

future
The Future of Mobile Radio



Hand Held Controller Firmware
ST101679V1 R4A

MANUAL REVISION HISTORY

| REV | DATE | REASON FOR CHANGE |
|-----|-----------|-------------------|
| - | Apr. 2006 | Initial Release |

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1. INTRODUCTION

This document provides information for the R4A release of the Mobile Hand Held Controller software.

The Hand Held Controller (HHC), part number CU101239V1, is an optional piece of terminal equipment that provides a display, microphone, and full radio control suite into an integrated, hand held package. The HHC communicates with the radio over the 485 bus using the X328 DRP protocol. Inputs from the HHC consist of a keypad matrix, ON/OFF-VOLUME Control and a flash programming interface used to flash the application program. The LCD has a 3X12 display providing conformation of user to radio interaction. The HHC provides compatible features of those implemented in the ORION® Control Head.

2. COMPATIBILITY

The following chart shows the minimum software version of radios or systems that is compatible with this release of Hand Held Controller software.

| RADIO/SYSTEM | SOFTWARE VERSION |
|--|-------------------------|
| JAGUAR® 725 Mobile | R1B |
| Orion Mobile 256K Orion Mobile 512K | R33 R41A |
| M7100 Mobile | R1B |
| 700P RU101219 | R1B |
| 700P KRD103161 | R4A |
| M-RK™ 256K M-RK 512 K | R32B R40A |
| P7100/P5100 Vehicular Chargers | R4A |
| ProGrammer™ | R10A R10A |

3. FEATURES/ENHANCEMENTS

The following features were added in this release of software.

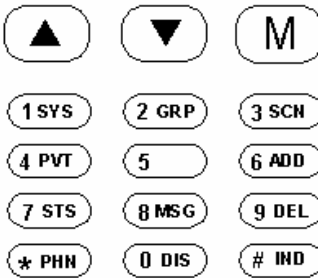
3.1 M-RK COMPUTABILITY

The HHC can now communicate with M-RK through the Enhanced Vehicular Charger/485 bus interface.

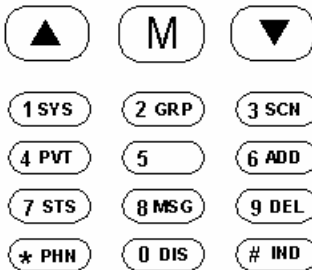
3.2 MENU/SYSTEM DOWN KEY SWAP

The Menu key and System Down key have been interchanged in order to match the layout of the JAGUAR radio.

Before Modification:



After Modification:



3.3 FIX HKSU – SCAN FUNCTION

The hookswitch status was not being correctly reported to the radio at power up. This problem has been resolved.

4. INSTALLATION PROCEDURES

The following are installation procedures for the HHC Software.

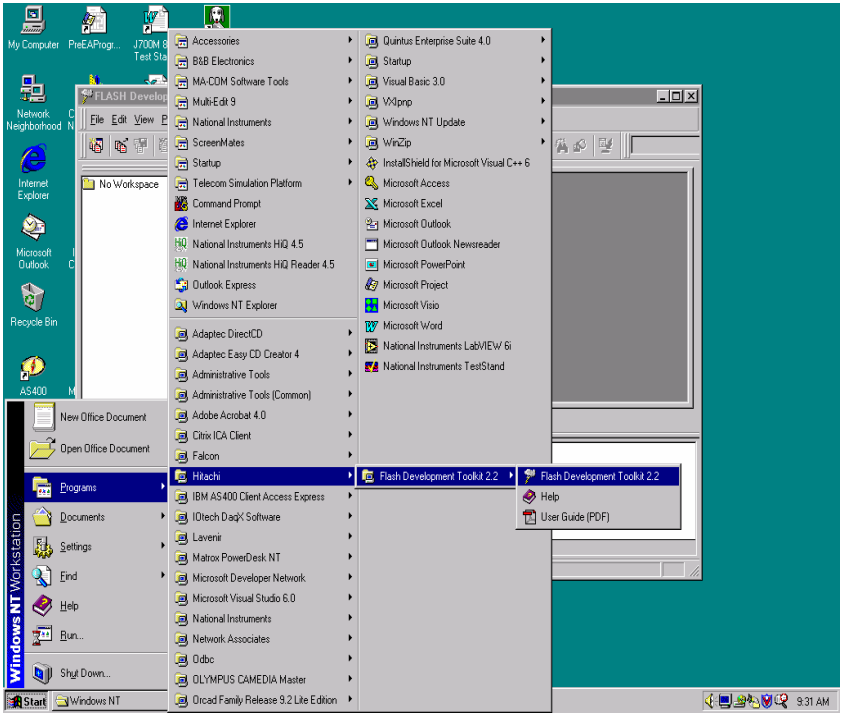
1. Install Flash Development Toolkit. If the Flash Development Toolkit is already installed skip step 1.
 - A. Insert the install CD in the CD-ROM drive.
 - B. Install FDT based on your target operating system:
 - **Windows® 98:** Navigate to Drive Letter:\WINDOWS 98
Double click on the file (fdt2_2.zip).
 - **Windows 95:** Navigate to Drive Letter:\WINDOWS 95
Double click on the file (fdt2_2.zip).
 - **Windows NT:** Navigate to Drive Letter:\WINDOWS NT
Double click on the file (fdt2_2.zip).
 - C. Run the EXE fdt2_2.zip.exe by double clicking on the file. Accept all defaults.
2. Connect peripherals to Hand Held Controller Programming Interface Adapter, TQ3414.
 - A. Connect the Serial cable to the available COM port on the PC. Connect the other end to the HHC Interface Adapter.
 - B. Apply 12 VDC to the Programming Interface Adapter.
 - C. Connect the HHC to the Programming Interface Adapter.



Figure 1: FLASH Programming Interface Adapter

3. FLASH the HHC software.

A. Run the FDT software.

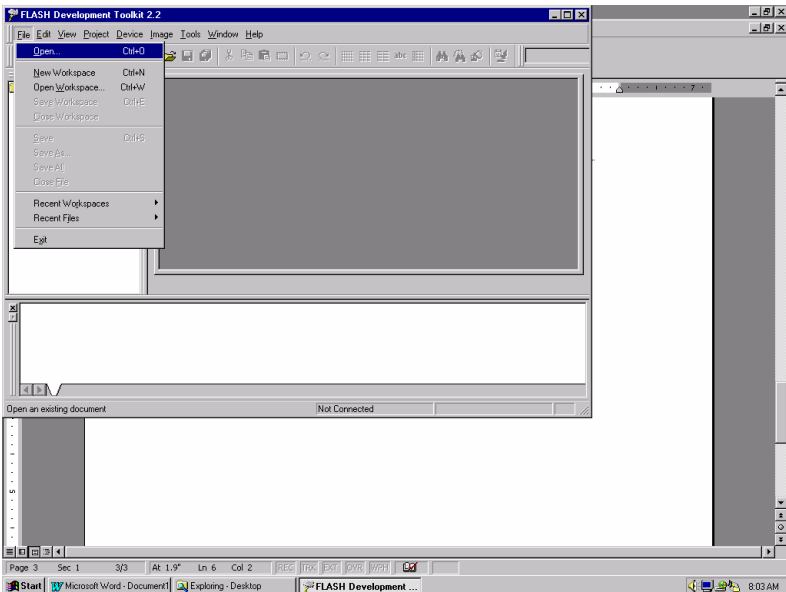


Note: Example shown is for Windows NT

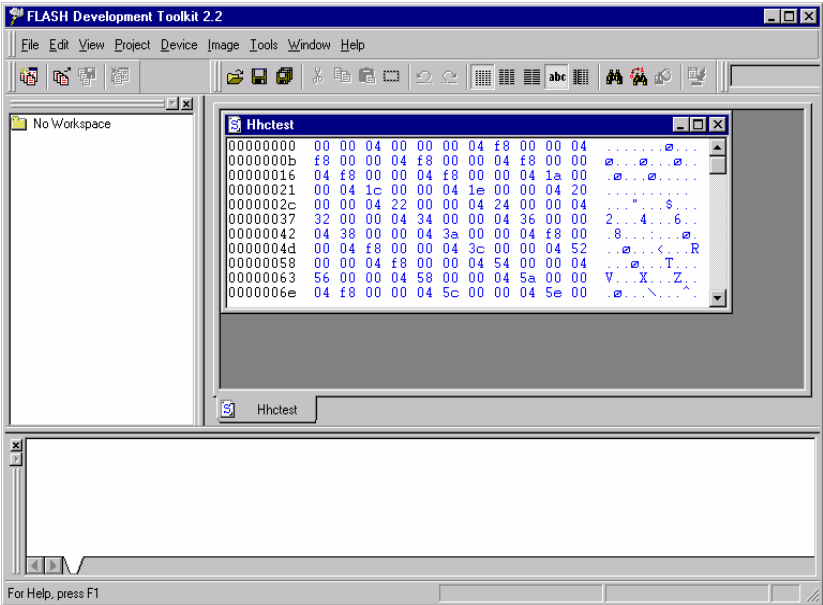
B. Do not create a new workspace at this time (Click Cancel).



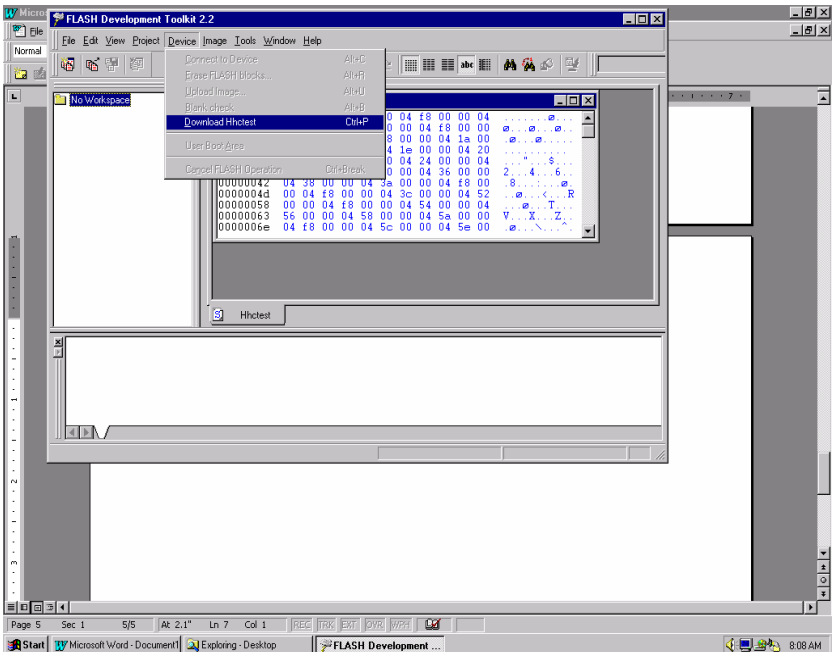
C. Open the hex file you wish to program (*.mot). Select **File** from the main menu then **Open**.



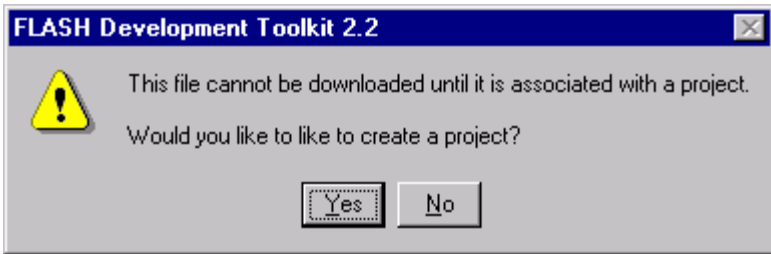
- D. Browse to the location where the hex file (*.mot) file is located and open it.



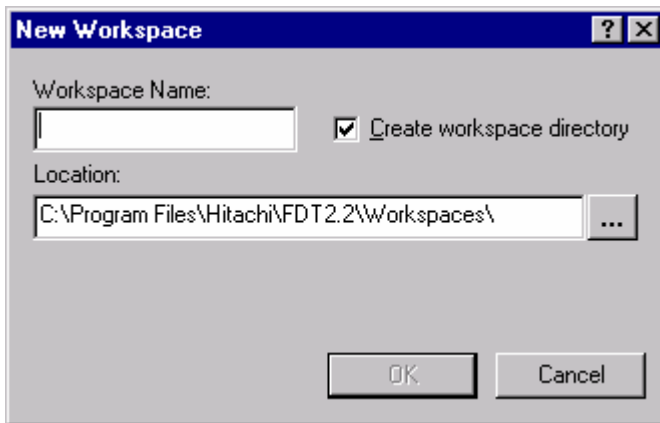
- E. Select **Device** from the main menu then **Download (Filename)**. The filename will contain the name of your hex file.



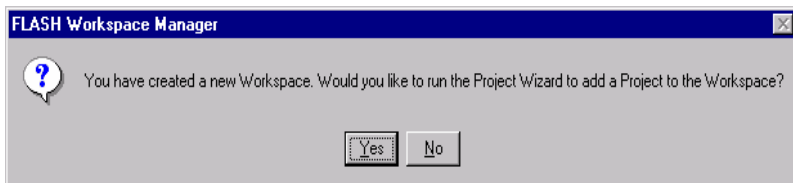
F. You will be asked to link the hex file to a new project. Select **Yes**.



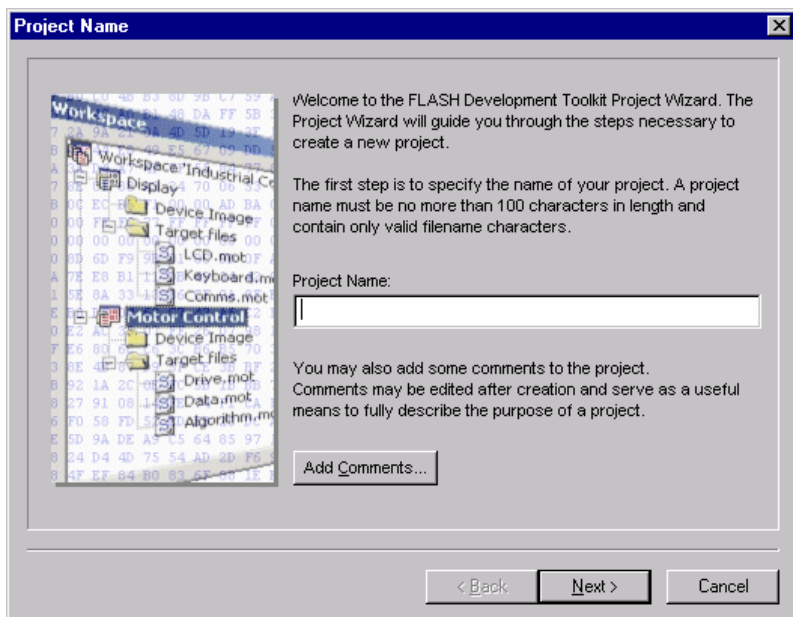
G. Enter Workspace name and click **OK**.



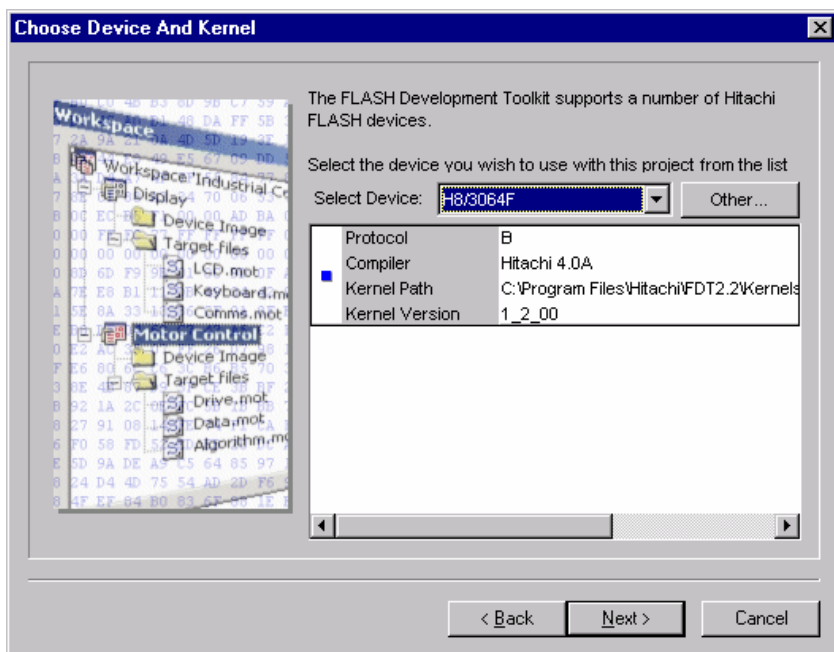
H. You will be asked if you would like to run the Project Wizard to load the new workspace. Select **Yes**.



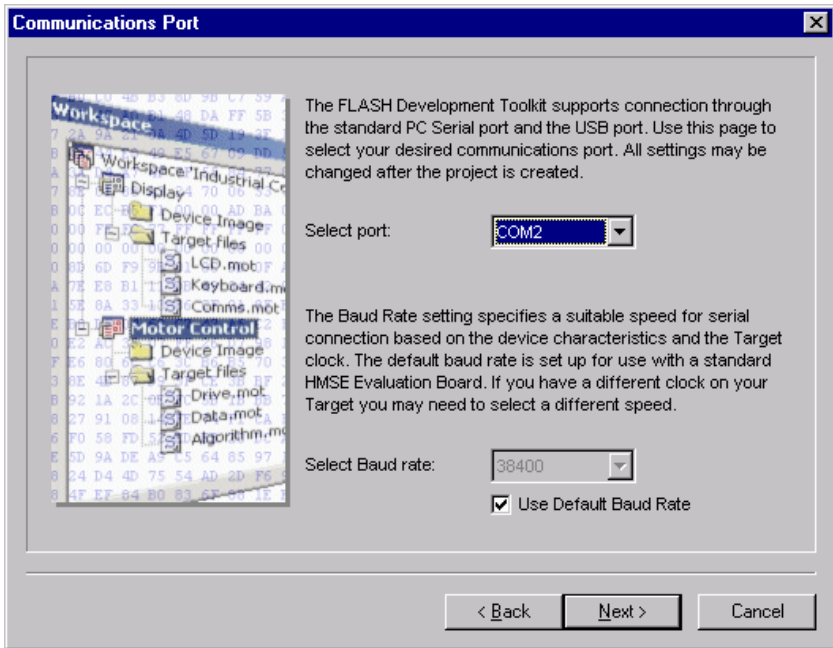
I. Enter your generic Project Name and select **Next>**.



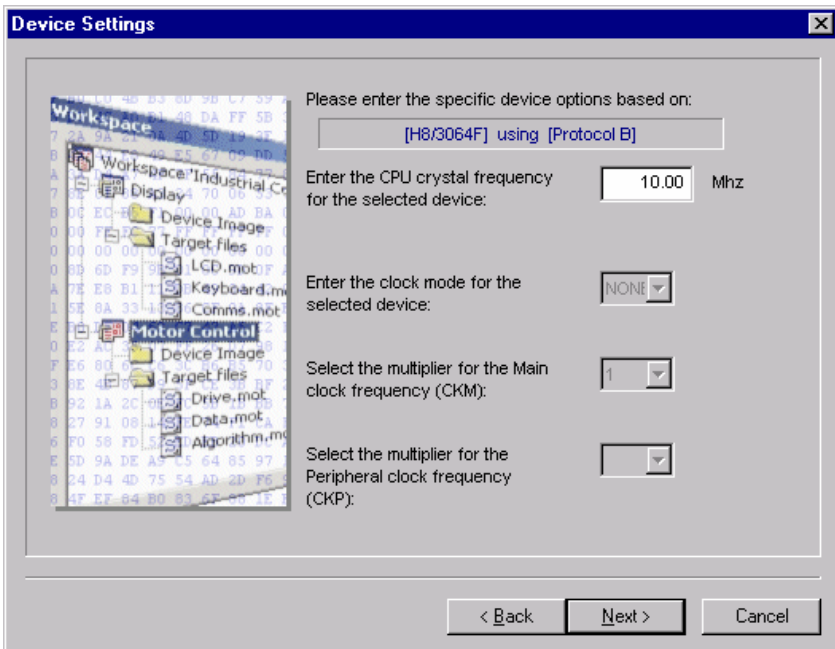
J. Select H8/3064F and click on **Next>**.



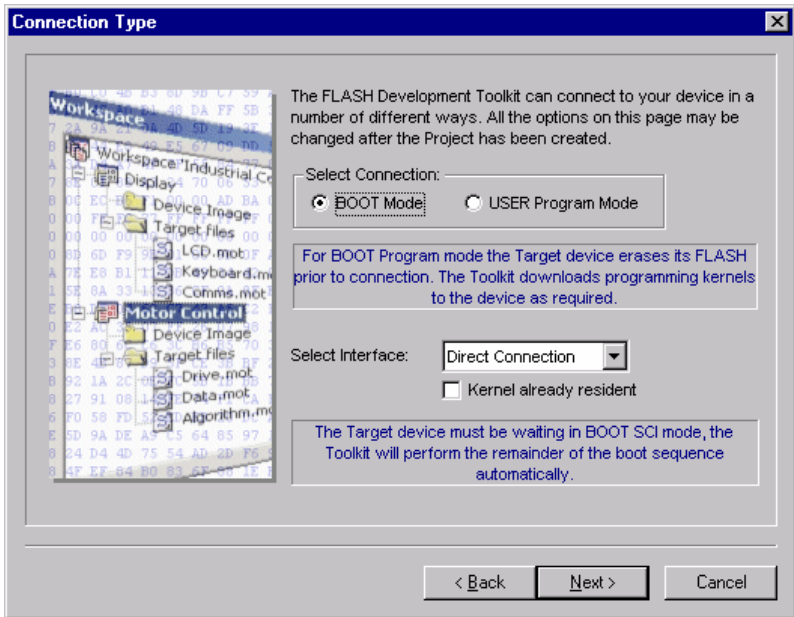
K. Select the COM port and click on **Next**>.



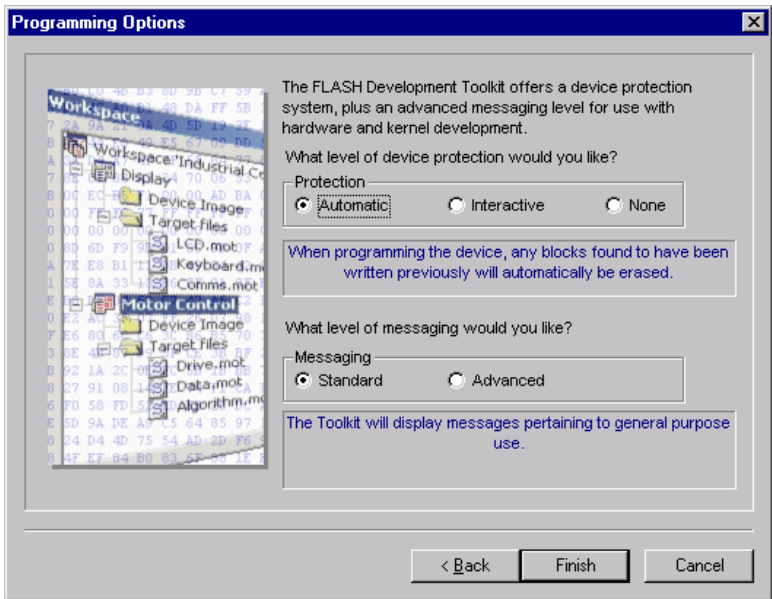
L. Enter 10 MHz clock frequency and click **Next**>.



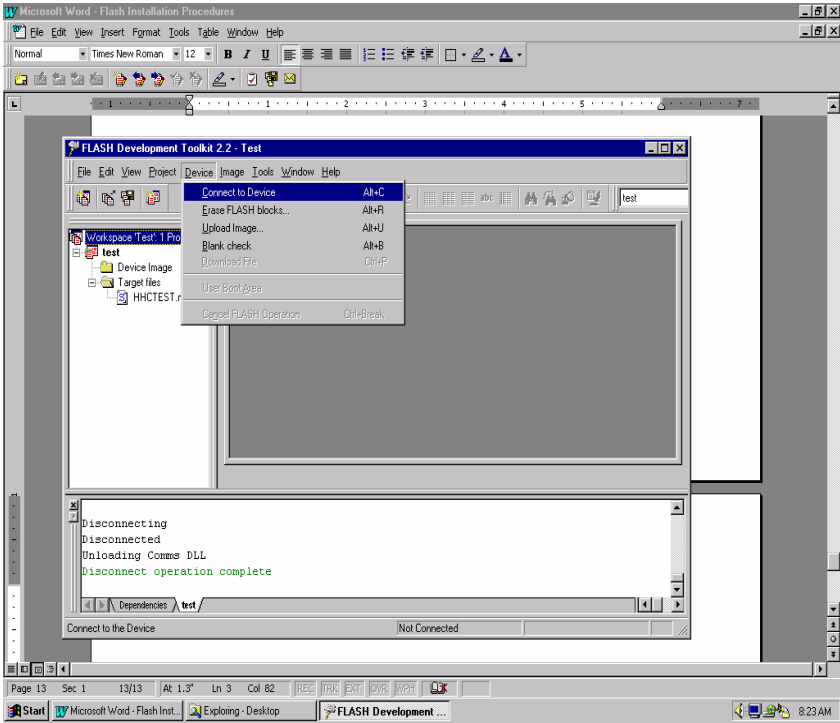
M. Select BOOT Mode and Direct Connection then click **Next>**.



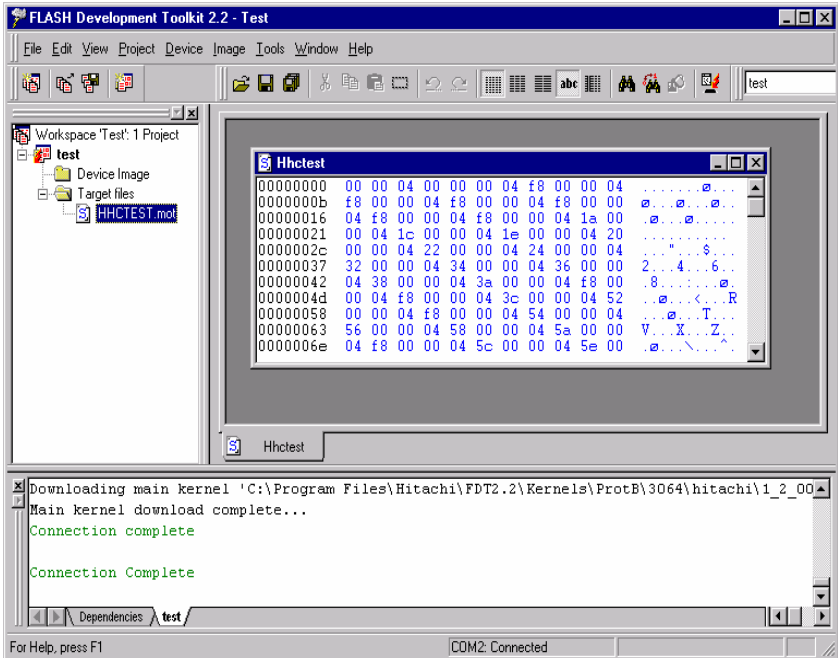
N. Select Automatic protection and standard messaging then click **Finish>**.



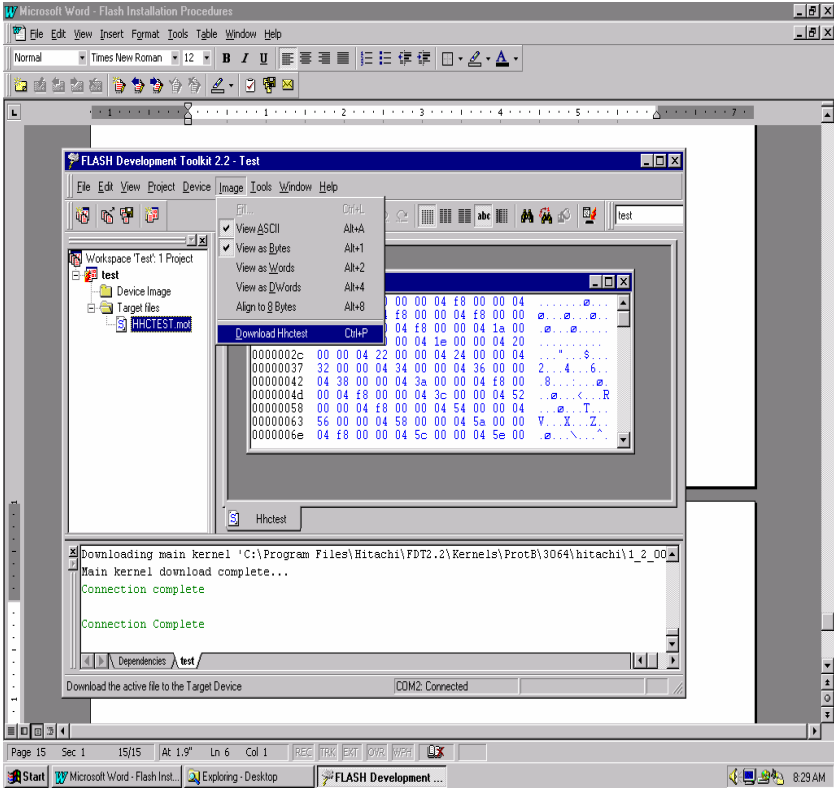
- O. Connect to the device by selecting **Device** from the main menu and then **Connect to Device**. If the device fails to connect, cycle power and try again.



- P. Click on the *.mot file under target file to ensure the hex file (.mot) is resident in the programming window.



Q. Select **Image** from the main menu and then **Download** to load the flash.



NOTE

A complete users manual can be found on the following web site:

<http://www.hmse.com/products/fdt/support.htm>

5. TECHNICAL SUPPORT

M/A-COM's Technical Assistance Center (TAC) resources are available to help you with overall system operation, maintenance, upgrades, and product support. TAC is your point of contact when you need technical questions answered.

Product specialists, with detailed knowledge of product operation, maintenance, and repair, provide technical support via a toll-free telephone number (in North America). Support is also available through mail, fax, and e-mail.

For more information about technical assistance services, contact your sales representative, or call the Technical Assistance Center directly at:

| | |
|----------------|--|
| North America: | 800-528-7711 |
| International: | 434-385-2400 |
| FAX: | 434-455-6712 |
| e-mail: | tac@tycoelectronics.com |

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