A103	168, 500, 1k hrs	0/231
PRCL @ DeltaTj 100 C D2PAK: 5 min on/off	JESD22-A122	3k, 6k cycles	0/231
HAST @ 130C, 85%RH, 80% rated BV, max Vds=42V	JESD22-A110	96 hours	0/231
TMCL @ -65C to 150 C, 30 min/cycle	JESD22-A104	200,500 cycles	0/231