

RAiO

Image Tool User Guide

Version 1.0
July 26, 2016

RAiO Technology Inc.

Copyright RAiO Technology Inc. 2013

Revise History		
Version	Date	Description
0.1	September 01, 2014	Initial Release
0.2	February 2, 2015	Add Chapter 3 & 4
1.0	July 26, 2016	Modify Chapter 3

Preliminary

Chapter	Contents	Page
1.	Converting image (bmp/jpg) file to binary format	4
2.	Converting image (bmp/jpg) file to C language file format (*.h)	9
3.	Converting the PNG image file (with alpha channel) to binary format	13
4.	Converting the graphic cursor image file to binary format (or C language format)	16

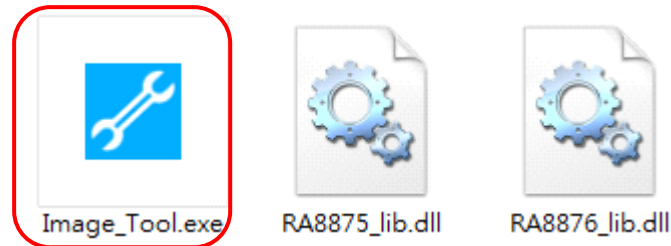
Preliminary

Before using this tool

1. This Tool supports Windows XP, Windows 7 and Windows 8.1, Windows 10
2. You must first install Microsoft Office Excel before using this tool.

1. Converting image (bmp/jpg) file to binary format

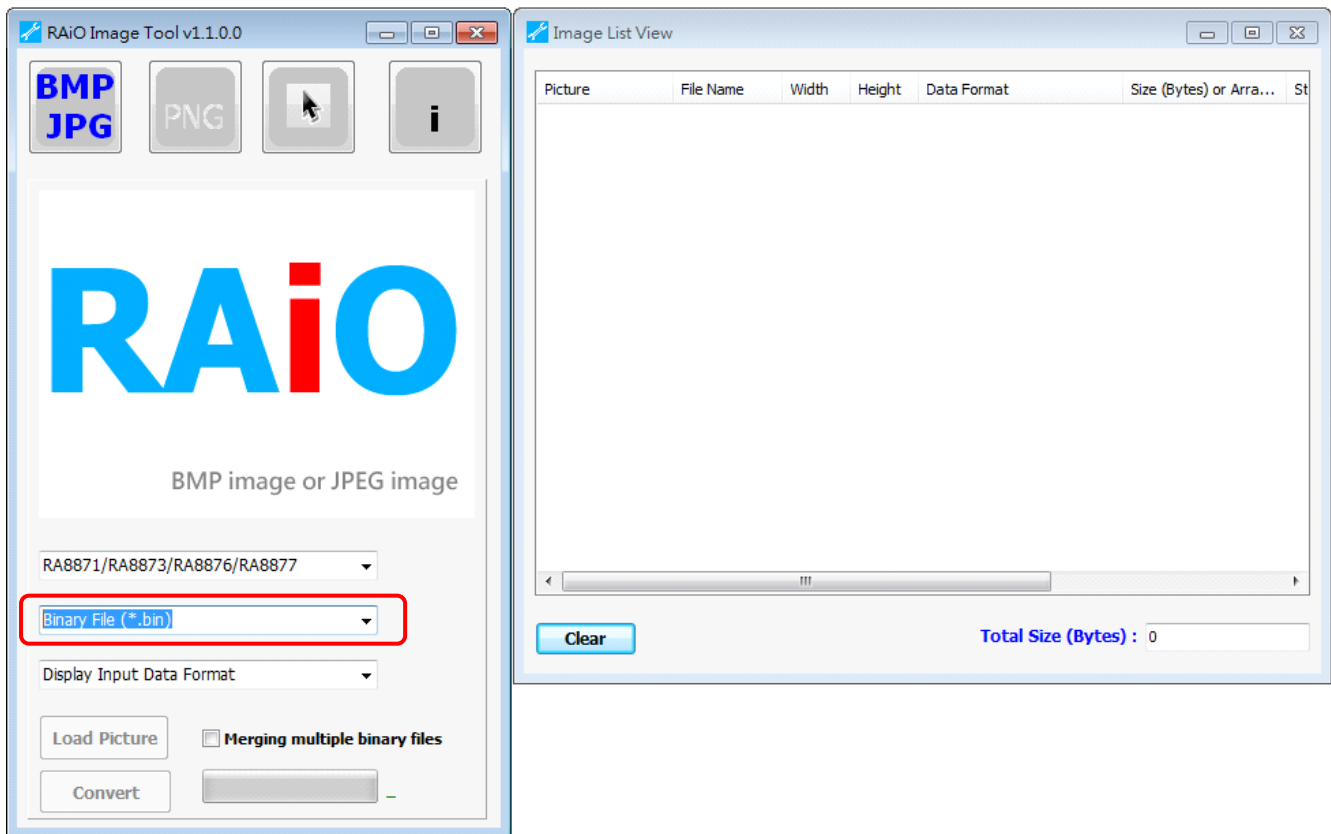
- 1 Execute RAiO Image Tool (Image_Tool.exe)



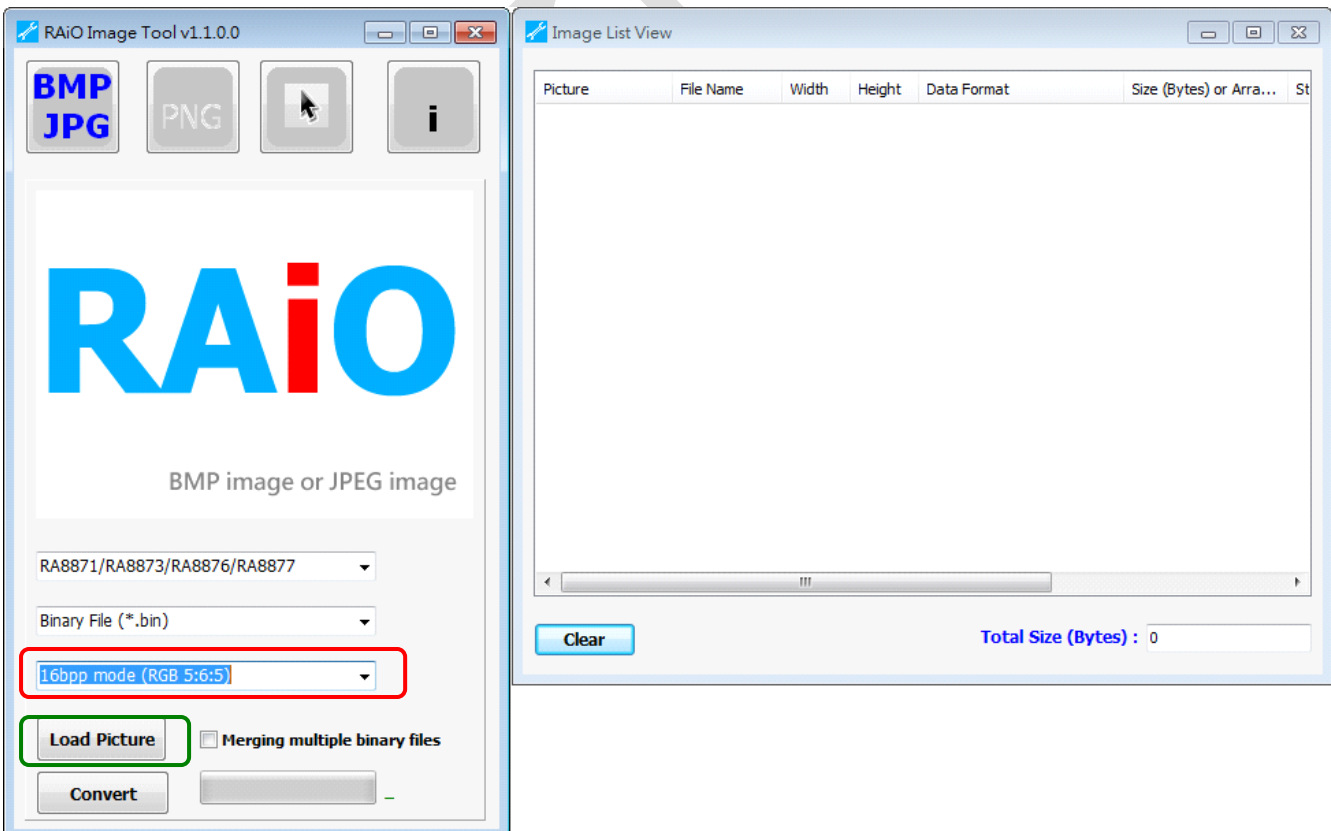
- 2 Click the “BMP JPG” button, and select IC model.



3 Select the binary file format.



4 Select color depth, and then click the “Load Picture” button.



Note

- Uncheck “Merging multiple binary files” setting **Merging multiple binary files**

The tool will convert image files to the separate binary files.

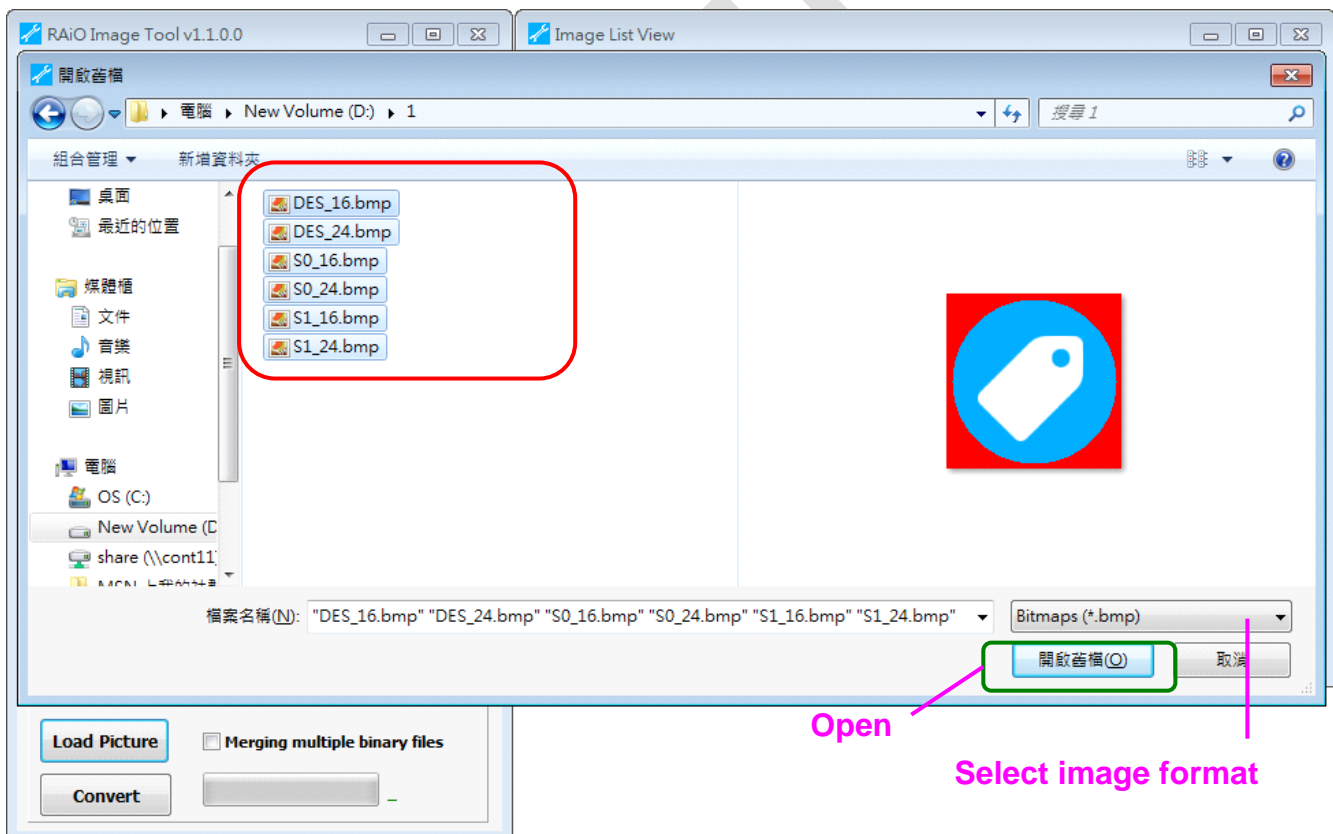
- Check “Merging multiple binary files” setting **Merging multiple binary files**

The tool will convert and merge image files to one binary file (All_xx_Pic_xxx.bin), and generate binary file information in excel file (All_xx_Pic_xxx.xls) and C header file (All_xx_Pic_xxx.h).

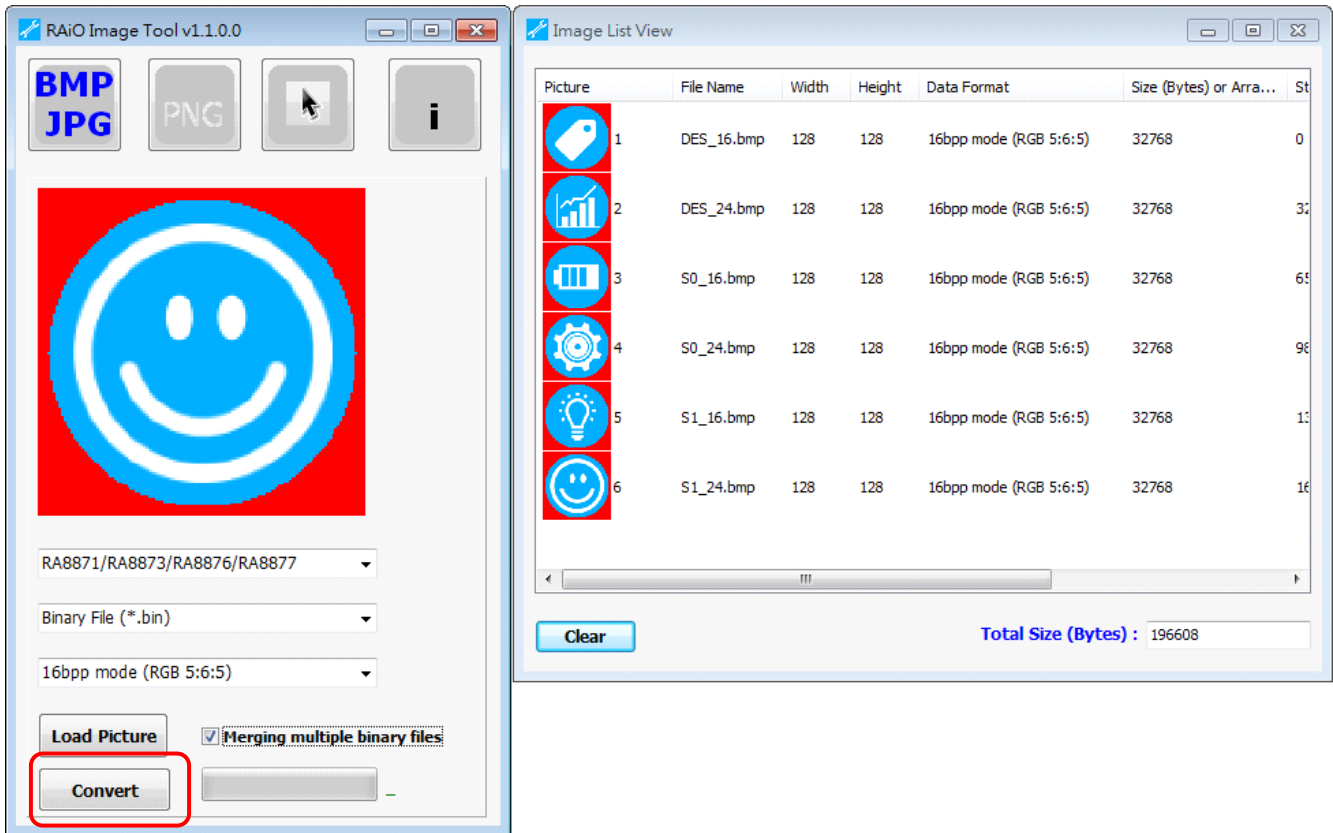
xx: IC Model.

xxx: The file name is depended the color depth setting. For example, if user selects the RA8871/RA8873/RA8876/RA8877 16bpp mode (65k colors), and then file name will be “All_76_Pic_65K.bin”.

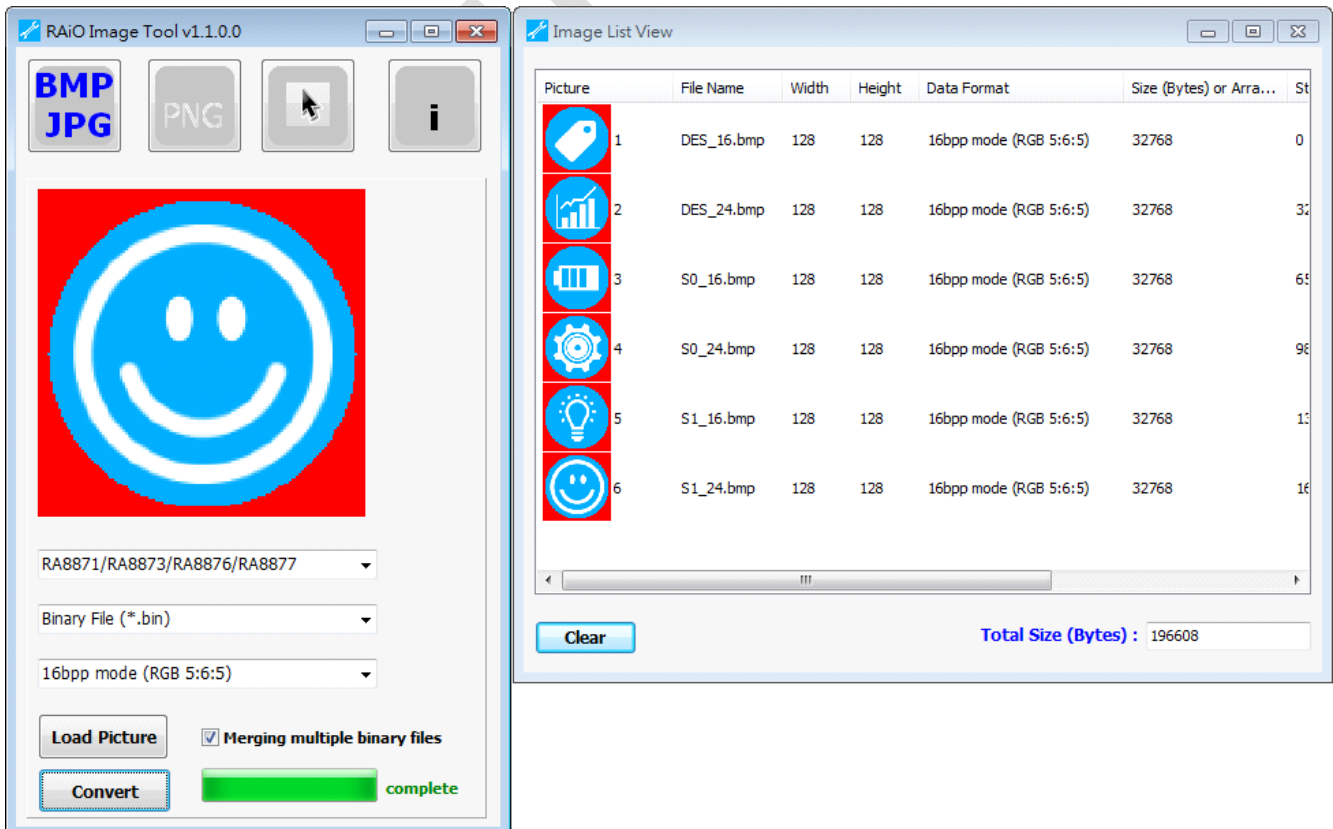
- 5 Select one or more image (bmp/jpg) files, then click “Open” button.



6 Click the "Convert" button and wait the conversion process be finished.



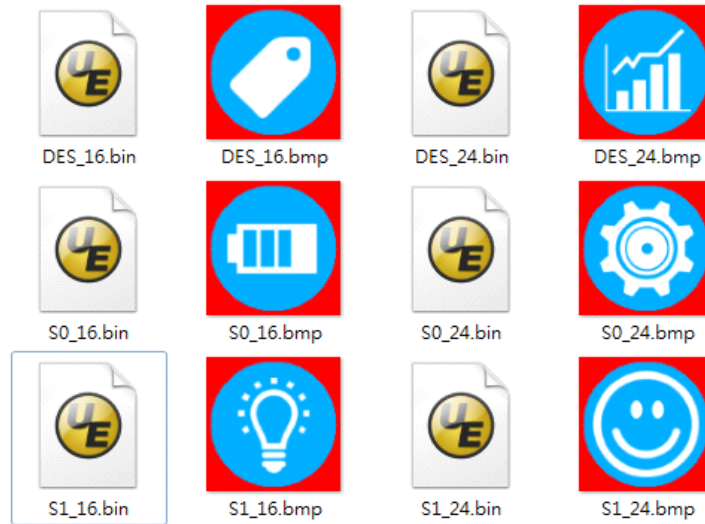
7 The conversion process is completed.



8 Conversion Results

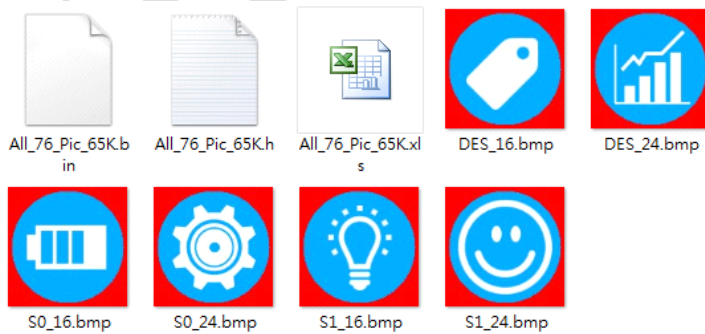
- Uncheck “Merging multiple binary files” setting **Merging multiple binary files**

Conversion Results:



- Check “Merging multiple binary files” setting **Merging multiple binary files**

Conversion Results:



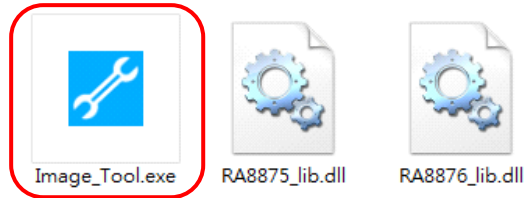
In this operation, the tool will generate an excel file “All_xx_Pic_xxx.xls” and a C header file “All_xx_Pic_xxx.h”.

The excel file contains the file name, width, height, data format, size and start address, etc.

The C header file defines a structure to hold this information which consists of the image filename, width, height, size and start address. Users can use this structure to obtain the image information.

2. Converting image (bmp/jpg) file to C language file format (*.h)

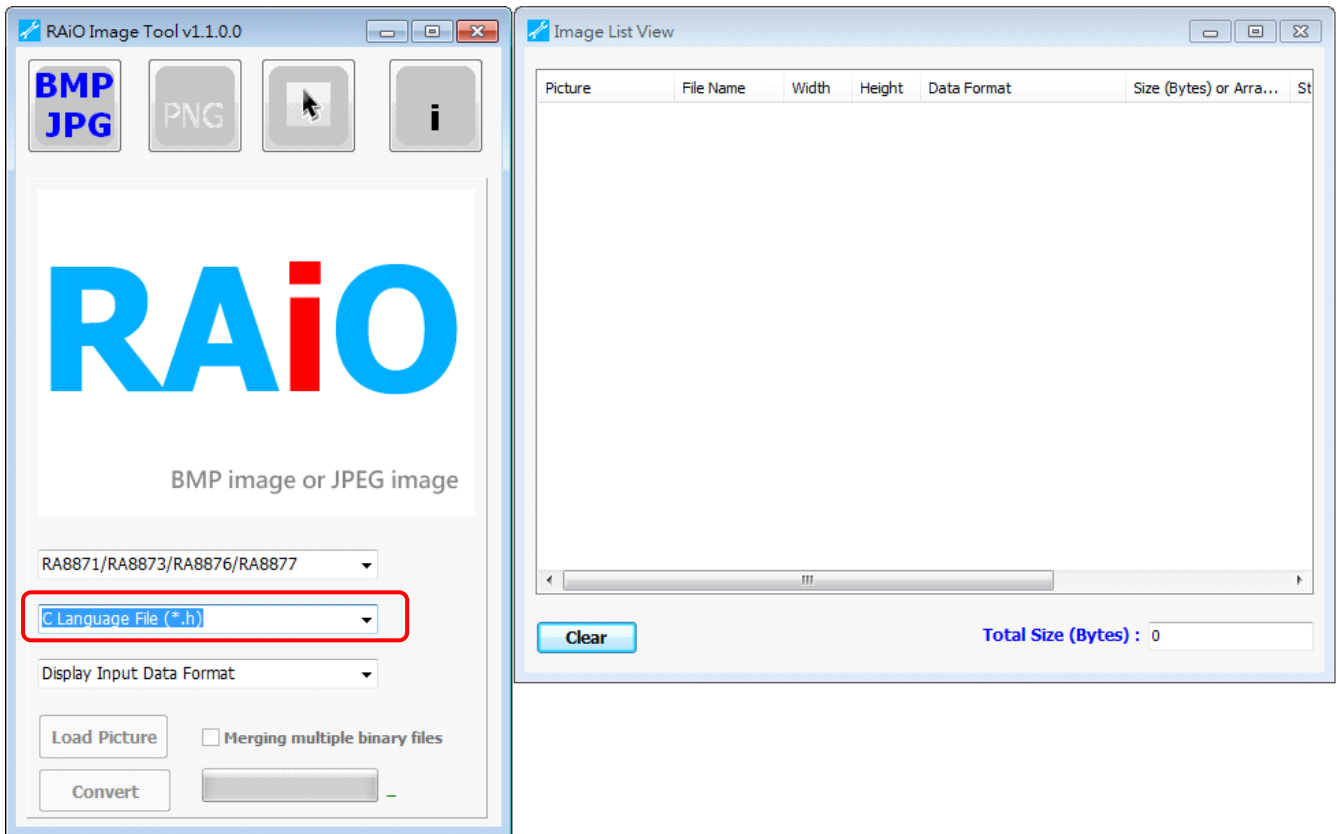
- 1 Execute RAiO Image Tool (Image_Tool.exe)



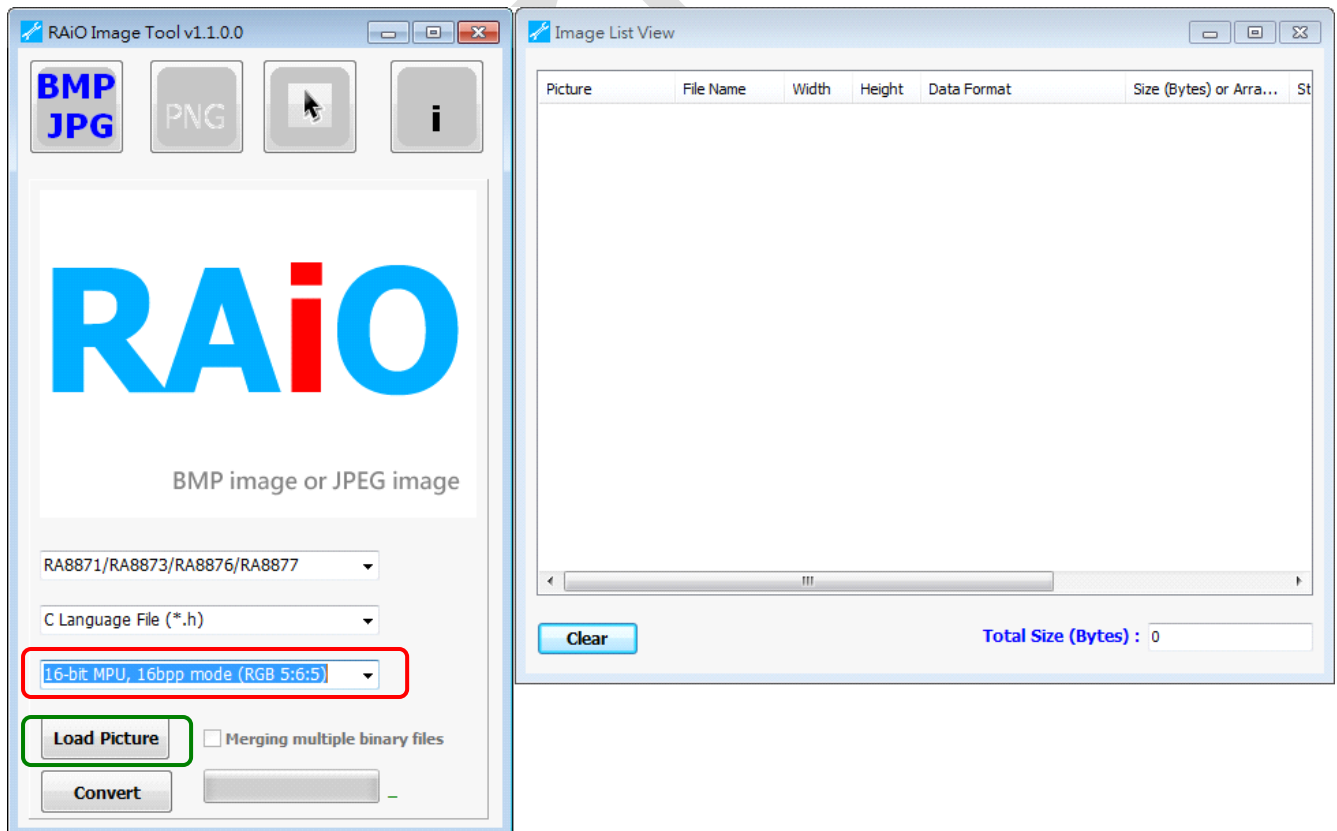
- 2 Click the “BMP JPG” button, and select IC model.



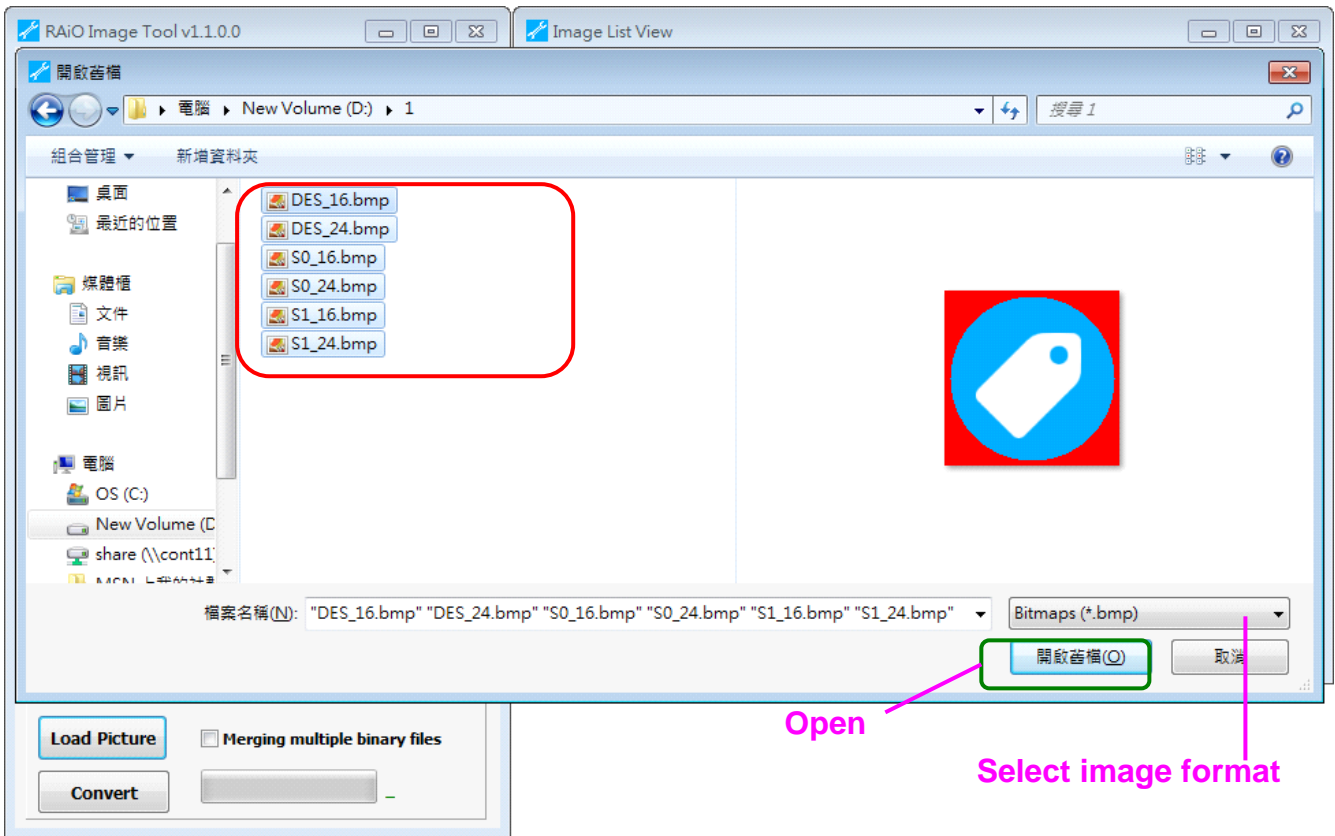
3 Select C language file format.



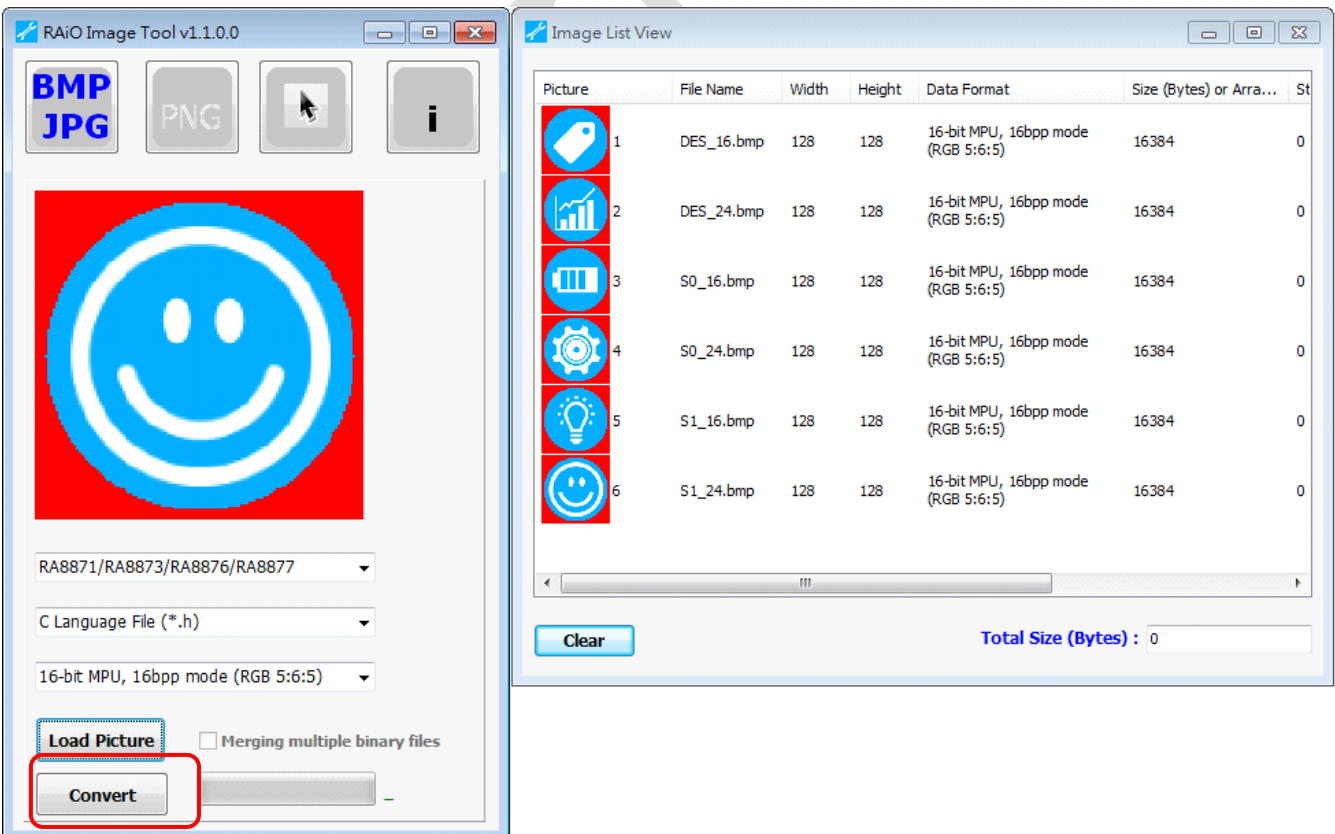
4 Select data format, then click the "Load Picture" button.



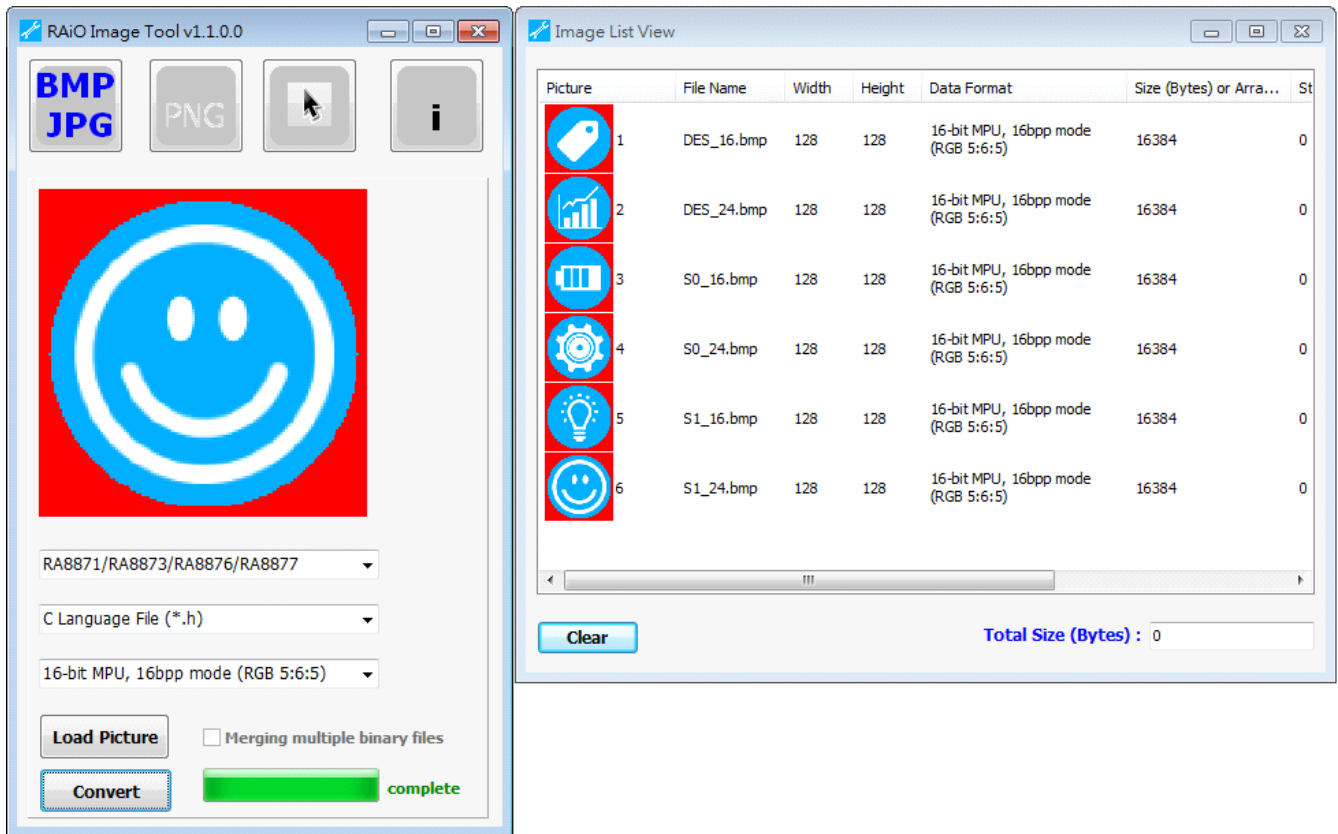
5 Select one or more image (bmp/jpg) files, then click “Open” button.



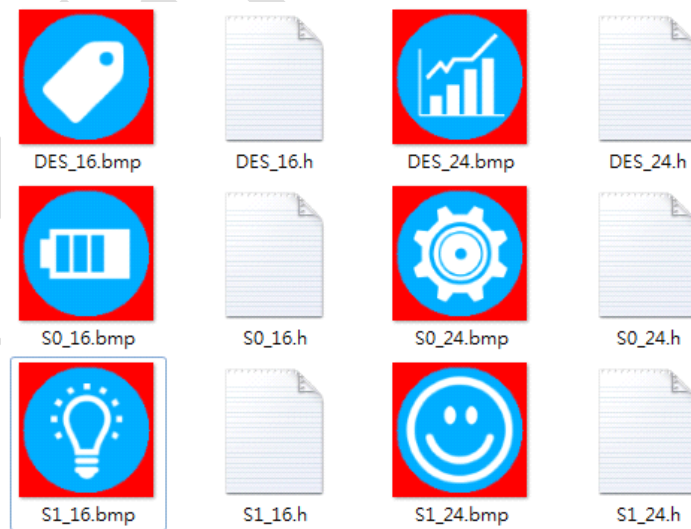
6 Click the “Convert” button and wait the conversion process be finished.



7 The conversion process is completed.



8 Conversion Results

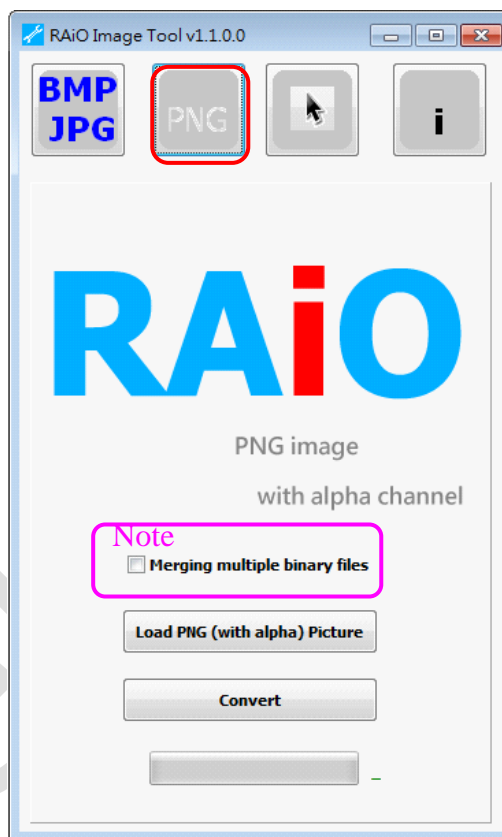


3. Converting the PNG image file (with alpha channel) to binary format

1 Execute RAiO Image Tool (Image_Tool.exe)



2 Click the “PNG” button, then click the “Load PNG Picture” button.



Note

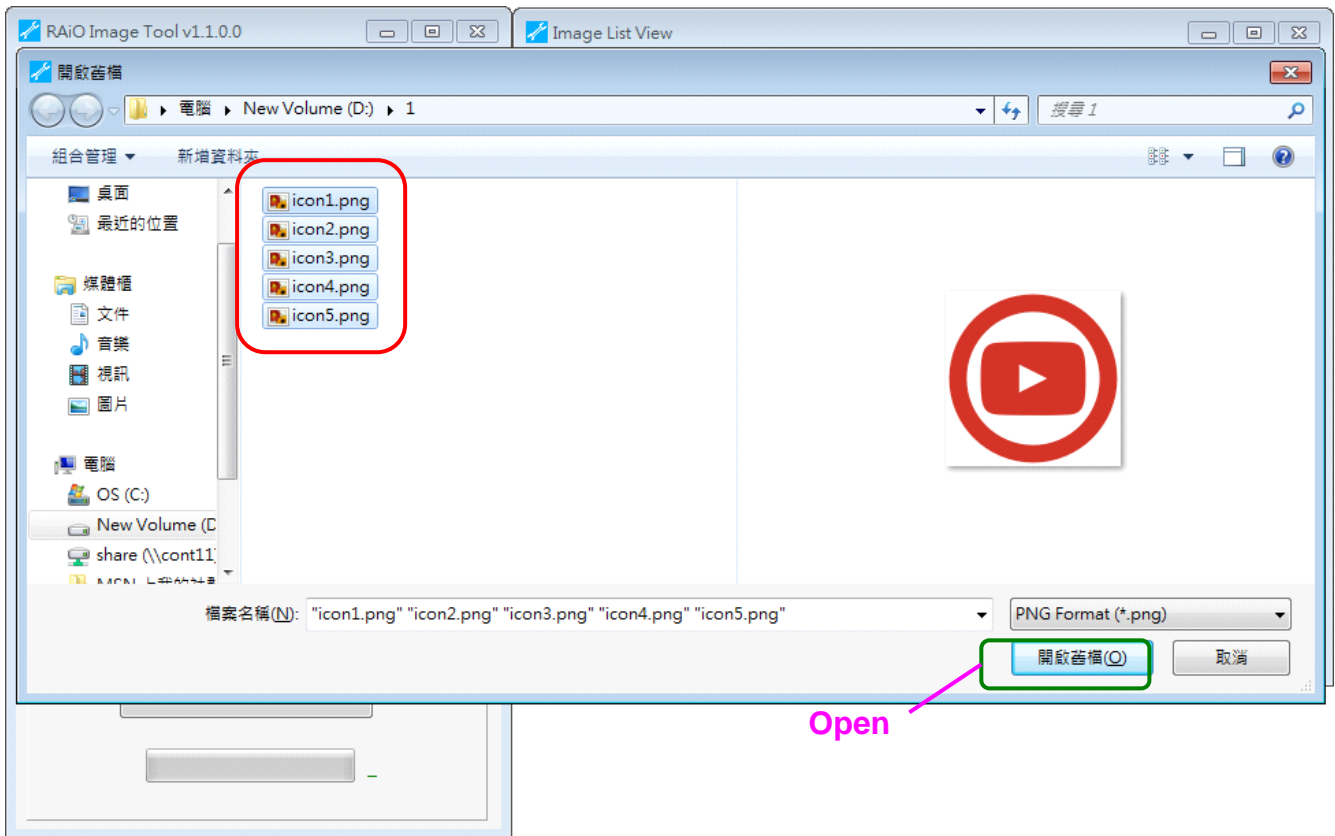
■ Uncheck “Merging multiple binary files” setting **Merging multiple binary files**

The tool will convert image files to the separate binary files.

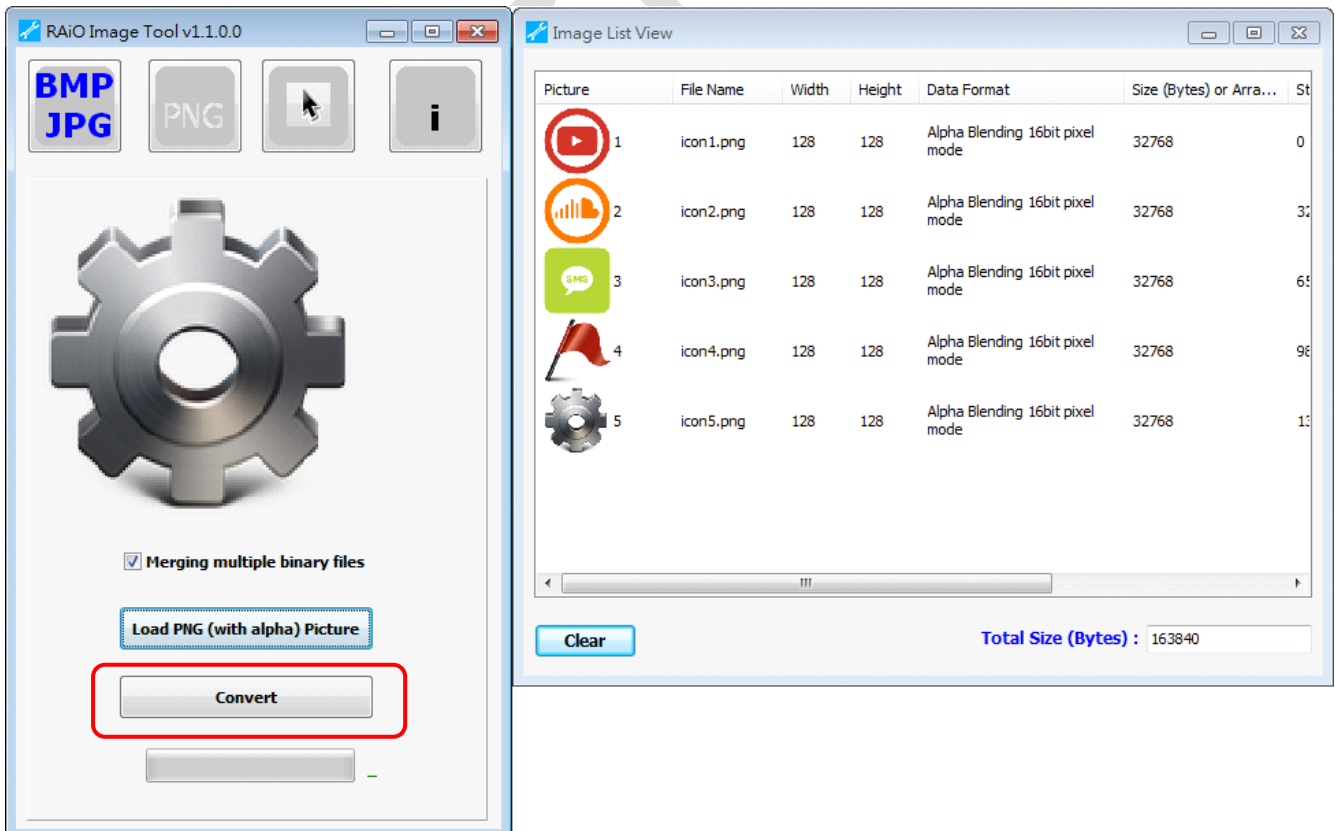
■ Check “Merging multiple binary files” setting **Merging multiple binary files**

The tool will convert and merge image files to one binary file (All_76_alpha_pixel_16bit.bin), and generate binary file information in excel file (All_76_alpha_pixel_16bit.xls) and C header file (All_76_alpha_pixel_16bit.h).

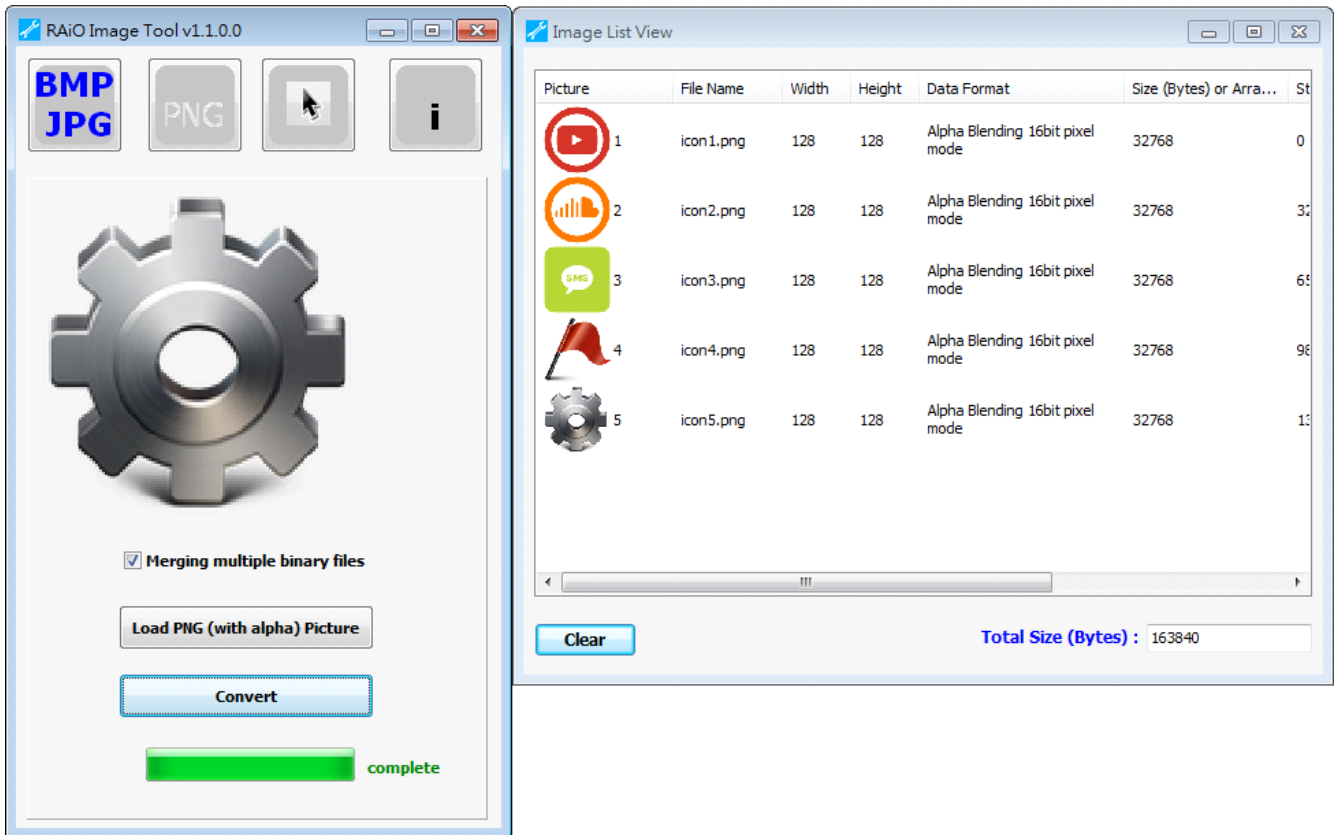
3 Select a PNG image file, then click “Open” button.



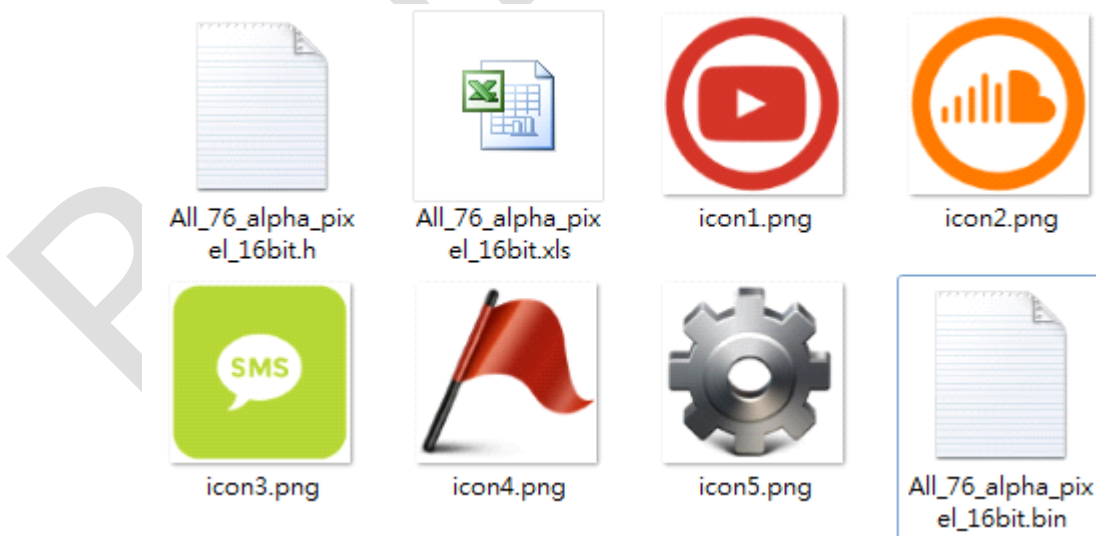
4 Click the “Convert” button and wait the conversion process be finished.



5 The conversion process is completed.



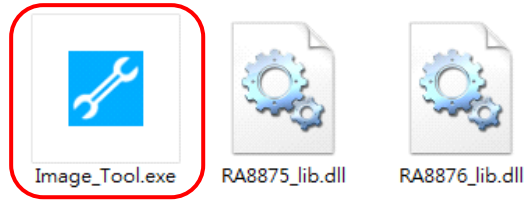
6 Conversion Results. (Check "Merging multiple binary files" setting)




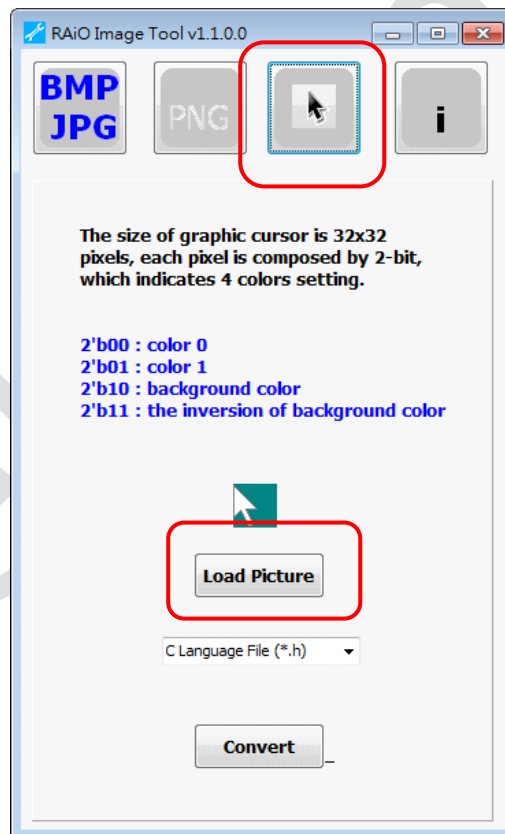
This binary file is used for BTE alpha blending 16bit pixel mode.(RA8871 / RA8873 / RA8876 / RA8877)

4. Converting the graphic cursor image file to binary format (or C language format)

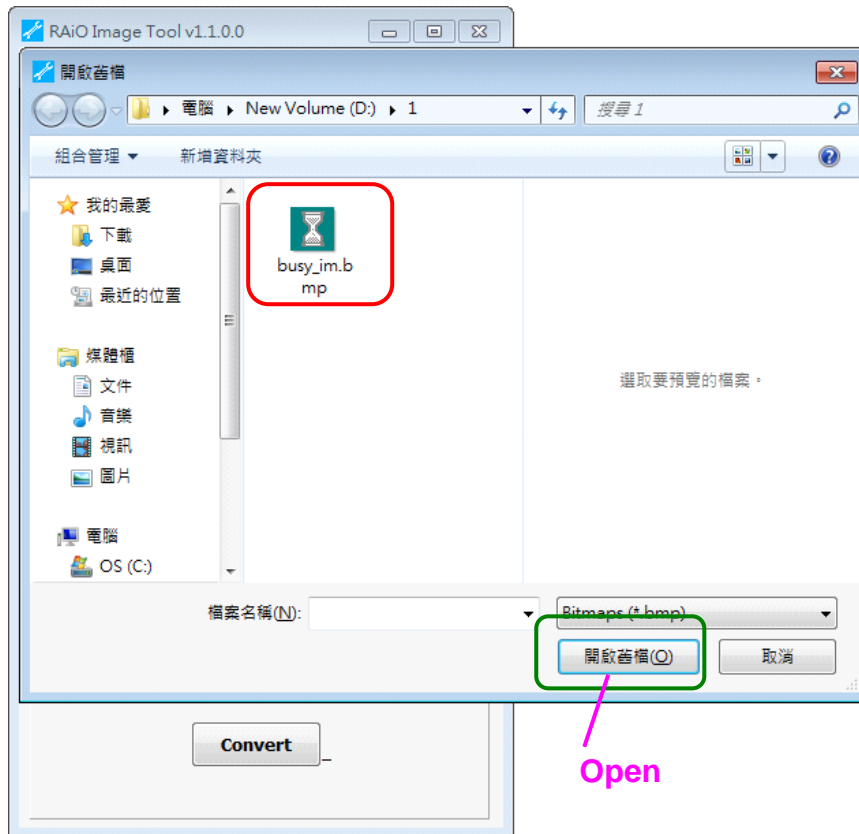
- 1 Execute RAiO Image Tool (Image_Tool.exe)



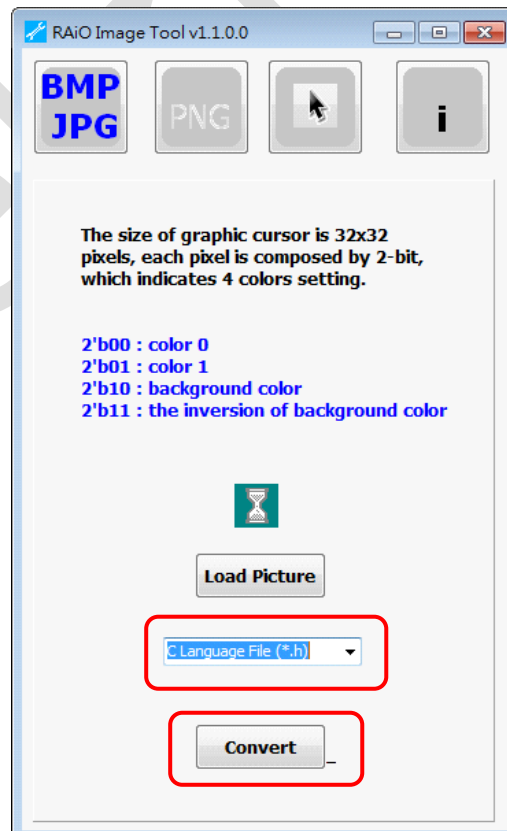
- 2 Click the  button, then click the “Load Picture” button.



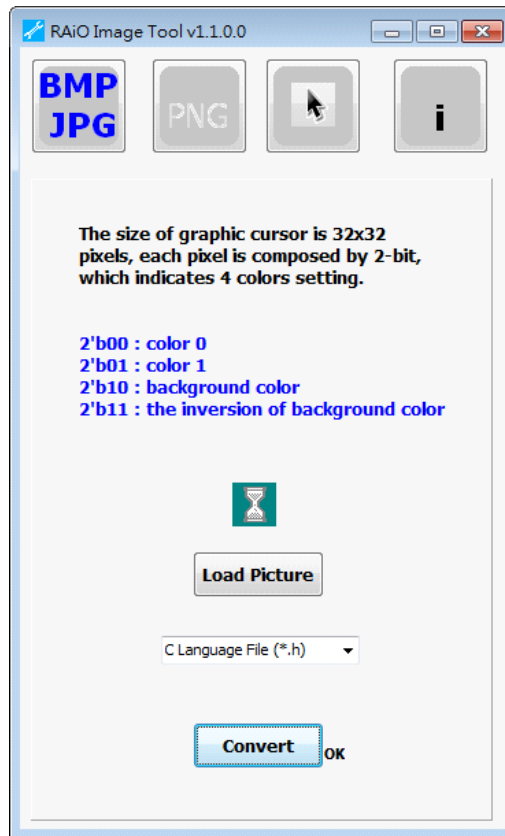
- 3 Select a graphic cursor image file, then click "Open" button.



- 4 Select binary file or C language file, then click the "Convert" button and wait the conversion process be finished.

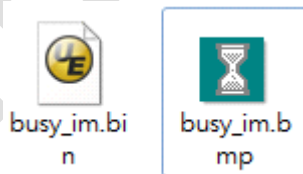


5 The conversion process is completed.



6 Conversion Results

■ Binary File (.bin)



■ C Language File (.h)

