

# **NRomMaker Tool User Guide**

**V2.00.003**

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**Support Chips:**

W55VA Series

W55FA Series

**Support Platforms:**

Windows

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# 1. Introduction

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## 1.1. What Is the NRomMaker Tool

NRomMaker tool provides developers the environment within product development phases. It is used to provide user a tool which can convert the ram disk memory to an image. The image can mount by other devices or OS.

The NRomMaker tool provides features as below:

- Limited disk size, its range is 6 MB to 4095 MB, and could be converted to a image, the image could include up 2 FATs.
- Get the created image check-sum value
- Generate customer NAND ROM request form
- For 1 FAT, the exported image has no MBR parts default. By setting check box “with MBR”, MBR could add the exported image.

## 2. Quick Start

This chapter is a quick reference about how to use NRomMaker Tool.

### 2.1. Select created ram disk option

Start the tool, the UI will be shown as follows.

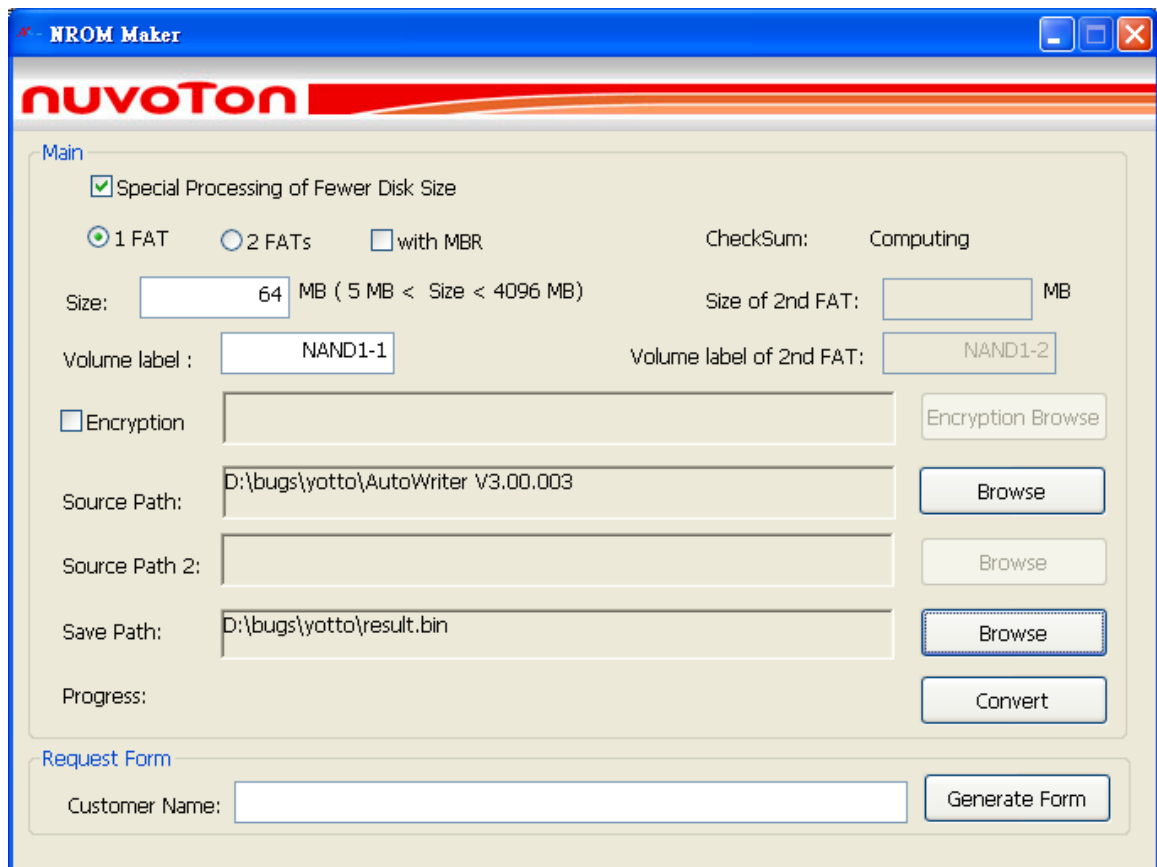


Figure 2-1 Start NRomMaker tool

There are two radio buttons 1FATs and 2 FATs. 1FATs is the default the image includes one FAT. User could set the check box “with MBR”, and the exported image could have the MBR header. If user does not set the check box “with MBR”, the exported image does not have the MBR header. 2 FATs is the image including two FATs and MBR headers. If user sets the radio button 1 FATs, the options of 2 FATs will disable. User could set the volume label of disk by himself. User could type the limited disk size to create the setting image size. The range of size is between 6 MB and 4095 MB. If use doesn’t export the specified disk size, he could select the check box “Special

Processing of Fewer Disk Size”. For example, if user set the Size to be 512 MB, if user doesn’t set the check box, then the exported file size is 512 MB. If user sets the check box, the exported file size depends on the size of specified folder.

## 2.2. Select source path, source path 2 and save path

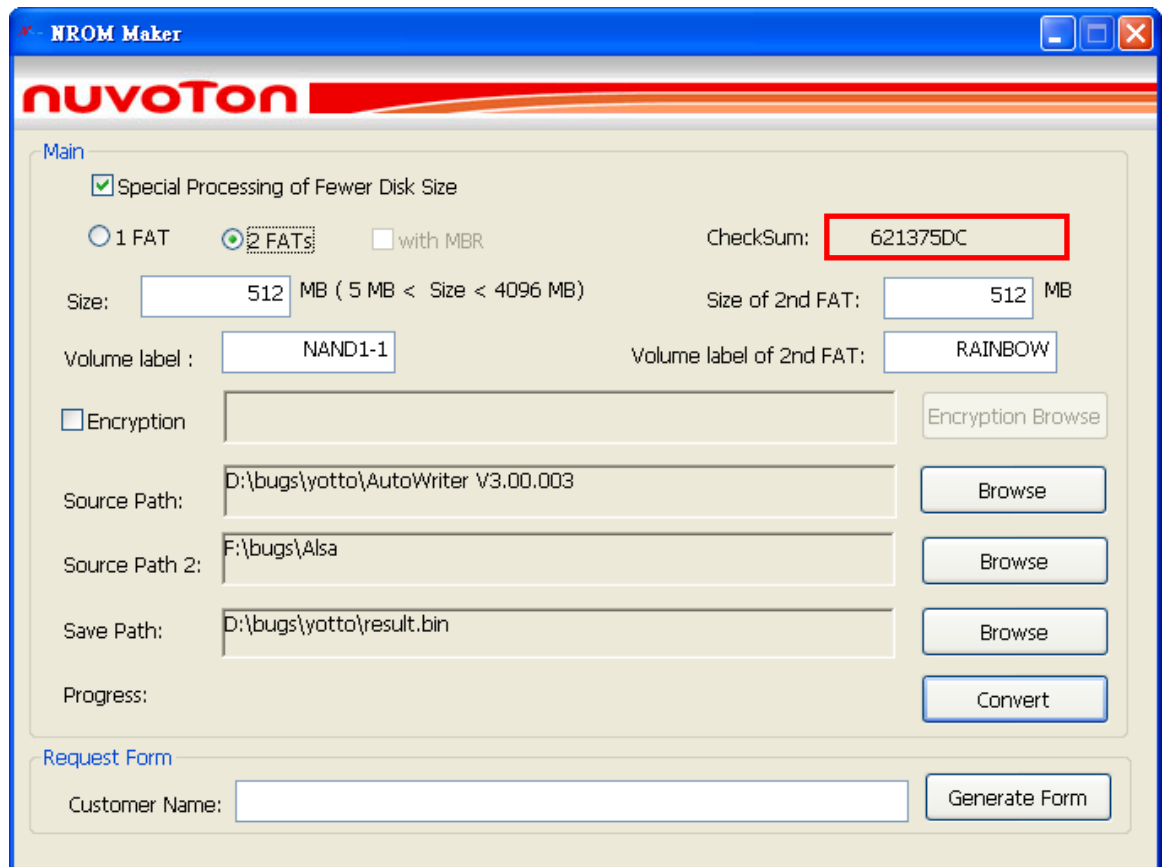
Figure 2-2 Select source and save path

User can press upper **Browse** button to open a dialog which can select the folder of path you want to get, for the source path and source path 2. And lower **Browse** button to open a dialog which can select the folder of path you want to save the image.



The source path and source path 2 can select only one path.

## 2.3. Get check-sum value



*Figure 2-3 Get check-sum value*

The check-sum method is to get two byte buffer of the save path file. Whatever math carried method, a check-sum value only got four bytes number in hex. It can get the check-sum value by two conditions as below:

- Condition #1: After press **Convert** button and wait the dump memory process is terminal, it will be calculated automatically and shown on dialog.
- Condition #2: Select the lower **Browse** and select a path, it will be calculated automatically and shown on dialog.

## 2.4. Convert to a image

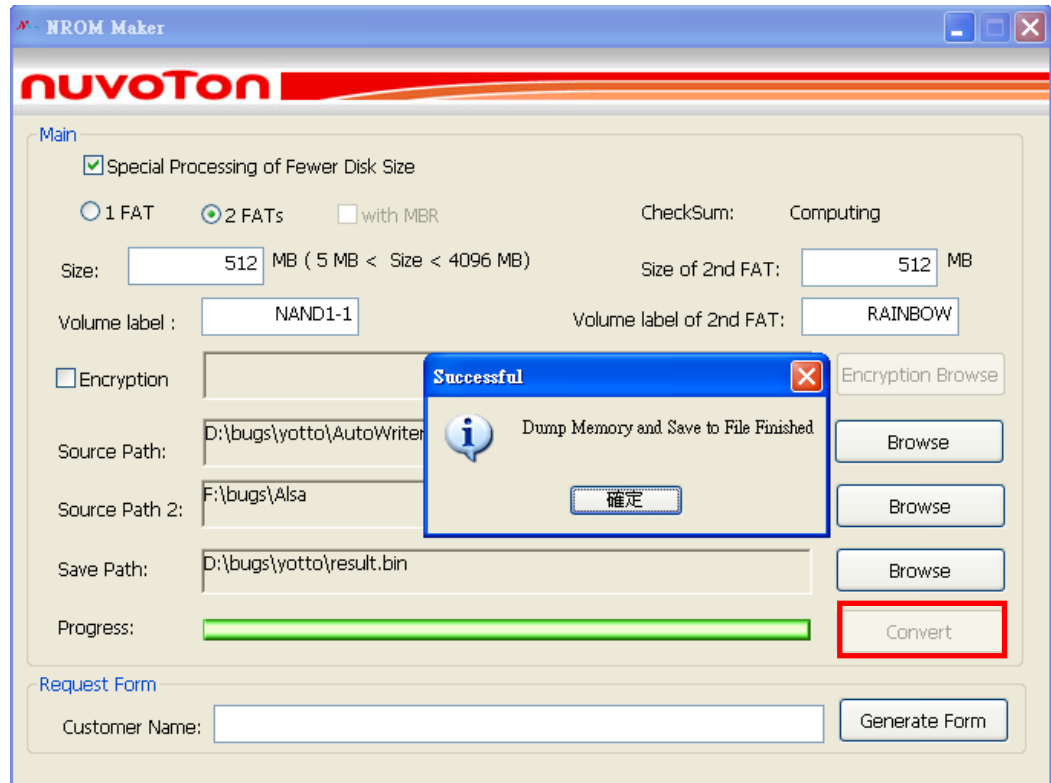


Figure 2-4 Convert to a image

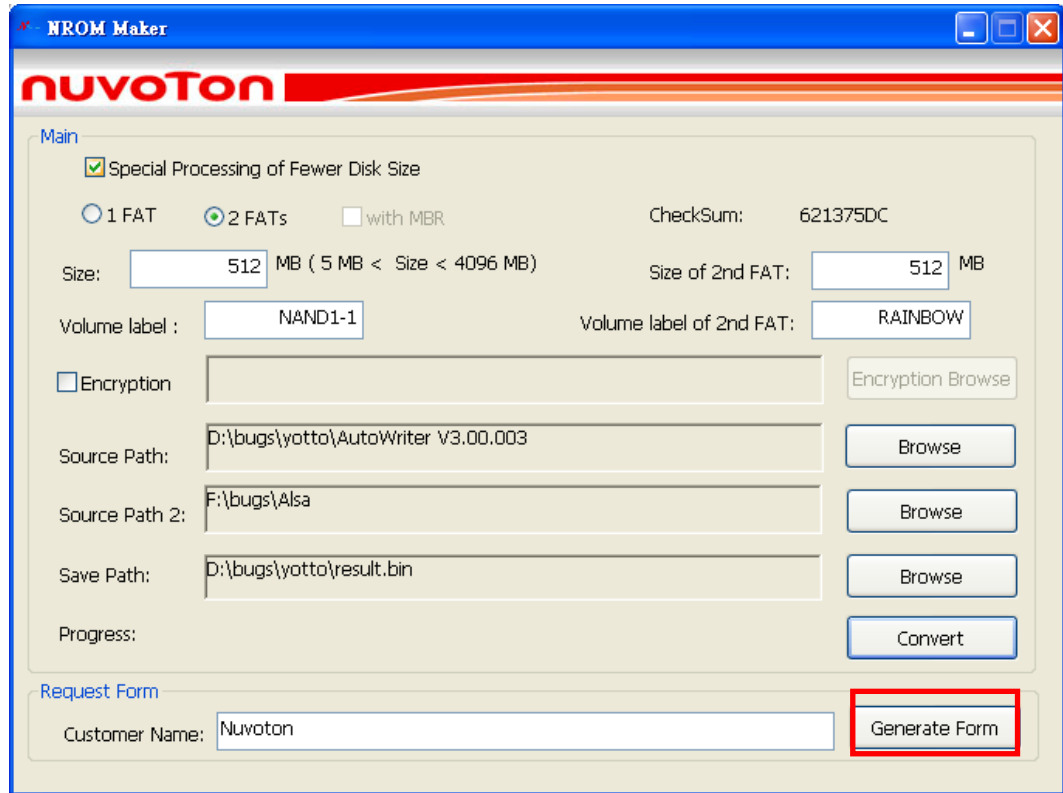
Before you click the **Convert** button, please check the cases as below:

- Make sure the size option is your want.
- Source path, source path 2 and save path are selected and their size is conform to the rule.

Click the **Convert** button and it maybe need sometime according your the size of source folder. Finally, it will show a successful dialog to remind you if the process is OK.



## 2.5. Generate customer request form



The screenshot shows the NROM Maker application window. The 'Main' tab is active, displaying various configuration options. The 'Request Form' tab is also visible at the bottom, containing a 'Customer Name' field and a 'Generate Form' button, which is highlighted with a red rectangle.

**Main Tab:**

- ☒ Special Processing of Fewer Disk Size
- ☐ 1 FAT ☒ 2 FATs ☐ with MBR
- CheckSum: 621375DC
- Size: 512 MB ( 5 MB < Size < 4096 MB)
- Size of 2nd FAT: 512 MB
- Volume label : NAND1-1
- Volume label of 2nd FAT: RAINBOW
- ☐ Encryption
- Source Path: D:\bugs\yotto\AutoWriter V3.00.003
- Source Path 2: F:\bugs\Alsa
- Save Path: D:\bugs\yotto\result.bin
- Progress:

**Request Form Tab:**

- Customer Name: Nuvoton
- Generate Form** (highlighted with a red rectangle)

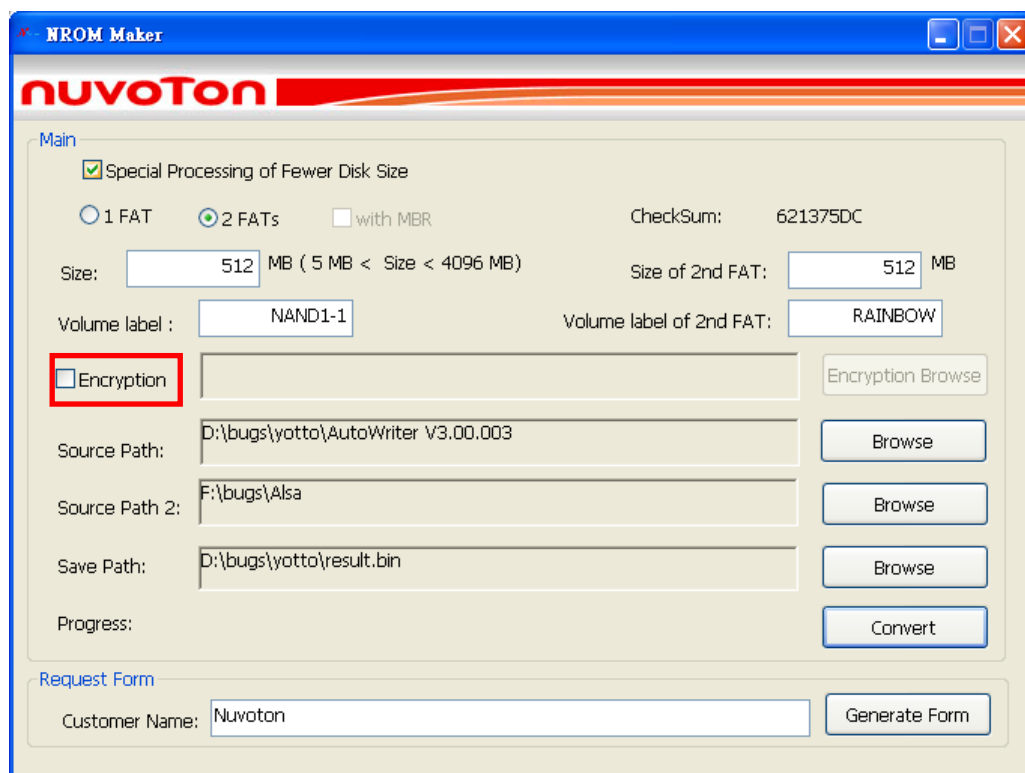
*Figure 2-5 Generate request form*

The **Generate Form** button can help customer to generate NAND ROM request form. Before you click the button, please check the cases as below

- Fill in your company name on the blank of **Customer Name**
- Save path is your request file.
- Check-sum value has been calculated and shown as upper-right corner.

Click the **Generate Form** button and the request form file will save the same folder as NRomMaker's path. The filename of the form is Request Form.ini.

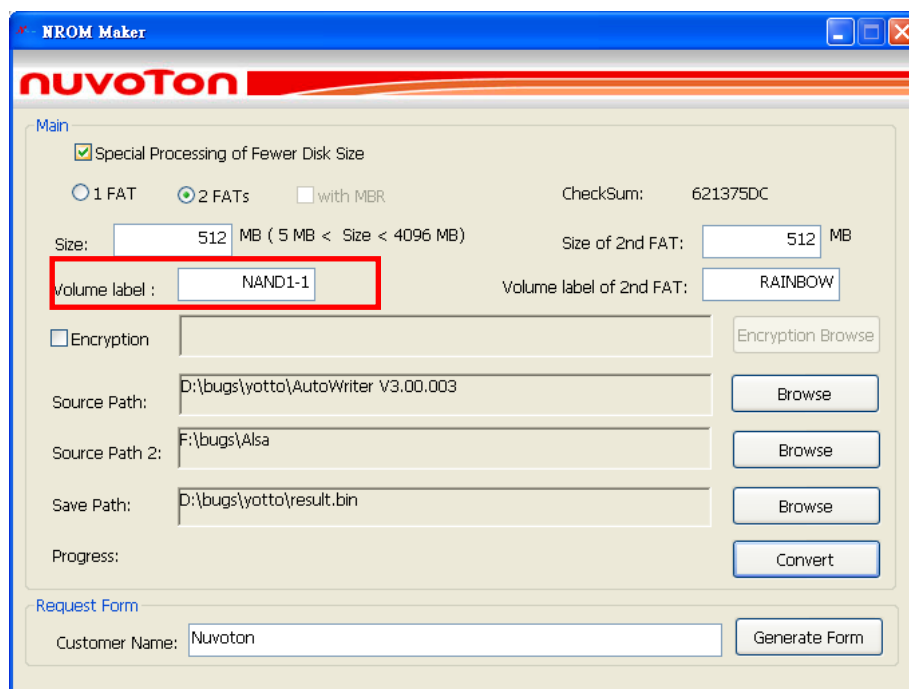
## 2.6. Encryption



*Figure 2-6 Encryption*

The **Encryption** can encrypt the result image of save path into the one encoded image. About the processing, please consult with Nuvoton for more details.

## 2.7. Volume label



*Figure 2-7 Encryption*

The maximum length of volume label is 10. If user selects the radio button 2 FATs, then there are two volume labels to set.

### 3. Revision History

Version	Date	Description
V2.00.003	Mar. 9, 2015	<ul style="list-style-type: none"> <li>• Add one check box "Special Processing of fewer Disk Size"</li> </ul>
V2.00.002	Jun. 25, 2012	<ul style="list-style-type: none"> <li>• Create one image including two FATs.</li> </ul>
V2.00.001	Sep. 16, 2010	<ul style="list-style-type: none"> <li>• Support Unicode format</li> <li>• Image size could be created between 6 MB and 4095 MB.</li> </ul>
V1.00.002	Feb. 11, 2009	<ul style="list-style-type: none"> <li>• Upgrade user interface and add generate request form function</li> </ul>
V1.00.001	Dec. 13, 2009	<ul style="list-style-type: none"> <li>• Created</li> </ul>

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