



ENHANCED SOLUTIONS
DESIGN/PROCESS CHANGE NOTIFICATION
(formerly Military & Aerospace Division)

PCN Nr: 2000 Listing

Issued: 01/24/2000

GIDEP Nr:	GIDEP Category:	TRB Nr:
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Product ID (Description):

Proposed Date of Change:

Description of Change:

Effect of Change:

In Case of further questions please contact:

	North America	Europe
QA / Spec Control	Tel: 408-721-5649	Tel: +49 (0)8141 35-1483 / 1402
PCN Administrator	Tel: 408-721-4189 Email: sherry.dobbins@nsc.com	Eur Enhanced Solutions Marketing: Tel: +49 (0)8141 35 1495 Email: petra.pavel@nsc.com
Customer Support Center	Tel: 1-800-272-9959 Email: support@nsc.com	Tel: +49 (0)180 530 8585 (German) Tel: +49 (0)180 532 7832 (English) Email: europe.support@nsc.com
Other contacts		

Other Ref: None

Associated Notes / Table(s):

Please note - [S] indicates PCN contains information also relating to Space Level Products

<u>PCN</u>	<u>Nr Date</u>	<u>Description</u>
MA2000-01	01/24/00	Standard -MLS Products [S]
MA2000-02	02/29/00	Q3FY00 Enhanced Solutions Obsolescence [S]
MA2000-02A	03/01/00	Q3FY00 Enhanced Solutions Obsolescence - Amendment A [S]



ENHANCED SOLUTIONS DESIGN/PROCESS CHANGE NOTIFICATION

(formerly Military & Aerospace Division)

PCN Nr: MA2000-01

Issued: 01/24/2000

GIDEP Nr: AH6-C-00-06	GIDEP Category:	TRB Nr:
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Product ID (Description):

Standard -MLS Products

Proposed Date of Change:

February 1, 2000

Description of Change:

MAS-2-011 Revision B to Revision C

OPTIMIZATION/ ELIMINATION OF SELECTED TESTS

"Standard MLS" are products procured to National's Document MAS-2-011. This document defines the requirements for screening, processing and quality conformance testing of IC's for applications in Space or similar environments for which there is no source control drawing. New revision C incorporates alternative processing that has been previously approved for our standard JAN S and QMLV products.

These changes do NOT apply to -MLS device types with specific customer drawing requirements.

See Table I for a detailed description of the selected tests that have been optimized or eliminated.

Additional minor changes to add appropriate verbiage for test modifications and to correct inconsistencies are not described herein, but may be obtained by requesting a copy of subject document from the contacts shown below.

Effect of Change:

Standardization of Level S processing

In Case of further questions please contact:

	North America	Europe
QA / Spec Control	Tel: 408-721-5649	Tel: +49 (0)8141 35-1483 / 1402
PCN Administrator	Tel: 408-721-4189 Email: sherry.dobbins@nsc.com	Eur Enhanced Solutions Marketing: Tel: +49 (0)8141 35 1495 Email: petra.pavel@nsc.com

Customer Support Center	Tel: 1-800-272-9959 Email: support@nsc.com	Tel: +49 (0)180 530 8585 (German) Tel: +49 (0)180 532 7832 (English) Email: europe.support@nsc.com
Other contacts	Susan Davis Space Level Manager Tel: (408) 721-3161 email: susan.davis@nsc.com	

Other Ref: None

Associated Notes / Table(s):

TABLE I **MLS TEST OPTIMIZATION**

Test Optimization	GIDEP and PCN Number	Description of Change
Elimination of -55C electrical test on FACT Products	GIDEP: AH6-C-97-12 PCN: MA97013	Elimination of -55C DC and AC 100% production test and Group A sample test on –MLS FACT family. Product families effected: AC ACT ACQ ACTQ FCT SCAN logic products.
Modification of metallization step coverage on Interface product	GIDEP: AH6-C-97-14 PCN: MA97021	Modified metallization step coverage criteria from 50% to a minimum of 30% (remaining metallization) for selected S level Interface products: DS16F95 DS26F31 DS26F32 DS96F172 DS96F173 DS96F174 DS96F175
Modification of SEM wafer sampling plan for FACT, FAST, LPS and TTL products.	GIDEP: AH6-C-98-11 PCN: MA98017	Reduced the required number of wafers pulled from each wafer lot for SEM inspection from 2 per metal layer to 1 per metal layer. Product families effected: FACT FAST LPS TTL
FACT MLS Static Burn-In reduction	GIDEP: AH6-C-98-13 PCN: MA98019	Removed Static Low Burn-In (inputs tied to GND) on FACT product. Static High and dynamic Burn-In remain unchanged. Customer SCD requirements may override this BI reduction.
Thermal Stability change to in-line process monitor	GIDEP: AH6-C-00-02 PCN: MA99025	Changed Thermal Stability testing on each specific wafer lot as required by wafer lot acceptance per Method 5007 to an in-line process monitor.



ENHANCED SOLUTIONS
DESIGN/PROCESS CHANGE NOTIFICATION
(formerly Military & Aerospace Division)

PCN Nr: MA2000-02

Issued: 02/29/2000

GIDEP Nr: AH6-D-00-04	GIDEP Category: DMSMS	TRB Nr:
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Product ID (Description):

TABLE I - Packaged Product
TABLE II - Die sales Managed by Enhanced Solutions

Proposed Date of Change:

Lifetime buy purchase orders will be accepted until **6 March 2001**.

Description of Change:

PRODUCT OBSOLESCENCE

National Semiconductor wishes to inform you that the devices listed in Tables I & II are being discontinued. The decision to obsolete these products was primarily due to low volume or minimal demand from our customer base.

Effect of Change:

While all best efforts will be made to ensure that product can be supplied for any order received during the Life Time Buy period, this cannot be guaranteed. We would therefore advise that you do not wait until the last moment before placing your final orders.

Suggested alternate devices and manufacturers are viable at the time of publication of this document.

In Case of further questions please contact:

	North America	Europe
QA / Spec Control	Tel: 408-721-5649	Tel: +49 (0)8141 35-1483 / 1402
PCN Administrator	Tel: 408-721-4189 Email: sherry.dobbins@nsc.com	Eur Enhanced Solutions Marketing: Tel: +49 (0)8141 35 1495 Email: petra.pavel@nsc.com
Customer Support Center	Tel: 1-800-272-9959 Email: support@nsc.com	Tel: +49 (0)180 530 8585 (German) Tel: +49 (0)180 532 7832 (English) Email: europe.support@nsc.com

Other contacts	<p>Mike Scott Enhanced Solutions Marketing (408) 721-5491 email: mike.scott@nsc.com</p> <p>Joe Steele Enhanced Solutions Sr. Eng. Manager (408) 721-3819 email: joe.steele@nsc.com</p> <p>Jacqueline Collard Die products Business Unit Marketing (207) 541-8760 email: jacqueline.1.collard@nsc.com</p>	
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Other Ref: None

Associated Notes / Table(s):

Legend:

NSC = National Semiconductor

NA = None

TI = Texas Instruments

REI = Rochester Electronics

TABLE I				
			ALTERNATE	
S/S or SMD	NSID	ALTERNATE NSID	S/S OR SMD	SOURCE
	CLC109AJ-QML			NA
5962-9687601MPA	CLC111AJ-QML	CLC111AJP		NSC
	COPCG-AHR/V-MPC			NA
	COPCG-AHS/V-MPC			NA
	DM54LS14J/883	54F14DMQB	5962-8875201CA	NSC
	DM54LS164J/883	JD54LS164BCA	JM38510/30605BCA	NSC
	DM54LS165J/883	SNJ54LS165J		TI
	DM54LS193J/883	JD54LS193BEA	JM38510/31508BEA	NSC
	DM54LS299J/883	54F299DMQB		NSC
JM38510/30605B2A	JD54LS164B2A			REI
JM38510/10103SHA	JL101ASHA	JL101ASPA	JM38510/10103SPA	NSC
JM38510/10304B2A	JL111B2A	LM111E/883		NSC
	LM137HVH-MLS	LM137HVH-QMLV	5962-7703404VXA	NSC
	LM139AJ-MLS	LM139AJ-QMLV	5962-9673801VCA	NSC
5962-9453402QXA	LMC6484AMWG/883	LMC6484AMJ/883	5962-9453402MCA	NSC
	X2C3STZ-D3-MSP			NA
	X2C3UEU-V4-MSP			NA
	X2C4E18UXD/-MSP			NA
	X2C4PRU-E9-MSP			NA
	X2C4PSE-E9-MSP			NA
	X2C4QLJ-E9-MSP			NA

	X2C4QZQ-E9-MSP			NA
	X2C4RFL-E9-MSP			NA
	X2C4RLB-E9-MSP			NA
	X2C4RLC-E9-MSP			NA
	X2C4SJE-E9-MSP			NA
	X2C4S JL-E9-MSP			NA
	X2C4SJM-E9-MSP			NA
	X2C4TEA-E9-MSP			NA
	X2C4TEJ-E9-MSP			NA
	X2C8D3AEA/-MSP			NA
	X2C8D3XXX/-MIL			NA
	X2C8D3XXX/-MSP			NA
	XD12E14EIW/-MSP			NA
	XD12E14XXX/-MPR			NA
	XD12E14XXX/-MSP			NA
	XD60E15MJD/-MSP			NA
	XD60E15MJF/-MSP			NA
	XD60E15MJK/-MSP			NA
	XD60E15MJR/-MSP			NA
	XD60E15XXX/-MSP			NA
	XD60E16MJC/-MSP			NA
	XD60E16MJE/-MSP			NA
	XD60E16MJH/-MSP			NA
	XD60E16MJY/-MSP			NA
	XD60E16XXX/-MSP			NA
	XD60E17MJA/-MSP			NA
	XD60E17MJB/-MSP			NA
	XD60E17MJG/-MSP			NA
	XD60E17MJI/-MSP			NA
	XD60E17MJJ/-MSP			NA
	XD60E17MJL/-MSP			NA

	XD60E17MJN/ -MSP			NA
	XD60E17MJP/ -MSP			NA
	XD60E17MJQ/ -MSP			NA
	XD60E17MJT/ -MSP			NA
	XD60E17MJX/ -MSP			NA
	XD60E17MJZ/ -MSP			NA
	XD60E17XXX/ -MSP			NA
	XD61E17MJS/ -MSP			NA
	XDD2E1AEU/ -MSP			NA
	XDD2E1XXX/ -MSP			NA
	XDD4E14EBE/ -MSP			NA
	XDD4E14XXX/ -MPR			NA
	XDD4E14XXX/ -MSP			NA
	XDD8E9EBF/ -MSP			NA
	XDD8E9XXX/ -MSP			NA
TABLE II				
	DIE NAME	ALTERNATE NSID	SOURCE	
	CLC109 MDC		NONE	
	CLC412AMC	CLC412 MDC	NATIONAL	
	CLC415AMC	CLC415 MDC	NATIONAL	
	CLC420AMC	CLC420 MDC	NATIONAL	
	CLC426AMC	CLC426 MDC	NATIONAL	
	CLC449AMC	CLC449 MDC	NATIONAL	
	CLC502AMC	CLC502 MDC	NATIONAL	
	CLC505AMC	CLC505 MDC	NATIONAL	
	CLC522AMC	CLC522 MDC	NATIONAL	
	CLC532AMC	CLC532 MDC	NATIONAL	
	DS3695 MWC	DS3695AM	NATIONAL	

	DS36F95 MWC	DS36F95M	NATIONAL	
	LM117HVKG MW8	LM117HVK/883	NATIONAL	



ENHANCED SOLUTIONS
DESIGN/PROCESS CHANGE NOTIFICATION
(formerly Military & Aerospace Division)

PCN Nr: MA2000-02A

Issued: 03/01/2000

GIDEP Nr: AH6-D-00-04	GIDEP Category: DMSMS	TRB Nr:
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Product ID (Description):

TABLE I - Packaged Product

TABLE II - Die sales Managed by Enhanced Solutions

Amendment A dated 3/1/00:

The following devices have been removed from the attached obsolescence list and re-instated as orderable.

JM38510/10103SHA JL101ASHA

5962-9453402QXA LMC6484AMWG/883

LM137HVH-MLS

Proposed Date of Change:

Lifetime buy purchase orders will be accepted until **6 March 2001**.

Description of Change:

PRODUCT OBSOLESCENCE

National Semiconductor wishes to inform you that the devices listed in Tables I & II are being discontinued. The decision to obsolete these products was primarily due to low volume or minimal demand from our customer base.

Effect of Change:

While all best efforts will be made to ensure that product can be supplied for any order received during the Life Time Buy period, this cannot be guaranteed.

We would therefore advise that you do not wait until the last moment before placing your final orders.

Suggested alternate devices and manufacturers are viable at the time of publication of this document.

In Case of further questions please contact:

	North America	Europe
QA / Spec Control	Tel: 408-721-5649	Tel: +49 (0)8141 35-1483 / 1402
PCN Administrator	Tel: 408-721-4189 Email: sherry.dobbins@nsc.com	Eur Enhanced Solutions Marketing: Tel: +49 (0)8141 35 1495 Email: petra.pavel@nsc.com

Customer Support Center	Tel: 1-800-272-9959 Email: support@nsc.com	Tel: +49 (0)180 530 8585 (German) Tel: +49 (0)180 532 7832 (English) Email: europe.support@nsc.com
Other contacts	<p>Mike Scott Enhanced Solutions Marketing (408) 721-5491 email: mike.scott@nsc.com</p> <p>Joe Steele Enhanced Solutions Sr. Eng. Manager (408) 721-3819 email: joe.steele@nsc.com</p> <p>Jacqueline Collard Die products Business Unit Marketing (207) 541-8760 email: jacqueline.l.collard@nsc.com</p>	

Other Ref: None

Associated Notes / Table(s):

TABLE I				
			ALTERNATE	
S/S or SMD	NSID	ALTERNATE NSID	S/S OR SMD	SOURCE
	CLC109AJ-QML			NA
5962-9687601MPA	CLC111AJ-QML	CLC111AJP		NSC
	COPCG-AHR/V-MPC			NA
	COPCG-AHS/V-MPC			NA
	DM54LS14J/883	54F14DMQB	5962-8875201CA	NSC
	DM54LS164J/883	JD54LS164BCA	JM38510/30605BCA	NSC
	DM54LS165J/883	SNJ54LS165J		TI
	DM54LS193J/883	JD54LS193BEA	JM38510/31508BEA	NSC
	DM54LS299J/883	54F299DMQB		NSC
JM38510/30605B2A	JD54LS164B2A			REI
JM38510/10304B2A	JL111B2A	LM111E/883		NSC
	LM139AJ-MLS	LM139AJ-QMLV	5962-9673801VCA	NSC
	X2C3STZ-D3-MSP			NA
	X2C3UEU-V4-MSP			NA
	X2C4E18UXD/-MSP			NA
	X2C4PRU-E9-MSP			NA
	X2C4PSE-E9-MSP			NA
	X2C4QLJ-E9-MSP			NA
	X2C4QZQ-E9-MSP			NA
	X2C4RFL-E9-MSP			NA
	X2C4RLB-E9-MSP			NA
	X2C4RLC-E9-MSP			NA
	X2C4SJE-E9-MSP			NA
	X2C4S JL-E9-MSP			NA

	X2C4SJM-E9-MSP			NA
	X2C4TEA-E9-MSP			NA
	X2C4TEJ-E9-MSP			NA
	X2C8D3AEA/-MSP			NA
	X2C8D3XXX/-MIL			NA
	X2C8D3XXX/-MSP			NA
	XD12E14EIW/-MSP			NA
	XD12E14XXX/-MPR			NA
	XD12E14XXX/-MSP			NA
	XD60E15MJD/-MSP			NA
	XD60E15MJF/-MSP			NA
	XD60E15MJK/-MSP			NA
	XD60E15MJR/-MSP			NA
	XD60E15XXX/-MSP			NA
	XD60E16MJC/-MSP			NA
	XD60E16MJE/-MSP			NA
	XD60E16MJH/-MSP			NA
	XD60E16MJY/-MSP			NA
	XD60E16XXX/-MSP			NA
	XD60E17MJA/-MSP			NA
	XD60E17MJB/-MSP			NA
	XD60E17MJG/-MSP			NA
	XD60E17MJI/-MSP			NA
	XD60E17MJJ/-MSP			NA
	XD60E17MJL/-MSP			NA
	XD60E17MJN/-MSP			NA
	XD60E17MJP/-MSP			NA
	XD60E17MJQ/-MSP			NA
	XD60E17MJT/-MSP			NA
	XD60E17MJX/-MSP			NA
	XD60E17MJZ/-MSP			NA

	XD60E17XXX/-MSP			NA
	XD61E17MJS/-MSP			NA
	XDD2E1AEU/-MSP			NA
	XDD2E1XXX/-MSP			NA
	XDD4E14EBE/-MSP			NA
	XDD4E14XXX/-MPR			NA
	XDD4E14XXX/-MSP			NA
	XDD8E9EBF/-MSP			NA
	XDD8E9XXX/-MSP			NA
TABLE II				
	DIE NAME	ALTERNATE NSID	SOURCE	
	CLC109 MDC		NONE	
	CLC412AMC	CLC412 MDC	NATIONAL	
	CLC415AMC	CLC415 MDC	NATIONAL	
	CLC420AMC	CLC420 MDC	NATIONAL	
	CLC426AMC	CLC426 MDC	NATIONAL	
	CLC449AMC	CLC449 MDC	NATIONAL	
	CLC502AMC	CLC502 MDC	NATIONAL	
	CLC505AMC	CLC505 MDC	NATIONAL	
	CLC522AMC	CLC522 MDC	NATIONAL	
	CLC532AMC	CLC532 MDC	NATIONAL	
	DS3695 MWC	DS3695AM	NATIONAL	
	DS36F95 MWC	DS36F95M	NATIONAL	
	LM117HVKG MW8	LM117HVK/883	NATIONAL	



ENHANCED SOLUTIONS
DESIGN/PROCESS CHANGE NOTIFICATION
(formerly Military & Aerospace Division)

PCN Nr: MA2000-03

Issued: 03/16/2000

GIDEP Nr: AH6-C-00-07	GIDEP Category: PCN	TRB Nr:
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Product ID (Description):

QML Level V, JAN S and MLS Metal Can Packaged Product

Proposed Date of Change:

March 2000 Datecode 0013 onward

Description of Change:

To align with the National corporate mark specification, the assembly plant code for Microsemi Corporation, Watertown, MA. (formerly Sertech Labs), will be changed from "T" to "X". Microsemi is a sub-contractor for National's QML Level V, JAN S and MLS products built in metal can packages. The new identifier will appear in the top mark and on the Certificate of Conformance (C of C).

Example:

N X9A9950
 5962-9879801VIA
 LM119H-QMLV

Effect of Change:

There is no change to the quality, reliability, and electrical performance of these products.

In Case of further questions please contact:

	North America	Europe
QA / Spec Control	Tel: 408-721-5649	Tel: +49 (0)8141 35-1483 / 1402
PCN Administrator	Tel: 408-721-4189 Email: sherry.dobbins@nsc.com	Eur Enhanced Solutions Marketing: Tel: +49 (0)8141 35 1495 Email: petra.pavel@nsc.com
Customer Support Center	Tel: 1-800-272-9959 Email: support@nsc.com	Tel: +49 (0)180 530 8585 (German) Tel: +49 (0)180 532 7832 (English) Email: europe.support@nsc.com
Other contacts	Susan Davis Space Level Manager Tel: (408) 721-3161 email: susan.davis@nsc.com	

Other Ref: None

Associated Notes / Table(s):

N/A



ENHANCED SOLUTIONS DESIGN/PROCESS CHANGE NOTIFICATION

(formerly Military & Aerospace Division)

PCN Nr: MA2000-04

Issued: 04/11/2000

GIDEP Nr: AH6-C-00-08	GIDEP Category: PCN	TRB Nr:
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Product ID (Description):

Analog Products supplied as Military Packaged devices (ceramics and metal cans), Commercial Metal Can packaged devices and Military & Commercial Wafer/Die products.

Includes Military Product Assurance Levels S, B, Q and V and selected commercial products.

- Table I - Military Packaged Products
- Table II - Commercial Packaged Products
- Table III - Die Products

Proposed Date of Change:

April 2000

Description of Change:

Several Analog products (listed in the Tables I - III) require wafer thinning and gold backside metalization to provide maximum thermal performance. To continue the manufacture of these device types, we are transferring these processes from our current subcontractor (Fairchild Semiconductor, Cebu, Philippines) to the following subcontractors. Backgrind will transfer to Quality Backgrind and Backmetal Service, (QBBS Santa Clara, CA), and gold-back will transfer to Scientific Coating Lab (Santa Clara, CA).

Effect of Change:

Both new subcontractors have been approved by National Semiconductor's Audit department and their processes have been fully qualified by Enhanced Solutions.

The quality, reliability and interchangeability of these devices will not be adversely effected by these transfers.

In Case of further questions please contact:

	North America	Europe
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Other contacts	Larry McGee Analog Eng. Mgr. (408) 721-7231 email: larry.mcgee@nsc.com	

Other Ref: None

Associated Notes / Table(s):

Table I - Military Packaged Products		
<u>National Part Number</u>	<u>Slashsheet or Standard Microcircuit Drawing Number</u>	
JL109BXA	JM38510/10701BXA	
JL109BYA	JM38510/10701BYA	
JL117BXA	JM38510/11703BXA	
JL117BYA	JM38510/11704BYA	
JL117SXA	JM38510/11703SXA	
JL117SYA	JM38510/11704SYA	
JL120-12BXA	JM38510/11502BXA	
JL120-12BYA	JM38510/11506BYA	
JL120-15BXA	JM38510/11503BXA	
JL120-15BYA	JM38510/11507BYA	
JL120-15SXA	JM38510/11503SXA	
JL120-5BXA	JM38510/11501BXA	
JL120-5BYA	JM38510/11505BYA	
JL120-5SYA	JM38510/11505SYA	
JL137BXA	JM38510/11803BXA	
JL137BYA	JM38510/11804BYA	
JL137SXA	JM38510/11803SXA	
JL137SYA	JM38510/11804SYA	
JL140-12BXA	JM38510/10703BXA	

JL140-12BYA	JM38510/10707BYA	
JL140-12SXA	JM38510/10703SXA	
JL140-12SYA	JM38510/10707SYA	
JL140-15BXA	JM38510/10704BXA	
JL140-15BYA	JM38510/10708BYA	
JL140-24BYA	JM38510/10709BYA	
JL140-5BXA	JM38510/10702BXA	
JL140-5BYA	JM38510/10706BYA	
JL140-5SXA	JM38510/10702SXA	
JL140-5SYA	JM38510/10706SYA	
LM109H/883		
LM109K/883		
LM117E/883		
LM117H/883		
LM117HVH/883		
LM117HVH-MLS		
LM117HVK/883		
LM117HVK-MLS		
LM117K/883		
LM117WG/883		
LM120H-12/883		
LM120H-15/883		
LM120H-5.0/883		

LM120K-12/883		
LM120K-15/883		
LM120K-5.0/883		
LM123K/883		
LM129AH/883		
LM129AH-SMD	5962-8992101XA	
LM129BH/883		
LM135H-MIL		
LM135H-MLS		
LM136AH-2.5-MLS		
LM137AH/883		
LM137AK/883		
LM137H/883		
LM137H-SMD	7703403XA	
LM137HVH/883		
LM137HVH-MLS		
LM137HVH-QMLV	5962-7703404VA	
LM137HVH-SMD	7703404XA	
LM137HVK/883		
LM137HVK-SMD	7703404YA	
LM137K/883		
LM137K-SMD	7703403YA	
LM137WG/883		
LM137WG-MPR		
LM138K-MIL		
LM140H-12/883		
LM140H-15/883		

LM140H-5.0/883		
LM140K-12/883		
LM140K-15/883		
LM140K-5.0/883		
LM140LAH-12/883		
LM140LAH-15/883		
LM140LAH5.0/883		
LM150K/883	5962-8767501XA	
LM1575HVK12-QML	5962-9167302QXA	
LM1575HVK5-QML	5962-9167402QXA	
LM1575HVKAD-QML	5962-9167102QXA	
LM1575J-12-QML	5962-9167301QEA	
LM1575J-15-QML	5962-9167401QEA	
LM1575J-5.0-MPR		
LM1575J-5.0-QML	5962-9167201QEA	
LM1575J-ADJ-QML	5962-9167101MEA	
LM1575K-5.0-QML	5962-9167201MXA	

LM1575K-ADJ-QML	5962-9167101MXA	
LM1577K-ADJ/883	5962-921660MXA	
LM185BE/883		
LM185BH/883		
LM185BYH/883		
LM185BYH1.2-SMD	5962-8759405XA	
LM185BYH2.5/883		
LM185BYH2.5-MLS		
LM185BYH2.5-SMD	5962-8759406XA	
LM185BYH-SMD	5962-9091401MXA	

LM185E-1.2/883	5962-87594012A	
LM185H-1.2/883		
LM185H-1.2-MLS		
LM185H-1.2-SMD	5962-8759401XA	
LM185H-2.5/883		
LM185H-2.5-SMD	5962-8759402XA	
LM185WG-1.2/883		
LM185WG-1.2-MPR		
LM195H/883	5962-8777801XA	
LM195K/883	5962-8777801YA	
LM2940J-12/883	5962-9088401QEA	
LM2940J-15/883	5962-9088501QEA	
LM2940J-5.0/883	5962-8958701EA	
LM2940J-8.0/883	5962-9088301QEA	
LM2940WG-12/883	5962-9088401QXA	
LM2940WG-15/883	5962-9088501QXA	
LM2940WG5.0/883	5962-8958701XA	
LM2941J/883	5962-9166701QEA	
LM555H/883		
LM555J/883		
LM556J-MIL		

Table II -		Table III -
Commercial		Die Products
Packaged Products		
LM109H		LM117 MDA
LM109K STEEL		LM117H MWA
LM117H		LM117HG MW8
LM117HVH		LM117HVKG MW8
LM117K STEEL		LM117K MDS
LM120H-12		LM117KG MW8
LM120H-15		LM120HG-12 MW8
LM120H-5.0		LM120HG-15 MW8
LM123K STEEL		LM120KG-12 MD8
LM129AH		LM120KG-12 MW8
LM129BH		LM120KG-5 MD8
LM129CH		LM120KG-5 MW8
LM133K STEEL		LM137H MDA
LM135AH		LM137H MDS
LM135H		LM137H MWA
LM136AH-2.5		LM137KG MD8
LM136AH-5.0		LM137KG MW8
LM136H-2.5		LM138KG MW8
LM136H-5.0		LM140KG-12 MW8
LM137H		LM140KG-15 MW8
LM138K STEEL		LM140KG-5 MW8
LM140K-12		LM142AH-5.0 MW8
LM140K-15		LM2941 MD8

LM140K-5.0		LM309K MWC
LM140LAH-12		LM317H MWC
LM140LAH-15		LM317K MWC
LM140LAH-5.0		LM320H-12 MWC
LM150K STEEL		LM320HG-5 MWC
LM185BH		LM320K-12 MWC
LM185BXH-1.2		LM320KG-5 MWC
LM185BXH-2.5		LM325 MWC
LM185BYH		LM329 MWC
LM185BYH-1.2		LM335 MWC
LM185BYH-2.5		LM337H MWC
LM185H-1.2		LM337K MWC
LM185H-2.5		LM338 MWC
LM235AH		LM340G-12 MWC
LM235H		LM340G-15 MWC
LM236AH-2.5		LM340G-5 MWC
LM236AH-5.0		LM342A-12 MWC
LM236H-2.5		LM35 MWC
LM236H-5.0		LM385-1.2 MWC
LM285BXH-1.2		LM385-2.5 MWC
LM285BYH-2.5		LM150G MW8
LM285H-1.2		

LM285H-2.5		
LM309H		
LM309K STEEL		
LM317AH		
LM317H		
LM317HVH		
LM317HVK STEEL		
LM317K STEEL		
LM320H-12		
LM320H-15		
LM320H-5.0		
LM320K-12		
LM320K-15		
LM323AK STEEL		
LM323K STEEL		
LM325H		
LM329AH		
LM329BH		
LM329CH		
LM329DH		
LM333K STEEL		
LM335AH		
LM335H		
LM337H		
LM337HVH		
LM337HVK STEEL		
LM337K STEEL		

LM338K STEEL		
LM340K-12		
LM340K-15		
LM340K-5.0		
LM340LAH-12		
LM340LAH-5.0		
LM34AH		
LM34CAH		
LM34CH		
LM34DH		
LM34H		
LM350K STEEL		
LM35AH		
LM35CAH		
LM35CH		
LM35DH		
LM35H		
LM78M05CH		
LM78M12CH		
LM78M15CH		



ENHANCED SOLUTIONS
DESIGN/PROCESS CHANGE NOTIFICATION
(formerly Military & Aerospace Division)

PCN Nr: MA2000-05

Issued: 05/24/2000

GIDEP Nr: AH6-D-00-05	GIDEP Category: DMSMS	TRB Nr:
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Product ID (Description):

TABLE I - Military Packaged Product
TABLE II - Commercial Packaged Product Managed by Enhanced Solutions
TABLE III - Die Products Managed by Enhanced Solutions

Proposed Date of Change:

Lifetime buy purchase orders will be accepted until **7 JUNE 2001**.

Description of Change:

PRODUCT OBSOLESCENCE

National Semiconductor wishes to inform you that the devices listed in Tables I, II & III are being discontinued. The decision to obsolete these products was primarily due to low volume or minimal demand from our customer base.

Effect of Change:

While all best efforts will be made to ensure that product can be supplied for any order received during the Life Time Buy period, this cannot be guaranteed. We would therefore advise that you do not wait until the last moment before placing your final orders.

Suggested alternate devices and manufacturers are viable at the time of publication of this document.

In Case of further questions please contact:

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PCN Administrator	Tel: 408-721-4189 Email: sherry.dobbins@nsc.com	Eur Enhanced Solutions Marketing: Tel: +49 (0)8141 35 1495 Email: petra.pavel@nsc.com
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Other Ref: None

Associated Notes / Table(s):

The first two columns are the product being obsoleted;
the last three are the suggested alternative and source.

TABLE I: Military Packaged Devices				
Obsolete Part #	SMD #	Alternate Part #	SMD #	Alternate Source
11C90DMQB.		11C91DMQB.		NATIONAL
DS96F174MJ-MLS		DS96F174MJ-QMLV	5962-9076502VEA	NATIONAL
DS96F175MJ-MLS		DS96F175MJ-QMLV	5962-9076601VEA	NATIONAL
GP7252-MIL				NONE
LF155AH-MLS		MP155		MICRO POWER
LF155AH/883		LF1055		LINEAR TECH
LF155H/883		PM155		ANALOG DEVICES
LM103H-3.6/883				NONE
LM108AW-MLS		LM108AW-QMLV-RH	5962R9863702VHA	NATIONAL
LM119J-MLS		LM119J-QMLV	5962-9679801VCA	NATIONAL
LM124WG/883	7704301XA	LM124AWG/883	7704302XA	NATIONAL
LM137AK/883		LM137K/883		NATIONAL
LM139W-MLS		LM139AW-QMLV	5962-9673801VDA	NATIONAL
LM1575HVK12-QML	5962-9167302QXA			NONE
LM1575HVKAD-QML	5962-9167102QXA			NONE
LM1575J-C5/883		LM1575J-5.0-QML	5962-9167201QEA	NATIONAL
LM1575J-CAD/883		LM1575J-ADJ-QML	5962-9167101MEA	NATIONAL
LM193H-MLS		LM193AH-QMLV	5962-9452602VGA	NATIONAL
LM431J-MLS				NONE

LM6164W-MLS		LM6164WG/883	5962-8962401XA	NATIONAL
MM9759-DD MPR				NONE
S50MAU6X-MPC				NONE
X2C3TQD-E4-MSP				NONE
X2C3UEU-EL-MSP				NONE

The first column is the product being obsoleted;
the third and fifth columns are the suggested alternative and source.

TABLE II: Commercial Packaged Devices				
Obsolete Part #		Alternate Part #		Alternate Source
CLC401AMC		CLC401AJE		NATIONAL
CLC402AMC		CLC402AJ		NATIONAL
CLC406AMC		CLC406AJE		NATIONAL
CLC407AMC				NONE
CLC409AMC		CLC409AJE		NATIONAL
LF155H		MP155		MICRO POWER
LF255H				NONE
LF355H				NONE
LM123K STEEL		LM123K/883		NATIONAL
LM133K STEEL		SG137		LINFINITY

The first column is the product being obsoleted;
the last three are the suggested alternative and source.

TABLE III: Die products				
Obsolete Part #		Alternate Part #	SMD #	Alternate Source
ADC0804 MWC		ADC0804LCN		NATIONAL
DS1776 MD8		DS1776E/883	5962-9231701M3A	NATIONAL
DS26F31 MDA		DS26LS31MJ/883		NATIONAL
LF355 MWC				NONE
LF442 MWC		LF442ACN		NATIONAL
LM111 MDS		LM111 MW8		NATIONAL
LM118 MW8		LM118H		NATIONAL
LM124 MDA		LM124 MW8		NATIONAL
LM139 MDA		LM139 MW8		NATIONAL
LM150G MW8		LM150G MD8		NATIONAL
LM158 MDS		LM158 MW8		NATIONAL
LM320H-12 MWC		LM320H-12		NATIONAL
LM320HG-5 MWC		LM320H-5.0		NATIONAL
LM338 MWC		LM338T		NATIONAL
LM555 MWC		LM555 MW8		NATIONAL
LM565 MWC		LM565 MDC		NATIONAL
LM7171 MDC		LM7171 MD8		NATIONAL
LM7171 MWC		LM7171 MD8		NATIONAL
LM7301 MWC		LM7301IM		NATIONAL
LMX2325 MDC		LMX2325TM		NATIONAL