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**PRODUCT/PROCESS CHANGE NOTIFICATION**  
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**27-MAR-2000**

**SUBJECT: ON Semiconductor Product/Process Change Notification #10156**

**TITLE: D-PAK Conversion to C008 Flashless Leadframe**

**EFFECTIVE DATE: 05-Jul-2000**

**AFFECTED CHANGE CATEGORY:**

**Package Change**

**Design Change**

**AFFECTED PRODUCT DIVISION: Bipolar Discretes Products**

**ADDITIONAL RELIABILITY DATA:** Available

Contact your local ON Semiconductor Sales Office or George Dorman <R23125@onsemi.com>

**SAMPLES:** Contact your local ON Semiconductor Sales Office or

Pat Gormley <RYEC60@onsemi.com>

**FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**

Contact Sales Office or Jose Ramirez <RVEG40@onsemi.com>

**DISCLAIMER:**

ON Semiconductor will consider this change approved unless specific conditions of acceptance are provided in writing within 30 days of receipt of this notice. To do so, contact your local ON Semiconductor sales office.

**DESCRIPTION AND PURPOSE:**

ON Semiconductor wishes to notify its customers that the current D-PAK copper leadframe used to package discrete devices will be changed to a new and improved version. The new leadframe has improved mold locks for better hermeticity and larger die bond area to accommodate larger die size, all other leadframe features will remain the same. The finished package external dimensions will be the same, the only difference is the exposed package back heatsink width, which will nominally change from 0.180" to 0.210". ON Semiconductor continues to make substantial investments in both new technologies and improved manufacturing capabilities to provide you with the highest quality and reliability in the semiconductor industry. We believe these actions will also improve our ability to serve you in the future.



**Product/Process Change Notification #10156**

**QUALIFICATION PLAN:**

Wire Pull (30 readings/lot)

	CTRL	QUAL1	QUAL2	QUAL3
Mean	113.2	111.5	112.3	115.2
StDev	7.44	7.29	7.34	6.25
Cpk	2.82	2.81	2.82	3.46

Bond Shear (30 readings/Lot)

	CTRL	QUAL1	QUAL2	QUAL3
Mean	609.8	584.9	575.3	589.0
StDev	49.18	51.41	43.32	42.44
Cpk	2.27	2.00	2.31	2.47

**RELIABILITY DATA SUMMARY:**

PFC16420 device

		CTRL	QUAL1	QUAL2	QUAL3
AUTOCLAVE	96hrs	0/77	0/77	0/77	0/77
	192hrs	0/77	0/77	0/77	0/77
TEMP CYCLE	1000Cyc	0/77	0/77	0/77	0/77
HTSL	1000hrs	0/77	0/77	0/77	0/77
HTRB	1000hrs	0/77	0/77	0/77	0/77
IOL	15000Cyc	0/77	0/77	0/77	0/77
H3TRB	1000hrs	0/77	0/77	0/77	0/77

**ELECTRICAL CHARACTERISTIC SUMMARY:** Available upon request.

**CHANGED PART IDENTIFICATION:**

Parts with date code 2500 or later will have the new leadframe.

**AFFECTED DEVICE LIST**

**PART**

BUD42D  
 BUD42D-001  
 BUD43B-001  
 BUD43D2-001  
 BUD43D2T4  
 BUD44D2-001  
 MAC4DCM-001  
 MAC4DCMT4  
 MAC4DCN-001  
 MAC4DCNT4  
 MAC4DHM-001  
 MAC4DHMT4  
 MAC4DLM-001  
 MAC4DLMT4  
 MAC4DSM-001  
 MAC4DSMT4  
 MAC4DSN-001  
 MAC4DSNT4  
 MBRD1035CTL

**Product/Process Change Notification #10156**

MBRD1035CTLT4  
MBRD320  
MBRD320RL  
MBRD320T4  
MBRD330  
MBRD330RL  
MBRD330T4  
MBRD340T4  
MBRD350RL  
MBRD350T4  
MBRD360  
MBRD360RL  
MBRD360T4  
MBRD620CTT4  
MBRD630CTT4  
MBRD640CT  
MBRD640CTT4  
MBRD650CT  
MBRD650CT1  
MBRD650CTT4  
MBRD660CT  
MBRD660CTRL  
MBRD660CTT4  
MBRD835L  
MBRD835LT4  
MCR12DCMT4  
MCR12DCN-001  
MCR12DCNT4  
MCR12DLDT4  
MCR12DLMT4  
MCR12DLNT4  
MCR12DSMT4  
MCR12DSN-001  
MCR12DSNT4  
MCR703ARL  
MCR703AT4  
MCR704ARL  
MCR704AT4  
MCR706ARL  
MCR706AT4  
MCR708A  
MCR708A1  
MCR708AT4  
MCR716T4  
MCR718RL  
MCR718T4  
MCR8DCMT4  
MCR8DCNT4  
MCR8DSMT4  
MCR8DSNT4  
MJD112  
MJD112-001  
MJD112RL  
MJD112T4  
MJD117  
MJD117-001

**Product/Process Change Notification #10156**

MJD117T4  
MJD122  
MJD122T4  
MJD127  
MJD127T4  
MJD128T4  
MJD148T4  
MJD18002D2T4  
MJD200  
MJD200-001  
MJD200RL  
MJD200T4  
MJD210  
MJD210RL  
MJD210T4  
MJD243  
MJD243T4  
MJD253T4  
MJD2955  
MJD2955-001  
MJD2955T4  
MJD3055  
MJD3055T4  
MJD31C  
MJD31C1  
MJD31CRL  
MJD31CT4  
MJD31T4  
MJD32C  
MJD32C1  
MJD32CRL  
MJD32CT4  
MJD32RL  
MJD32T4  
MJD340  
MJD340RL  
MJD340T4  
MJD350  
MJD350T4  
MJD41C1  
MJD41CRL  
MJD41CT4  
MJD42C  
MJD42C1  
MJD42CRL  
MJD42CT4  
MJD44E3T4  
MJD44H11  
MJD44H11-001  
MJD44H11RL  
MJD44H11T4  
MJD45H11  
MJD45H11-001  
MJD45H11RL  
MJD45H11T4  
MJD47



**Product/Process Change Notification #10156**

MJD47T4  
MJD50  
MJD50-001  
MJD50T4  
MJD5731T4  
MJD6039T4  
MSRD620CT  
MSRD620CTT4  
MURD305RL  
MURD310T4  
MURD315T4  
MURD320T4  
MURD610CTT4  
MURD615CTT4  
MURD620CT  
MURD620CT1  
MURD620CTT4  
SBRD81035CTLT4  
SBRD835LT4  
SJD31CT4  
XBRD3100