

Date Created : 2007/11/15
Date Issued On : 2007/11/29
PCN# : Q3073801-A

DESIGN/PROCESS CHANGE NOTIFICATION -- FINAL

This is to inform you that a design and/or process change will be made to the following product(s). This notification is for your information and concurrence.

If you require data or samples to qualify this change, please contact **Fairchild Semiconductor within 30 days of receipt of this notification.**

Updated process quality documentation, such as FMEAs and Control Plans, are available for viewing upon request.

If you have any questions concerning this change, please contact:

Technical Contact:

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PCN Originator:

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Phone:

Implementation of change:

Expected 1st Device Shipment Date: 2008/01/29

Earliest Year/Work Week of Changed Product: 0805

Change Type Description: Bond Wire Material Composition, Lead Frame Dimensions (Internal and External)

Description of Change (From): Current TO-220 heatsink and die attach pad thickness of 1.30mm. Material composition of wire used for wire bonding process is gold (Au) wire and copper (Cu) wire.

Description of Change (To): New TO-220 heatsink and die attach pad thickness will be 0.51mm. There is no change in heatsink and die attach pad material. Material composition of wire used during wire bonding process will be copper (Cu). Conversion of heatsink thickness will be done on a part by part basis starting WW05 of 2008 to prevent mixing of product with different heat sink dimensions in shipments during the transition period.

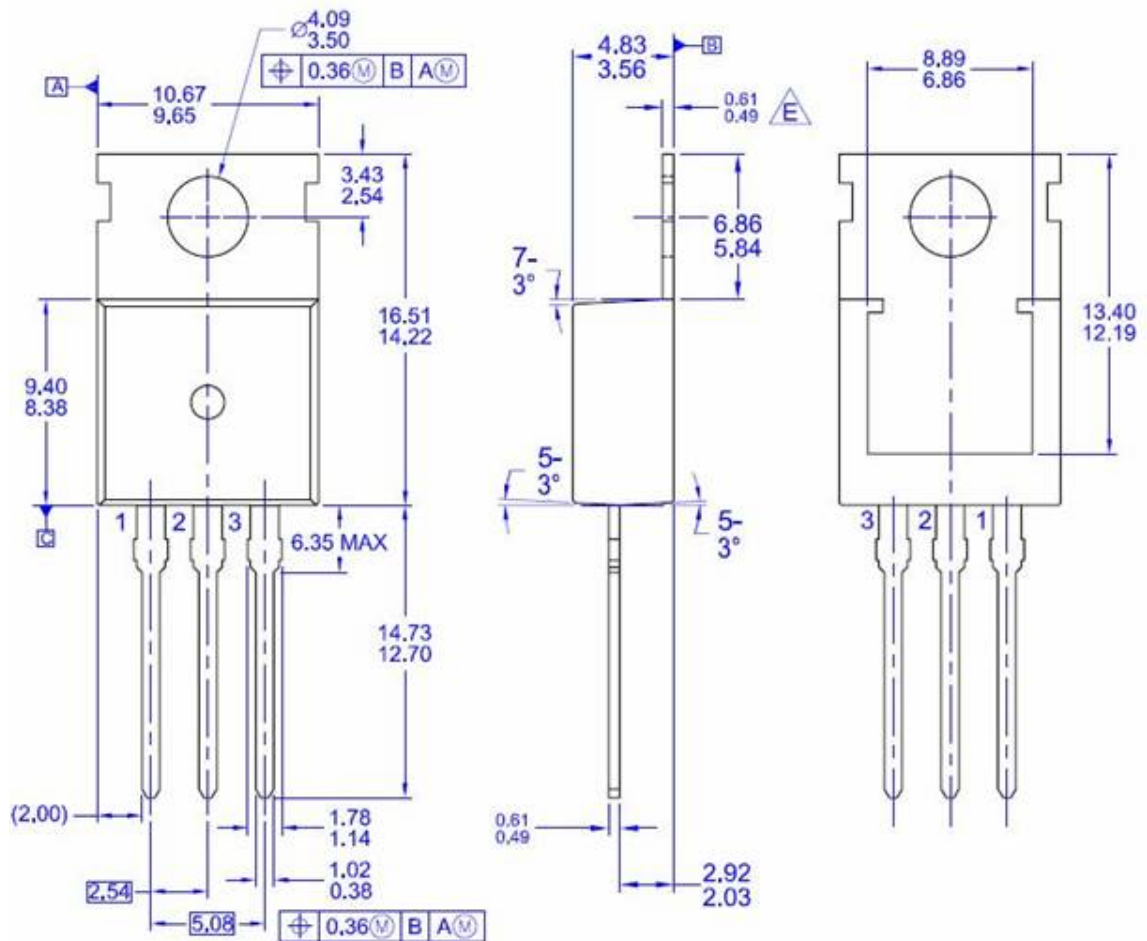
Reason for Change : Enhancement of leadframe design to improve package mechanical performance and support additional demand for various TO-220 products to improve our service to customers. There is insignificant difference in product thermal performance.

Qual/REL Plan Numbers : Q20070208

Qualification :

Passed and meet the FSC rel performance requirement

Change From



Results/Discussion

Test: (Autoclave)					
Lot	Device	96-HOURS	Failure Code		
Q20070208AAACLV	MC78T12CT	0/77			
Q20070208BAACLV	KA350TU	0/77			
Q20070208CAACLV	KSE13003TH2ATU	0/77			
Q20070208DAACLV	KSE13009TU	0/77			
Q20070208EAACLV	FJP5027RTU_F080	0/77			
Test: (High Temperature Reverse Bias)					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20070208CAHTRB	KSE13003TH2ATU	0/77	0/77	0/77	
Q20070208DAHTRB	KSE13009TU	0/77	0/77	0/77	
Q20070208EAHTRB	FJP5027RTU_F080	0/77	0/77	0/77	
Test: (High Temperature Storage Life)					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20070208AAHTSL	MC78T12CT	0/77	0/77	0/77	
Q20070208BAHTSL	KA350TU	0/77	0/77	0/77	
Q20070208CAHTSL	KSE13003TH2ATU	0/77			

			0/77		
				0/77	
Test: (Temperature Humidity Biased Test)					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20070208AATHBT	MC78T12CT	0/77			
			0/77		
				0/77	
Q20070208BATHBT	KA350TU	0/77			
			0/77		
				0/77	
Q20070208CATHBT	KSE13003TH2ATU	0/77			
			0/77		
				0/77	
Q20070208DATHBT	KSE13009TU	0/77			
			0/77		
				0/77	
Q20070208EATHBT	FJP5027RTU_F080	0/77			
			0/77		
				0/77	
Test: -65C, 150C (Temperature Cycle)					
Lot	Device	100-CYCLES	500-CYCLES		Failure Code
Q20070208AATMCL1	MC78T12CT	0/77			
Q20070208AATMCL1	MC78T12CT		0/77		
Q20070208BATMCL1	KA350TU	0/77			
Q20070208BATMCL1	KA350TU		0/77		
Q20070208CATMCL1	KSE13003TH2ATU	0/77			
Q20070208CATMCL1	KSE13003TH2ATU		0/77		
Q20070208DATMCL1	KSE13009TU	0/77			
Q20070208DATMCL1	KSE13009TU		0/77		
Q20070208EATMCL1	FJP5027RTU_F080	0/77			
Q20070208EATMCL1	FJP5027RTU_F080		0/77		

Product Id Description :

Affected FSIDs :

495219TU_F080	495220TU	495220TU_F080
KSA473O	KSA473OTU	KSA473Y
KSA473YTU	KSA473YTU_F080	KSC1173OTU
KSC1173YTU	KSC1173YTU_F080	KSC2333YTU
KSE13003TH1ATU	KSE13003TH2ATU	LM317AHVT
LM317MT	LM317T	LM337T
LM350T	LM7805ACT	LM7805CT
LM7805ECT	LM7806ACT	LM7806CT
LM7808ACT	LM7808CT	LM7809ACT
LM7809CT	LM7810ACT	LM7810CT
LM7812ACT	LM7812CT	LM7815ACT
LM7815CT	LM7818ACT	LM7818CT
LM7824ACT	LM7824CT	LM78M05CT
LM7905CT	LM79M05CT	