# iRMX 86 R6.Ø UP3 Installation Guide

(Part Number 147731-ØØ1)

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# Introduction

The iRMX" 86 Update Package is the mechanism Intel uses to distribute (1) fixes to reported software problems and (2) newly added iRMX" 86 features. Intel refers to problem fixes and to newly added features as ZAPs.

ZAPs reside on the update diskette as object modules. These object modules are automatically applied to your system when you install the update. ZAPs representing new features are simply added to the system library. ZAPs representing problem fixes replace the existing version of an object module in the library with the new fixed version.

The update package contains an accumulation of all ZAPs issued against the current version of the iRMX<sup>™</sup> 86 Operating System. Thus, when you install this update, you are assured that all current ZAPs have been applied to your system. (Previously applied ZAPs are re-applied when the new update is installed.)

The iRMX<sup>™</sup> 86 R6.Ø UP3 Installation Guide describes the contents of the iRMX<sup>™</sup> 86 Update Package and explains how to install the update. The installation guide contains two sections. Section One describes the procedure for installing the update on each of the three types of Intel development systems. Section Two provides a brief overview of all of the ZAPs contained in the current update.

# Section One

# Installation Procedures

The update package is designed to update your iRMX<sup>TM</sup> 86 R6.Ø object code on any of three types of development systems: an iRMX<sup>TM</sup> 86 R6.Ø development system (System 3ØØ Series microcomputer or a custom built system), an Intellec Series III development system, or a Series IV development system.

The update package contains a generation submit file designed for each type of development system, plus two configuration files. One configuration file contains the pathnames for the iRMX<sup>™</sup> 86 system files and the other contains the list of ZAPs being applied.

# Section 1.1 General Installation Notes

Following is a list of the utilities used by the update package and their corresponding version numbers.

UTILITY	iRMX™ 86	Series III	Series IV
RUN	man and an and an an an	V2.Ø	
ASM86(.86)	V2.Ø	V2.Ø	v2.ø
LINK86(.86)	V2.Ø	V2.Ø	v2.ø
LIB86(.86)	V2.1	V2.1	V2.1
*PTCH86	V2.3	V2.3	V2.3
*ED	V1.1	V1.1	V1.1

<sup>\*</sup> The PATCH Utility (PTCH86) and ED editor (ED) are supplied on the Update diskette.

# NOTE

To execute properly under iRMX<sup>™</sup> 86 Release 6.0, the assembler (ASM86) and the linker (LINK86) must have been linked to Version 2.0 of the UDI interface libraries. You must check the size of these utilities to determine whether both have been linked to the right version. (Use the Human Interface DIR command with the S option set.) A properly linked ASM86 V2.0 has a file size of 137,286 bytes; LINK86 V2.0 has a file size of 83,752 bytes. If any other file size is indicated, contact your local Intel representative.

# NOTE

For Series III development system users, "PTCH86" and "ED" will have to be RENAMED to "PTCH86.86" and "ED.86" in order to "RUN" properly. Refer to Step 2 in the instructions for Series III development system users.

# Section 1.2 Installing the Update on an iRMX™ 86 Development System

The memory requirements for applying the entire update package are similar to the requirements for running the ICU. These requirements are:

1) a minimum of 512K Bytes of memory in the system, and 2) a user's memory partition size (/config/terminals file) of at least 235K.

You can apply replacement Human Interface system commands using less memory, by manually copying the ZAP from the update package diskette to your "/system" directory. You will need to rename the ZAP file to the proper system command name. The minimum amount of memory for this is 1) 384K Bytes of memory in the system, and 2) a user's memory partition size (/config/terminals file) of at least 135K.

There are three files on the update package diskette that you need to use:

regen.csd, repath.cfg, and zaps.cfg.

"r6gen.csd" is the generation submit file. This submit file will use the two configuration files: "r6path.cfg" and "zaps.cfg" to generate the application submit file "upr6.csd". The contents of "r6gen.csd" MUST NOT BE CHANGED.

"r6path.cfg" is the pathname configuration file. This file contains the pathnames for the directories on your development system used by the update process. The pathnames in this file are a subset of those created by the installation process for Release 6. The pathnames can be changed (as described in Step 4) to reflect the names used in your system.

The directory pathnames specified in "r6path.cfg" are:

System files for

Directory pathname

/lang/
/system/
/rmx86/nucleus/
/rmx86/th/
/rmx86/ios/
/rmx86/eios/
/rmx86/loader/
/rmx86/sdb/
/rmx86/hi/
/rmx86/udi/
/rmx86/crash/
/rmx86/files/
/rmx86/icu/
/rmx86/inc/
/rmx86/lib/

"zaps.cfg" is the ZAP configuration file. This file contains the list of ZAPs to be applied.

#### STEPS:

- 1) If your system files (e.g., "/rmx86/\*") do not allow read, write or delete access to users other than user 0, then become the "super user" by executing the SUPER command and entering the correct password. The ZAP submit files need to access your iRMX" 86 system files.
- 2) Copy the contents of the update package diskette onto your system. Intel recommends that you create a directory in your "/rmx86" directory called "update" and copy the contents there.
- 3) The ZAP installation procedure includes a file called "zaps.cfg". This file controls which ZAPs will be applied during the update process. At the beginning of the file is a block of comments. At the end of the file is a list of control lines. Each control line corresponds to one ZAP. For example, ZAP number 33 has a corresponding control line that reads "ZBRA33(PZZØ3) \*". The asterisk causes the ZAP to not be applied.

Each of the ZAPs is described at the end of these instructions. The description will indicate if the ZAP is defaulted to not be applied. You should read these descriptions so that you can decide which ZAPs you want to apply. If your decision matches the default, you can proceed to Step 4. If you decide to modify which ZAPs are applied, you MUST edit the file "zaps.cfg". To remove a ZAP that is to be applied, add an asterisk to the control line for that ZAP. Conversely, to apply a ZAP that is NOT to be applied, remove the asterisk from the control line for that ZAP.

# IMPORTANT NOTE

Some of the ZAPs supplied with this update default so that they are not applied during the update process. This is done when a ZAP has side effects. These ZAPs should only be installed if you need the feature or fix and have read the documentation concerning that ZAP. This documentation will explain the side effects.

4) If your system uses the same iRMX<sup>™</sup> 86 directory names as those listed above, then go on to Step 5. If your pathnames are not the same then you MUST edit the file "r6path.cfg". When editing this file, simply find the pathname that you need to change and modify it.

THERE ARE THREE IMPORTANT RULES TO FOLLOW WHILE EDITING THE "r6path.cfg" FILE:

- (1) DO NOT change the order of the pathnames in this file. The order is essential for the "régen.csd" generation submit file to work properly.
- (2) DO NOT remove any of the pathnames from this list. The number of pathnames in this file is essential for the "r6gen.csd" generation submit file to work properly.

- (3) When changing a directory name, you MUST put a slash "/" as the last character in the pathname. If you change the directory pathnames to logical names, you will not need the slash "/".
- 5) Invoke the submit file "r6gen.csd". There is one parameter. This parameter is the pathname for the directory that you created in Step 2. This directory MUST contain the contents of the update package diskette (be sure to include a slash "/" as the last character). This submit file will create the application submit file "upr6.csd".

Example: "submit /rmx86/update/r6gen(/rmx86/update/)"

6) Now invoke the application submit file "upr6.csd" created in Step 5. There are no parameters.

Example: "submit /rmx86/update/upr6"

NOTE: The warnings of "UNRESOLVED SYMBOLS" from the LINK86 utility are expected and should be ignored.

7) Now that the system files are updated, you will need to re-generate your iRMX<sup>™</sup> 86 bootable system using ICU86. The system that you re-generate will then incorporate all of the ZAPs from this update package. Refer to Chapter 18 of the Release 6.Ø, iRMX<sup>™</sup> 86 Configuration Guide for information on generating an iRMX<sup>™</sup> 86 system.

NOTE ON ACCESS RIGHTS: When the update process is complete, all iRMX<sup>IM</sup> 86 system files and libraries accessed by the update process will have the same access rights as set by the installation process for iRMX<sup>IM</sup> 86 Release 6.Ø. User Ø has all access rights, and user WORLD has read only access.

# Section 1.3 Installing the Update on an ISIS Series III Development System

There are three files on the update package diskette that you need to use:

s3gen.csd, s3path.cfg, and zaps.cfg.

"s3gen.csd" is the generation submit file. This submit file will use the two configuration files: "s3path.cfg" and "zaps.cfg" to generate and execute the application submit file "ups3.csd". The contents of "s3gen.csd" MUST NOT BE CHANGED.

"s3path.cfg" is the pathname configuration file. This file contains the devicenames for your development system. The devicenames can be changed (as described in Step 4) to reflect the devices used for your development work.

The devicenames assumed for your Series III system:

System files for	Devicename
Language Utilities (for Series III)	:FØ:
ISIS II System Commands	:FØ:
Nucleus	:F1:
Terminal Handler/Dynamic Debugger	:F1:
Basic I/O System and Device Drivers	:F1:
Extended I/O System	:F1:
Loaders	:F1:
System Debugger (SDB)	:F1:
Human Interface	:F1:
Universal Development Interface (UDI)	:F1:
Crash Analyzer	:F1:
Files Utility	:F1:
Interactive Configuration Utility (ICU)	:F1:
Include Files	:F1:
Interface Libraries	:F1:

"zaps.cfg" is the ZAP configuration file. This file contains the list of ZAPs to be applied.

# STEPS:

1) The first step is to make a copy of the update package diskette. You can copy it to a hard disk or make another floppy diskette. The device that you copy the contents to will be used by the update package (e.g., assembling, patching, linking). Therefore, be sure that the device is NOT write protected.

- 2) The two files "PTCH86" and "ED" on the update package diskette are used in the update process. These files need to be RENAMED in order to "RUN" properly on a Series III development system. On the device you copied the update package diskette to (Step 1), RENAME the file "PTCH86" to "PTCH86.86" and the file "ED" to "ED.86".
- 3) The ZAP installation procedure includes a file called "zaps.cfg". This file controls which ZAPs will be applied during the update process. At the beginning of the file is a block of comments. At the end of the file is a list of control lines. Each control line corresponds to one ZAP. For example, ZAP number 33 has a corresponding control line that reads "ZBRA33(PZZØ3) \*". The asterisk causes the ZAP to not be applied.

Each of the ZAPs is described at the end of these instructions. The description will indicate if the ZAP is defaulted to not be applied. You should read these descriptions so that you can decide which ZAPs you want to apply. If your decision matches the default, you can proceed to Step 4. If you decide to modify which ZAPs are applied, you MUST edit the file "zaps.cfg". To remove a ZAP that is to be applied, add an asterisk to the control line for that ZAP. Conversely, to apply a ZAP that is NOT to be applied, remove the asterisk from the control line for that ZAP.

# IMPORTANT NOTE

Some of the ZAPs supplied with this update default so that they are not applied during the update process. This is done when a ZAP has side effects. These ZAPs should only be installed if you need the feature or fix and have read the documentation concerning that ZAP. This documentation will explain the side effects.

4) If your system uses the devicenames listed above, go on to Step 5. If your devicenames are not the same, you MUST edit the file "s3path.cfg". When editing this file, simply find the pathname that you need to change and modify it.

THERE ARE TWO IMPORTANT RULES TO FOLLOW WHILE EDITING THE "s3path.cfg" FILE:

- (1) DO NOT change the order of the devicenames in this file. The order is essential for the "s3gen.csd" generation submit file to work properly.
- (2) DO NOT remove any of the devicenames from this list. The number of devicenames in this file is essential for the "s3gen.csd" generation submit file to work properly.

5) Now invoke the submit file "s3gen.csd". There is one parameter. This parameter is the devicename where the contents of the update package diskette were copied to in Step 1. This device MUST contain the contents of the update package diskette.

Example: "submit :F1:s3gen(:F1:)"

NOTE: The warnings of "UNRESOLVED SYMBOLS" from LINK86 are expected and should be ignored.

6) Now that the system files are updated, you will need to re-generate your iRMX<sup>™</sup> 86 bootable system using ICU86. The system that you re-generate will then incorporate all of the ZAPs you selected from this update package. Refer to chapter 18 of the Release 6.Ø, iRMX<sup>™</sup> 86 Configuration Guide for information on generating an iRMX<sup>™</sup> 86 system.

# NOTE

The list of devicenames above does not contain a devicename for the Human Interface system commands. The Update Package submit files will not copy ZAPs that are Human Interface system commands onto your Series III development system. Depending on your application you will need to copy all ZAPs that are replacement system commands to your iRMX 86 System. Refer to the ZAP descriptions at the end of these instructions to see which ZAPs are replacement system commands.

# Section 1.4 Installing the Update on a Series IV Development System

There are three files on the Update Package Diskette that you need to use:

s4gen.csd, s4path.cfg, and zaps.cfg.

"s4gen.csd" is the generation submit file. This submit file will use the two configuration files: "s4path.cfg" and "zaps.cfg" to generate and execute the application submit file "ups4.csd". The contents of "s4gen.csd" MUST NOT BE CHANGED.

"s4path.cfg" is the pathname configuration file. This file contains the pathnames for the directories on your development system used by the update process. These pathnames can be changed (as described in Step 4 below) to reflect the names used on your development system.

The directory pathnames specified in "s4path.cfg" are:

System files	for	Directory	pathname

rmx86/nucleus/ Nucleus rmx86/th/ Terminal Handler/Dynamic Debugger rmx86/ios/ Basic I/O System and Device Drivers rmx86/eios/ Extended I/O System rmx86/loader/ Loaders rmx86/sdb/ System Debugger (SDB) rmx86/hi/ Human Interface rmx86/udi/ Universal Development Interface (UDI) rmx86/crash/ Crash Analyzer Files Utility rmx86/files/ Interactive Configuration Utility (ICU) rmx86/icu/ rmx86/inc/ Include Files rmx86/lib/ Interface Libraries

"zaps.cfg" is the ZAP configuration file. This file contains the list of ZAPs to be applied.

## STEPS:

Series IV development systems can be different, depending on the hardware configuration. Therefore, logical names are used by the update package.

- 1) If your iRMX<sup>™</sup> 86 system files (e.g., "rmx86/\*") are only accessible by superuser, then you will need to logon as superuser. The ZAP command files need to access your iRMX<sup>™</sup> 86 system files.
- 2) Assign the following logical names using the "LNAME" system command:

:LANG: = The directory that contains your language utilities. (e.g., ASM86, LINK86, LIB86)

:SYSTEM: = The directory that contains your system commands. (e.g., copy, delete, rename)

:RMX86: = The directory ("rmx86") that contains the 13 directories in "s4path.cfg".

Here is an example of how to define the logical name for the rmx86 directory, assuming your system device is "winiø":

Example: "lname define :RMX86: for /winiØ/rmx86"

3) Create a directory in the "rmx86" directory called "update".

Example: "createdir :RMX86:update"

Then copy the contents of the update package diskette to this directory.

4) The ZAP installation procedure includes a file called "zaps.cfg". This file controls which ZAPs will be applied during the update process. At the beginning of the file is a block of comments. At the end of the file is a list of control lines. Each control line corresponds to one ZAP. For example, ZAP number 33 has a corresponding control line that reads "ZBRA33(PZZØ3) \*". The asterisk causes the ZAP to not be applied.

Each of the ZAPs is described at the end of these instructions. The description will indicate if the ZAP is defaulted to not be applied. You should read these descriptions so that you can decide which ZAPs you want to apply. If your decision matches the default, you can proceed to Step 5. If you decide to modify which ZAPs are applied, you MUST edit the file "zaps.cfg". To remove a ZAP that is to be applied,

add an asterisk to the control line for that ZAP. Conversely, to apply a ZAP that is NOT to be applied, remove the asterisk from the control line for that ZAP.

#### IMPORTANT NOTE

Some of the ZAPs supplied with this update default so that they are not applied during the update process. This is done when a ZAP has side effects. These ZAPs should only be installed if you need the feature or fix and have read the documentation concerning that ZAP. The documentation will explain the side effects.

5) If your system uses the same iRMX 86 directory names as described above and you used the logical names described in Step 2, go on to Step 6. If your pathnames are not the same, you MUST edit the file "s4path.cfg". When editing this file, simply find the pathname that you need to change and modify it.

THERE ARE THREE IMPORTANT RULES TO FOLLOW WHILE EDITING THE "s4path.cfg" FILE:

- (1) DO NOT change the order of the pathnames in this file. The order is essential for the "s4gen.csd" generation submit file to work properly.
- (2) DO NOT remove any of the pathnames from this list. The number of pathnames in this file is essential for the "s4gen.csd" generation submit file to work properly.
- (3) When changing a directory name, you MUST put a slash "/" as the last character in the pathname. If you change the directory pathnames to logical names, you will not need the slash "/".
- 6) Now invoke the submit file "s4gen.csd". There is one parameter. This parameter is the pathname for the directory that you created in Step 3. This directory must contain the contents of the update package diskette (be sure to include a slash "/" as the last character).

Example: "submit :RMX86:update/s4gen(:RMX86:update/)"

NOTE: The warnings of "UNRESOLVED SYMBOLS" from LINK86 are expected and should be ignored.

7) Now that the system files are updated, you will need to re-generate your iRMX<sup>™</sup> 86 bootable system using ICU86. The system that you re-generate will then incorporate all of the ZAPs from this update package. Refer to Chapter 18 of the Release 6.Ø, iRMX<sup>™</sup> 86 Configuration Guide for information on generating an iRMX<sup>™</sup> 86 system.

# NOTE

The list of directory names in the instructions for Series IV development system users does not contain a directory name for the Human Interface system commands. The update package submit files will not copy ZAPs that are Human Interface system commands onto your Series IV development system. Depending on your application you will need to copy all ZAPs that are replacement system commands to your iRMX<sup>TM</sup> 86 System. Read the ZAP descriptions at the end of these instructions to see which ZAPs are replacement system commands.

# Section 2

# The iRMX 86 Update 3 Documentation

The iRMX<sup>M</sup> 86 Update 3 is supported by two types of documentation—printed documents that accompany the Update 3 diskettes and files that reside on Update 3 Diskette No.1.

# 2.1 Printed Documentation

Each iRMX<sup>™</sup> 86 Update 3 package includes a shrinkwrapped package containing the following five items of printed documentation:

# The iRMX 86 Release 6 Update 3 Customer Letter

Appearance: A three-page single-sided document stapled in the

upper right hand corner.

Description: This document introduces the iRMX<sup>M</sup> 86 Release 6

Update 3 product. It also serves as an entry point into the documentation, indicating where to find

vital information concerning Update 3.

Re-Ordering: Not available for re-ordering

The iRMX 86 R6.Ø UP3 Installation Guide (Order #147731-ØØ1)

Appearance: A double-sided, five-hole punched document stapled in

the upper right hand corner. The front and back

covers are white.

Description: This document contains instructions for installing

the update on an iRMX<sup>™</sup> 86 Development System, an ISIS Series III Development System, and a Series IV Development System. In addition, it describes all of the ZAPs contained in Update 3. The contents of this document are duplicated in a file named INSTAL.DOC on

Update diskette No. 1.

Re-Ordering: Not available for re-ordering

FORMAT Command and Disk Verification Utility Enhancements (Order #147155-ØØ1)

Appearance: A double-sided, five-hole punched document stapled in

the upper right hand corner. The front and back

covers are white.

Description: This document provides information about enhancements

made to the FORMAT command and the Disk Verification Utility. These enhancements offer two new iRMX<sup>™</sup> 86 capabilities—the capability of backing up and

restoring volume fnodes, and the capability of adding the second stage of the Bootstrap Loader to a volume without re-formatting the volume. This document (along with the associated software) was first distributed in Update 1 (June, 1984). If you have received Update 1 or Update 2, you already have a

copy.

Re-Ordering: Available through Intel's Literature Department

(address below).

iRMX 86 Device Driver Change Package: Update 3 (Order # 147721-ØØ1)

Appearance: A shrinkwrapped package containing double-sided

five-hole punched change pages. The front and back

cover are blue.

Description: This package contains change pages to be installed in

the existing iRMX'M 86 Release 6 Operating System

documentation. These change pages provide

documentation to support the device drivers currently

distributed through the iRMX' 86 Updates.

Instructions for installing the change pages are printed on a blue sheet at the front of the package.

Re-Ordering: Available through Intel's Literature Department

(address below).

iRMX 86 Release 6 Documentation Change Package: Update 3 (Order #147540-001)

Appearance: A shrinkwrapped package containing double-sided

five-hole punched change pages. The front and back

cover are blue.

Description: This package contains change pages to be installed in

the existing iRMX<sup>™</sup> 86 Release 6 Operating System documentation. These change pages correct technical errors identified in the documentation. Instructions for installing the change pages are printed on a blue

sheet at the front of the package.

Re-Ordering: Available through Intel's Literature Department

(address below).

Items may be re-ordered by contacting:

Intel Corporation Literature Department 3Ø65 Bowers Avenue Santa Clara, CA 95Ø51

# 2.2 Documentation Residing in Update 3 Files

The Update 3 Diskette No. 1 contains the following three documentation files:

#### READ.ME

The READ.ME file (1) describes workarounds for problems discovered in the iRMX<sup>TM</sup> 86 Release 6.00 Operating System software (2) provides vital information that is missing from the iRMX<sup>TM</sup> 86 Release 6.00 Operating System documentation. All items in this file are temporary. An item remains in the file only as long as the associated problem is unfixed. Once a fix is available through the update service (either as a ZAP or as change pages to the documentation), the item is removed from the READ.ME file.

# NOTES

The NOTES file contains (1) general background information about the iRMX<sup>™</sup> 86 Release 6.Ø Operating System, and (2) an outline of some of the major differences between iRMX<sup>™</sup> 86 Release 6.Ø and iRMX<sup>™</sup> 86 Release 5.Ø. Items in the NOTES file accumulate from update to update. Thus, in addition to the notes added in Update 3, the NOTES file also contains the notes from all previous updates.

# INSTAL.DOC

The INSTAL.DOC file contains instructions for installing the update on an iRMX<sup>™</sup> 86 System, an ISIS Series III Development System, and a Series IV Development System. In addition, it describes all of the ZAPs contained in Update 3. The contents of this file are duplicated in an Update 3 printed document titled "The iRMX<sup>™</sup> 86 R6.Ø UP3 Installation Guide".

#### Section Three

# ZAP Descriptions

The next section of this document is the list of ZAPs and their descriptions. Read this section to determine which ZAPs you want to have applied to your system. Pay special attention to "SPECIAL NOTES" and "SIDE EFFECTS".

Unless stated otherwise, the default condition for a ZAP is that it will be installed during the update process.

#### ZBRAØØ. A86

DATE: 11 April 1984

PRODUCT(S): iRMX 86 R6.Ø, UDI V3.Ø
REPAIR LIBRARY(MODULE): udi.lib(udures)

DESCRIPTION: This ZAP solves the problem of the FORTRAN compiler not being able to run on iRMX<sup>rm</sup> 86 R6.Ø.

SPECIAL NOTES: This ZAP only applies to Fortran V2.2 that is linked with UDI V2. $\emptyset$ . This ZAP will become obsolete as soon as the next version of the compiler is released.

# ZBRAØ1.A86

DATE: 12 APRIL 1984

PRODUCT(S): iRMX 86 R6.Ø, UDI V3.Ø
REPAIR LIBRARY(MODULE): udi.lib(uxclsv)

DESCRIPTION: If the assembler (ASM86 V2.Ø) runs out of memory and has to create a work (spill) file, it will abort with an E\$MEM exception. This ZAP adds code to UDI to call DQ\$RESERVE\$IO\$MEMORY before the assembly starts. This will allow the assembler to create work (spill) files if it needs to.

SIDE EFFECTS: This ZAP should only be applied if you are experiencing the above problem. Installing this ZAP will cause Utilities which use UDI calls to always reserve 12K Bytes of RAM for work files. This ZAP will become obsolete as soon as the next version of the assembler is released.

#### ZBRAØ2.R86

DATE: 2Ø APRIL 1984

PRODUCT: iRMX 86 R6.Ø, Human Interface V3.Ø REPLACEMENT SYSTEM COMMAND: hrest.r86 (RESTORE)

DESCRIPTION: This ZAP is for the RESTORE system command. This ZAP fixes the problem in RESTORE that returned an E\$MEM when restoring multiple volumes.

SPECIAL NOTES: This copy of the RESTORE system command is V3.1 (the sign-on message reflects this). If you are using a Series III or Series IV development system, you will have to copy this replacement system command to your target system manually. The application submit files ups3.csd and ups4.csd will not copy replacement system command ZAPs to your Series III or Series IV development system.

# ZBRAØ6.RMD

DATE: 2Ø APRIL 1984

PRODUCT: iRMX 86 R6.Ø, SDB V3.Ø

REPLACEMENT MODULE: sdbint in sdb.lib

DESCRIPTION: This replacement module corrects the SDB's help screen sign-on message to reflect V3.0.

## ZBRAØ9.INC

DATE: SEPTEMBER 1984

PRODUCT: iRMX 86 R6.Ø, BOOTSTRAP LOADER V6.Ø

REPLACEMENT INCLUDE FILE: BS1DEV.INC

DESCRIPTION: This replacement include file fixes a problem which occured when using only %AUTO without %CONSOLE or %MANUAL. This produced errors during the assembly of the module BS1.A86.

# ZBRA11.RMD

DATE: SEPTEMBER 1984

PRODUCT: iRMX 86 R6.Ø, UDI V3.Ø
REPLACEMENT MODULE: udufil in udi.lib

DESCRIPTION: This replacement module fixes a problem where DQ\$FILE\$INFO returns erroneous information about a file's owner id and file type.

#### ZBRA14.RMD

DATE: SEPTEMBER 1984

PRODUCT: iRMX 86 R6.Ø, IOS V4.1

REPLACEMENT MODULE: ilnmat in ios.lib

DESCRIPTION: This replacement module fixes a problem where a file cannot be deleted if its fnode has been corrupted.

SPECIAL NOTES: This ZAP must be used in conjunction with ZBRA15.RMD to fix the problem.

#### ZBRA15.RMD

DATE: SEPTEMBER 1984

PRODUCT: iRMX 86 R6.Ø, IOS V4.1

REPLACEMENT MODULE: ispath in ios.lib

DESCRIPTION: This replacement module corrects a problem where a file cannot be deleted if its fnode has been corrupted.

SPECIAL NOTES: This ZAP must be used in conjunction with ZBRA14.RMD to fix the problem.

#### ZBRA16.R86

DATE: SEPTEMBER 1984

PRODUCT: iRMX 86 R6.Ø, HI V3.Ø

REPLACEMENT SYSTEM COMMAND: hform.r86 (FORMAT)

DESCRIPTION: This ZAP is the FORMAT system command. It has two new features:

- 1) FORMAT can now copy the 2nd stage of the Bootstrap Loader onto track Ø, without formatting the volume. This enables a user to put the capabilities of the Release 6.Ø Bootstrap Loader (specifically the debug switch) onto a volume without having to re-format it.
- 2) FORMAT can now (while formatting the disk) create a file named R?SAVE. The volume label and the fnodes are then copied to this file. This feature works in conjunction with the enhanced DISKVERIFY system command (see next ZAP description).

See the enclosed manual "FORMAT Command and Disk Verification Utility Enhancements" for a full description.

SPECIAL NOTES: This copy of the FORMAT system command is V3.1 (this can be displayed using the VERSION system command). If you are using a Series III or Series IV development system, you will have to copy this replacement system command to your target system manually. The application submit files ups3.csd and ups4.csd will not copy replacement system command ZAPs to your Series III or Series IV development system.

# ZBRA17.R86

DATE: SEPTEMBER 1984

PRODUCT: iRMX 86 R6.Ø, HI V3.Ø

REPLACEMENT SYSTEM COMMAND: hdvfy.r86 (DISKVERIFY)

DESCRIPTION: This ZAP is the DISKVERIFY system command. Features were added to DISKVERIFY to manipulate the "R?SAVE" file created by the new FORMAT system command. DISKVERIFY contains a command to copy fnodes to the R?SAVE file. Also the volume label and fnodes can be restored by copying them from R?SAVE over the original fnodes and volume label. See the enclosed manual "FORMAT Command and Disk Verification Utility Enhancements" for a full description.

SPECIAL NOTES: This copy of the DISKVERIFY system command is V3.1 (the sign-on message reflects this). If you are using a Series III or Series IV development system, you will have to copy this replacement system command to your target system manually. The application submit files ups3.csd and ups4.csd will not copy replacement system command ZAPs to your Series III or Series IV development system.

# ZBRA18.RMD

DATE: SEPTEMBER 1984

PRODUCT: iRMX 86 R6.Ø, HI V3.Ø

REPLACEMENT MODULE: hgtchr in hi.lib

DESCRIPTION: This replacement module corrects a problem where DQ\$GET\$ARGUMENT does not handle buffers ending with double delimiters correctly. It also corrects a problem which prevents TX from accepting one character filenames.

SPECIAL NOTES: This ZAP must be used in conjunction with ZBRA68.RMD to fix the problem.

# ZBRA19.RMD

DATE: SEPTEMBER 1984

PRODUCT: iRMX 86 R6.Ø, UDI V3.Ø

REPLACEMENT MODULE: uduarg in udi.lib

This ZAP has been replaced by ZBRA68.RMD.

#### ZBRA21.RMD

DATE: DECEMBER 1984

PRODUCT: iRMX 86 R6.Ø, DEVICE DRIVERS V2.Ø (iSBC 544)

REPLACEMENT MODULE: x544 in xcmdrv.lib

DESCRIPTION: This ZAP fixes the iSBC 544 driver problem where a series of successive interrupts could result in a stack overflow that caused the system to crash.

SPECIAL NOTES: The iSBC 544 driver can still lose characters and experience communication errors. This can happen when large quantities of data are input to the iSBC 544 at high data rates or over multiple channels. If you need specific information about performance data, please contact your local Intel representative.

# ZBRA22.RMD

DATE: DECEMBER 1984

PRODUCT: iRMX 86 R6.Ø, UDI V3.Ø

REPLACEMENT MODULE: uduspl in udi.lib

DESCRIPTION: This ZAP repairs a problem where the UDI DQ\$SPECIAL call would corrupt the status of the output control character when the call was made with mode equal to 1 or 3. This would result in flow control being defeated and screen oriented applications garbaging the display on the screen.

# ZBRA24.RMD

DATE: DECEMBER 1984

PRODUCT: iRMX 86 R6.Ø, EIOS V3.Ø

REPLACEMENT MODULE: hybriddetachdevice in eios.lib

DESCRIPTION: This ZAP fixes a problem where RQ\$HYBRID\$DETACH\$DEVICE fails when called by user  $\emptyset$ . The exception E\$TYPE would be returned erroneously.

# ZBRA25.LIT

DATE: DECEMBER 1984

PRODUCT: iRMX 86 R6.0, IOS V4.1
REPLACEMENT LITERAL FILE: iexcep.lit

DESCRIPTION: This ZAP corrects the spelling of E\$IDDR in the literal file IEXCEP.LIT. It was incorrectly spelled as E\$IDD.

#### ZBRA27.RMD

DATE: DECEMBER 1984

PRODUCT: iRMX 86 R6.Ø, DEVICE DRIVERS V2.Ø (TERMINAL SUPPORT CODE)

REPLACEMENT MODULE: xtsio in xcmdrv.lib

DESCRIPTION: This ZAP fixes a problem where the hardware would always be reset when an RQ\$A\$SPECIAL, an RQ\$S\$SPECIAL, or a DQ\$SPECIAL call was made. If output was pending, it would result in garbage characters being output. With this ZAP and ZAPs ZBRA28.RMD and ZBRA29.RMD the hardware is only reset if the input or output baud rate or the read or write parity are being modified.

SPECIAL NOTES: This ZAP is intended to be used in conjunction with ZBRA28.RMD and ZBRA29.RMD. These ZAPs MUST be included or excluded from the update process as a group.

#### ZBRA28.RMD

DATE: DECEMBER 1984

PRODUCT: iRMX 86 R6.0, DEVICE DRIVERS V2.0 (TERMINAL SUPPORT CODE)

REPLACEMENT MODULE: xtsmod in xcmdrv.lib

DESCRIPTION: See ZBRA27.RMD.

SPECIAL NOTES: This ZAP is intended to be used in conjunction with ZBRA27.RMD and ZBRA29.RMD. These ZAPs MUST be included or excluded from the update process as a group.

# ZBRA29.RMD

DATE: DECEMBER 1984

PRODUCT: iRMX 86 R6.Ø, DEVICE DRIVERS V2.Ø (TERMINAL SUPPORT CODE)

REPLACEMENT MODULE: xtsosc in xcmdrv.lib

DESCRIPTION: See ZBRA27.RMD.

SPECIAL NOTES: This ZAP is intended to be used in conjunction with ZBRA27.RMD and ZBRA28.RMD. These ZAPs MUST be included or excluded from the update process as a group.

## ZBRA3Ø.R86

DATE: DECEMBER 1984

PRODUCT: iRMX 86 R6.0, ICU V2.1 REPLACEMENT COMMAND: icu86.r86

DESCRIPTION: This replacement system command fixes a problem with supplying user jobs to the ICU. If the user supplied a user job, the ICU would add it to the boot image library last. If the job was written as a main module, the boot loader would pick up it's start address, overriding the root job's starting address. The result was that the bootloader would give control to the user job instead of the root job. The most likely consequence was that the system would not boot. This version of the ICU puts the user jobs first in the boot image library.

An additional feature of this version of the ICU is support for the iSBC 188/48 driver (see ZBRA42.LIB).

SPECIAL NOTES: This version of the ICU is version 2.1. The version number of the ICU can be displayed with the VERSION command. This ZAP is intended to be used in conjunction with ZBRA31.HLP, ZBRA4Ø.R86 and ZBRA41.LIT. These ZAPs MUST be included or excluded from the update process as a group.

#### ZBRA31.HLP

DATE: DECEMBER 1984

PRODUCT: iRMX 86 R6.Ø, ICU V2.1 REPLACEMENT HELP FILE: icu86.hlp

DESCRIPTION: This ZAP is the new help messages for the new version (2.1) of the ICU. See ZBRA3Ø.R86 for more information.

SPECIAL NOTES: This ZAP is intended to be used in conjunction with ZBRA3Ø.R86, ZBRA4Ø.R86 and ZBRA41.LIT. These ZAPs MUST be included or excluded from the update process as a group.

#### ZBRA33.RMD

DATE: DECEMBER 1984

PRODUCT: iRMX 86 R6.Ø, DEVICE DRIVERS V2.Ø (iSBC 215/218)

REPLACEMENT MODULE: xtflop in xcmdrv.lib

DESCRIPTION: This ZAP alters the iSBC 215/218 driver to allow reading and writing of 9 sectors per track on a 5 1/4" uniform diskette that is attached "physical". The ZAP will not supply formatting capabilities, only read and write.

SPECIAL NOTES: The default for this ZAP is to not be installed.

SIDE EFFECTS: A system generated with this ZAP installed will allow ONLY nine sectors per track on 5 1/4", uniform, double density diskettes with 512 byte granularity that have been attached physical. Other diskette formats are unaffected. For a diskette with these attributes, the only thing that determines whether you access 8 or 9 sectors per track is the application of this ZAP. If you apply the ZAP, the system that you generate can only access 9 sectors per track for this type of diskette. If you do not apply this ZAP, the system that you generate can only access 8 sectors per track for this type of diskette.

# ZBRA34.R86

DATE: DECEMBER 1984

PRODUCT: iRMX 86 R6.Ø, ZSCAN V3.Ø NEW SYSTEM COMMAND: zscan.r86

DESCRIPTION: This new command displays a list of all ZAPs applied to a system image (library) or object module. If you are using a Series III or a Series IV development (or target) system, you will have to copy this command to your system manually. This update includes change pages for the Operator's Reference manual that describe how to use this command.

# ZBRA4Ø.R86

DATE: DECEMBER 1984

PRODUCT: iRMX 86 R6.Ø, ICU V2.1 REPLACEMENT COMMAND: icu862.r86

DESCRIPTION: This ZAP replaces the second stage of the ICU with version 2.1. See ZBRA3Ø.R86 for more information.

SPECIAL NOTES: This version of the ICU second stage is version 2.1. The version number of the ICU second stage can be displayed with the VERSION command. This ZAP is intended to be used in conjunction with ZBRA3Ø.R86, ZBRA31.HLP and ZBRA41.LIT. These ZAPs MUST be included or excluded from the update process as a group.

# ZBRA41.LIT

DATE: DECEMBER 1984

PRODUCT: iRMX 86 R6.0, ICU V2.1
REPLACEMENT LITERAL FILE: icu86.021

DESCRIPTION: This ZAP replaces the file ICU86.020 with the file ICU86.021. This literal file contains the new version number of the ICU which is V2.1. For more information see ZBRA30.R86.

SPECIAL NOTES: This ZAP is intended to be used in conjunction with ZBRA3Ø.R86, ZBRA31.HLP and ZBRA4Ø.R86. These ZAPs MUST be included or excluded from the update process as a group.

# ZBRA42.LIB

DATE: DECEMBER 1984

PRODUCT: iRMX 86 R6.Ø, DEVICE DRIVERS V2.1 (iSBC 188/48)

NEW LIBRARY: x18848.1ib

DESCRIPTION: This ZAP provides support for the iSBC 188/48.

SPECIAL NOTES: ZAPs ZBRA3Ø.R86, ZBRA31.HLP, ZBRA4Ø.R86 and ZBRA41.LIT (ICU version 2.1) supply configuration support for the iSBC 188/48 driver. If you intend to use the iSBC 188/48 driver you should use version 2.1 of the ICU. Installing the four ZAPs just mentioned will ensure that version 2.1 of the ICU will be used.

The new iSBC 188/48 device driver cannot be used in the same iRMX 86 system as the iSBC 544 device driver. Therefore, you should not attempt to configure an iRMX 86 system with both a iSBC 544 and an iSBC 188/48. Installing this ZAP will not cause a conflict between the iSBC 544 driver and the iSBC 188/48 driver, but do not ask the ICU to include both the iSBC 188/48 and the iSBC 544 in the same configuration.

# CAUTION

If you choose not to install ZAPS 44-47, be aware of the following: When you use the Application Loader to load a job, you must specify a stacksize greater than 272 decimal. Specifying a stacksize from Ø to 271 inclusive may result in (1) a system crash, or (2) CORRUPTION OF DATA ON ANY ACTIVE DISK OR DISKETTE VOLUME. (including the Winchester volume).

If you install ZAPS 44-47, attempting to load a job with a specified stacksize from 1 to 271 will result in an E\$PARAM exception being returned.

# ZBRA44.RMD

DATE: DECEMBER 1984

PRODUCT: iRMX 86 R6.Ø APPLICATION LOADER V3.1

REPLACEMENT MODULE: Itask in loadrp.lib

DESCRIPTION: This ZAP fixes a problem in the loader where the specified or default stack size allocated to the loaded job's initial task is too small. This can result in a stack overflow. This ZAP fixes loadrp.lib which is used if you specify PIC for Code Type in the application loader configuration screen of the ICU.

SPECIAL NOTES: If your loaded job currently has a stack size of zero, it will work without changes when this ZAP is applied to your system. If you do not specify a stack size of zero, you should specify a stack size of at least 272 decimal.

SIDE EFFECTS: If you currently have a job with a specified stack size between 1 and 271 inclusive, this job will not work correctly when this ZAP is applied to your system. An attempt to load such a job will result in an E\$PARAM exception.

#### ZBRA45.RMD

DATE: DECEMBER 1984

PRODUCT: iRMX 86 R6.Ø APPLICATION LOADER V3.1

REPLACEMENT MODULE: ltask in loadr1.lib

DESCRIPTION: This ZAP fixes a problem in the loader where the specified or default stack size allocated to the loaded job's initial task is too small. This can result in a stack overflow. This ZAP fixes loadrl.lib which is used if you specify LTL for Code Type in the application loader configuration screen of the ICU.

SPECIAL NOTES: If your loaded job currently has a stack size of zero, it will work without changes when this ZAP is applied to your system. If you do not specify a stack size of zero, you should specify a stack size of at least 272 decimal.

SIDE EFFECTS: If you currently have a job with a specified stack size between 1 and 271 inclusive, this job will not work correctly when this ZAP is applied to your system. An attempt to load such a job will result in an E\$PARAM exception.

#### ZBRA46.RMD

DATE: DECEMBER 1984

PRODUCT: iRMX 86 R6.Ø APPLICATION LOADER V3.1

REPLACEMENT MODULE: Itask in loadro.lib

DESCRIPTION: This ZAP fixes a problem in the loader where the specified or default stack size allocated to the loaded job's initial task is too small. This can result in a stack overflow. This ZAP fixes loadro.lib which is used if you specify OVR for Code Type in the application loader configuration screen of the ICU.

SPECIAL NOTES: If your loaded job currently has a stack size of zero, it will work without changes when this ZAP is applied to your system. If you do not specify a stack size of zero, you should specify a stack size of at least 272 decimal.

SIDE EFFECTS: If you currently have a job with a specified stack size between 1 and 271 inclusive, this job will not work correctly when this ZAP is applied to your system. An attempt to load such a job will result in an E\$PARAM exception.

# ZBRA47.RMD

DATE: DECEMBER 1984

PRODUCT: iRMX 86 R6.Ø APPLICATION LOADER V3.1

REPLACEMENT MODULE: ltask in loadra.lib

DESCRIPTION: This ZAP fixes a problem in the loader where the specified or default stack size allocated to the loaded job's initial task is too small. This can result in a stack overflow. This ZAP fixes loadra.lib which is used if you specify ABS for Code Type in the application loader configuration screen of the ICU.

SPECIAL NOTES: If your loaded job currently has a stack size of zero, it will work without changes when this ZAP is applied to your system. If you do not specify a stack size of zero, you should specify a stack size of at least 272 decimal.

SIDE EFFECTS: If you currently have a job with a specified stack size between 1 and 271 inclusive, this job will not work correctly when this ZAP is applied to your system. An attempt to load such a job will result in an E\$PARAM exception.

#### ZBRA48.RMD

DATE: MARCH 1985

PRODUCT: iRMX 86 R6.Ø APPLICATION LOADER V3.1

REPLACEMENT MODULE: laldj in loadrp.lib

DESCRIPTION: In some cases, RQ\$A\$LOAD\$10\$JOB and RQ\$S\$LOAD\$10\$JOB calls return an E\$NO\$MEM exception due to incorrect calculations in the Application Loader. This ZAP corrects the error in the Loader to calculate the memory requirements correctly.

SIDE EFFECTS: The application of this ZAP will slightly increase the memory needed to load some object modules.

## ZBRA49.RMD

DATE: MARCH 1985

PRODUCT: iRMX 86 R6.Ø APPLICATION LOADER V3.1

REPLACEMENT MODULE: laldj in loadrl.lib

DESCRIPTION: In some cases, RQ\$A\$LOAD\$IO\$JOB and RQ\$S\$LOAD\$IO\$JOB calls return an E\$NO\$MEM exception due to incorrect calculations in the Application Loader. This ZAP corrects the error in the Loader to calculate the memory requirements correctly.

SIDE EFFECTS: The application of this ZAP will slightly increase the memory needed to load some object modules.

# ZBRA5Ø.RMD

DATE: MARCH 1985

PRODUCT: iRMX 86 R6.Ø APPLICATION LOADER V3.1

REPLACEMENT MODULE: laldj in loadro.lib

DESCRIPTION: In some cases, RQ\$A\$LOAD\$IO\$JOB and RQ\$S\$LOAD\$IO\$JOB calls return an E\$NO\$MEM exception due to incorrect calculations in the Application Loader. This ZAP corrects the error in the Loader to calculate the memory requirements correctly.

SIDE EFFECTS: The application of this ZAP will slightly increase the memory needed to load some object modules.

#### ZBRA51.RMD

DATE: MARCH 1985

PRODUCT: iRMX 86 R6.Ø APPLICATION LOADER V3.1

REPLACEMENT MODULE: laldj in loadra.lib

DESCRIPTION: In some cases, RQ\$A\$LOAD\$IO\$JOB and RQ\$S\$LOAD\$IO\$JOB calls return an E\$NO\$MEM exception due to incorrect calculations in the Application Loader. This ZAP corrects the error in the Loader to calculate the memory requirements correctly.

SIDE EFFECTS: The application of this ZAP will slightly increase the memory needed to load some object modules.

# ZBRA52.RMD

DATE: MARCH 1985

PRODUCT: iRMX 86 R6.Ø DEVICE DRIVERS V2.Ø REPLACEMENT MODULE: xrad2 in xcmdrv.lib

DESCRIPTION: This replacement module corrects a coding error in the random access support code so that concurrent seeking is supported on all Intel-supported random access devices.

# ZBRA53.RMD

DATE: MARCH 1985

PRODUCT: iRMX 86 R6.Ø NUCLEUS V6.Ø REPLACEMENT MODULE: nertsk in nuc4.lib

DESCRIPTION: This replacement module corrects an error in one of the Nucleus routines that was causing iRMX 86 to write into ROM code during system initialization. Note that the problem was only relevant when the root job was in ROM.

#### ZBRA54.RMD

DATE: MARCH 1985

PRODUCT: iRMX 86 R6.Ø DEVICE DRIVERS V2.Ø REPLACEMENT MODULE: xprntr in xcmdrv.lib

DESCRIPTION: This replacement module restores the line printer driver to the way it was in Release 5. It was found that additions made to the driver in Release 6 (so that it meets Centronics specifications) are unnecessary and they slowed down the performance of the driver on 86-based systems.

#### ZBRA57.EXT

DATE: MARCH 1985

PRODUCT: iRMX 86 R6.Ø EXTERNAL DECLARATION FILES

REPLACEMENT DECLARATION FILE: hgtcmd.ext in /rmx86/inc

The original file is missing carriage returns (CR) at the end of several of its source lines. The CRs have been added in the replacement file.

# ZBRA58.LIT

DATE: MARCH 1985

PRODUCT: iRMX 86 R6.Ø LITERAL DECLARATION FILES

REPLACEMENT LITERAL DECLARATION: uexcep.lit in /rmx86/inc

The original file is missing carriage returns (CR) at the end of several of its source lines. The CRs have been added in the replacement file.

# ZBRA6Ø.RMD

DATE: JANUARY 1984

PRODUCT: iRMX 86 R6.Ø, DEVICE DRIVERS V2.1 (iSBX 217C)

REPLACEMENT MODULE: xrad3 in xcmdrv.lib

DESCRIPTION: This ZAP provides support for the iSBX 217C tape cartridge controller.

SPECIAL NOTES: ZAPs ZBRA6Ø.RMD through ZBRA67.RMD were designed to be used together. These ZAPs MUST be included or excluded from the update process as a group.

The default for these ZAPs is to not be installed.

Install ZAPs ZBRA6Ø.RMD through ZBRA67.RMD only under the following conditions. FAILURE TO COMPLY WITH THESE RESTRICTIONS COULD RESULT IN LOSS OF DATA.

- a. Install these ZAPs only in a System 310-XX.
- b. The iSBC 215G board in the 31Ø system must be of revision level  $-\emptyset12$ .
- c. The iSBC 215G board in the 31Ø system must contain firmware EPROMs with the following part numbers: 174581-ØØ1 and 174581-ØØ2. (If your iSBC 215G board does not contain this version of the firmware, the driver generates an E\$SUPPORT error when you attempt to attach the device.)
- d. Use the iSBX 217C board only in conjunction with a model number 5945L-2 Archive streamer tape drive.
- e. The 8742 microcomputer on the iSBX 217C board must have part number  $146855-\emptyset 01$ .

# f. Jumper the iSBX 217C board as follows:

-Remove 87-88, 95-96, and 37-38.

-Connect jumpers 88, 95, and 96 by running a wire wrap from 88 through 95 to 96.

# g. Jumper the iSBC 215G board as follows:

-Remove W3(1-2).

-Remove W24(1-2).

# ZBRA61.RMD

DATE: JANUARY 1984

PRODUCT: iRMX 86 R6.Ø, DEVICE DRIVERS V2.1 (iSBX 217)

REPLACEMENT MODULE: x215in in xcmdrv.lib

DESCRIPTION: See ZBRA6Ø.RMD.

# ZBRA62.RMD

DATE: JANUARY 1984

PRODUCT: iRMX 86 R6.Ø, DEVICE DRIVERS V2.1 (iSBX 217)

REPLACEMENT MODULE: x215cs in xcmdrv.lib

DESCRIPTION: See ZBRA6Ø.RMD.

# ZBRA63.RMD

DATE: JANUARY 1984

PRODUCT: iRMX 86 R6.Ø, DEVICE DRIVERS V2.1 (iSBX 217)

REPLACEMENT MODULE: x215it in xcmdrv.lib

DESCRIPTION: See ZBRA6Ø.RMD.

# ZBRA64.RMD

DATE: JANUARY 1984

PRODUCT: iRMX 86 R6.Ø, DEVICE DRIVERS V2.1 (iSBX 217)

REPLACEMENT MODULE: x215st in xcmdrv.lib

DESCRIPTION: See ZBRA6Ø.RMD.

# ZBRA65.RMD

DATE: JANUARY 1984

PRODUCT: iRMX 86 R6.0, DEVICE DRIVERS V2.1 (iSBX 217)

REPLACEMENT MODULE: x217dm in xcmdrv.lib

DESCRIPTION: See ZBRA6Ø.RMD.

# ZBRA66.RMD

DATE: JANUARY 1984

PRODUCT: iRMX 86 R6.Ø, DEVICE DRIVERS V2.1 (iSBX 217)

REPLACEMENT MODULE: x217it in xcmdrv.lib

DESCRIPTION: See ZBRA6Ø.RMD.

# ZBRA67.RMD

DATE: JANUARY 1984

PRODUCT: iRMX 86 R6.Ø, DEVICE DRIVERS V2.1 (iSBX 217)

REPLACEMENT MODULE: x217st in xcmdrv.lib

DESCRIPTION: See ZBRA6Ø.RMD.

# ZBRA68.RMD

DATE: MARCH 1985

PRODUCT: iRMX 86 R6.Ø UDI V3.Ø

REPLACEMENT MODULE: dq\$get\$argument in udi.lib

DESCRIPTION: This replacement module corrects a problem where DQ\$GET\$ARGUMENT does not handle buffers ending with double delimiters correctly. It also corrects a problem which prevents TX from accepting one character filenames.

SPECIAL NOTES: This ZAP must be used in conjunction with ZBRA18.RMD to fix the problem. This ZAP replaces ZBRA19. Users who have already applied ZBRA19 need not worry because applying this ZAP nullifies the effects of ZBRA19.

# ZBRA73.LIB

DATE: JANUARY 1984

PRODUCT: iRMX 86 R6.Ø, DEVICE DRIVERS V2.1 (iSBC 226)

NEW LIBRARY: 226DD.LIB

DESCRIPTION: This ZAP provides support for the iSBC 226 SMD controller. In addition to 226DD.LIB, this ZAP uses two other files supplied with Update 3--226IT.A86 and 226DB.A86. The documentation change page package (title "iRMX 86 Device Driver Change Package: Update 3") provides instructions on how to install and configure the 226 driver into your system.

SPECIAL NOTES: The following limitations apply to the use of the iSBC 226 Driver:

- a. On SMD drives with removable disk packs, you must always execute a DETACHDEVICE command before changing disk packs. After inserting the new disk pack, reattach the drive using the ATTACHDEVICE command. FAILURE TO EXECUTE THE DETACHDEVICE COMMAND BEFORE CHANGING DISK PACKS MAY RESULT IN CORRUPTION OF DATA ON THE NEWLY INSERTED PACK.
- b. The iSBC 226 driver does not support drive partitioning.
- c. Attempting to invoke DISKVERIFY on a very large capacity drive used in conjunction with the iSBC 226 will cause the system to hang.

NOTE: When using very large capacity drives, keep in mind the following iRMX 86 Operating System constraints. iRMX 86 limits the number of files that may reside on a single volume to 32,768. Furthermore, no single file may be larger than 67MB.

# ZBRA74.OBJ

DATE: JANUARY 1984

PRODUCT: iSBC 544 FIRMWARE

NEW FIRMWARE: xf544

DESCRIPTION: This ZAP is the new iSBC 544 firmware (V2.3). Installation of the update will only copy this file to your disk. To use the new firmware you must burn PROMs and install them on your iSBC 544 board.