九齊科技股份有限公司
Nyquest Technology Co., Ltd.

User Manual

MP3-Like

OTP's Easy MP3 and WAV DIY Programmer

Version 3.6
Aug. 27 2025

Table of Contents

1   Introduction

MP3-Like is OTP's Easy MP3 and WAV DIY Programmer for NY2 / NY3 / NY4 / NY5 / NY5+ / NY6 / NY7 / NX1 / NX1EF series of Nyquest Technology Co., Ltd. The main purpose of *MP3-Like* is to facilitate customers to develop related products.

1.1   Outline of this Manual

1.2   What Is *MP3-Like*

MP3-Like is OTP's Easy MP3 and WAV DIY Programmer for NY2 / NY3 / NY4 / NY5 / NY5+ / NY6 / NY7 / NX1 / NX1EF series of Nyquest Technology Co., Ltd.. Users simply select the desired sound to be compiled and downloaded. This way the product development process is simplified and the product development efficiency is enhanced.

1.3   The installation of *MP3-Like*

Please contact Nyquest Technology to obtain the latest installation program. Double click the execution icon to activate the installation wizard, and following the instructions to easily complete the installation process.

System Requirements:

◆ A PC compiled with Pentium 1.3GMHz or higher CPU, Windows7/8/10/11.

◆ At least 1GB DRAM.

◆ At least 2G hardware space.

◆ A display card and monitor that support 1366x768 resolution or higher.

◆ Microsoft .NET Framework 4.8 installed.

2 *MP3-Like* Interface

When executing *MP3-Like*, the interface will show up.
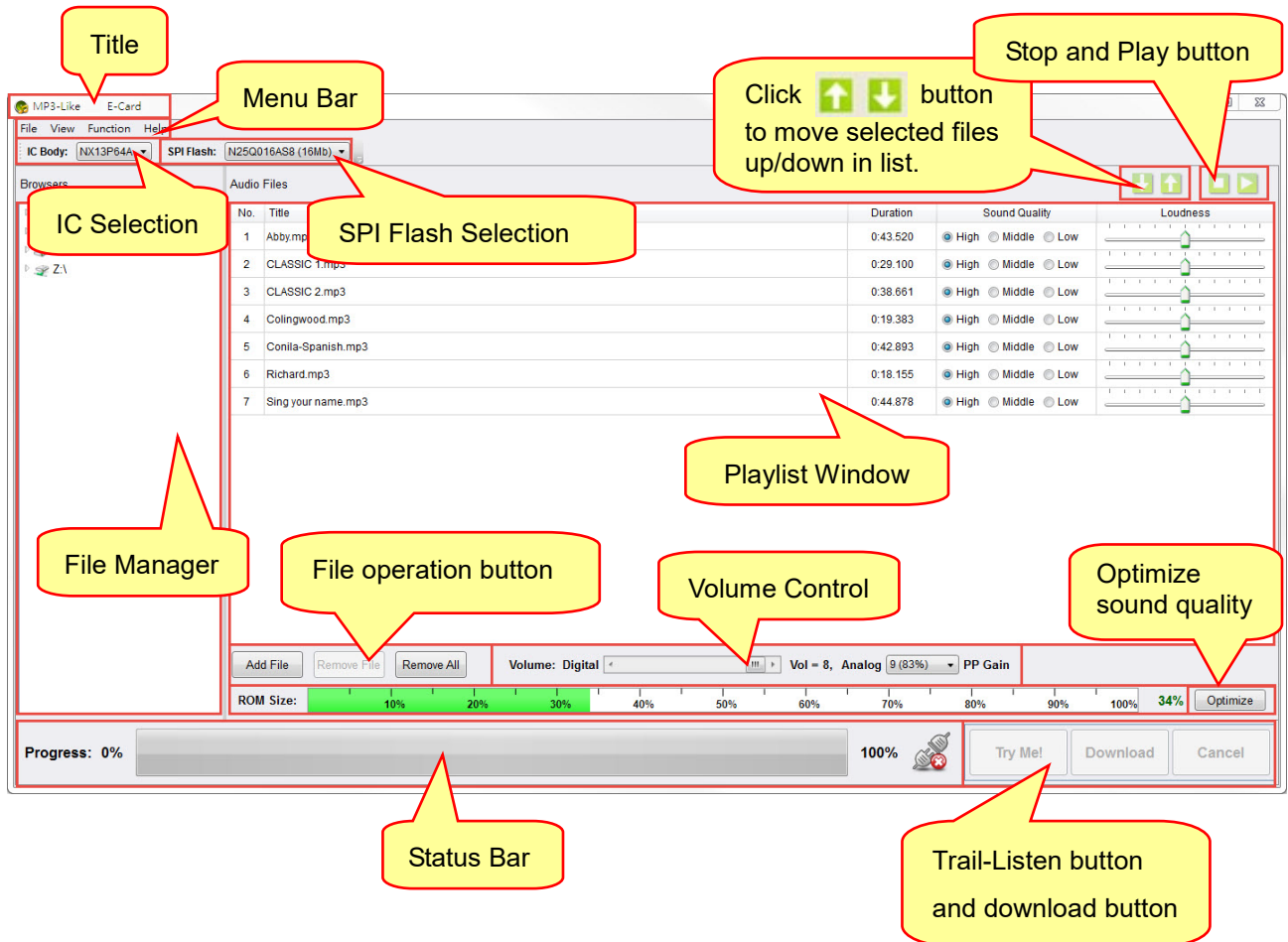
2.1 Title

Shown here are the title of software, version number and custom project name.

MP3-Like 3.10

2.2 Menu

The function menu contains: File, View, Function, and Help.

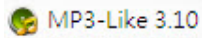File   View   Function   Help
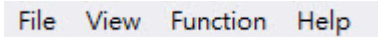
2.2.1 File

The following menu will appear by clicking [File]:

File
⏻ Exit
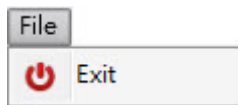
⏻ **Exit:** Exit *MP3-Like*.

2.2.2 View

The following menu will appear by clicking [View]:

View
🔄 Refresh   F5
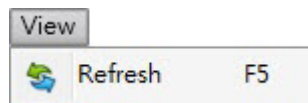
🔄 **Refresh:** Refresh the contents of Browsers.

2.2.3 Function

The following menu will appear by clicking [Function]:

Function
Configure Download
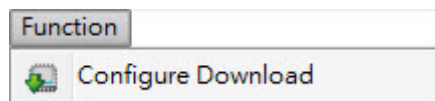
Configure Download︰User can use this option to set the trail-listen hardware. Only support FDB_Writer, Q-FDB_Writer, Romter and NX_Programmer at present.
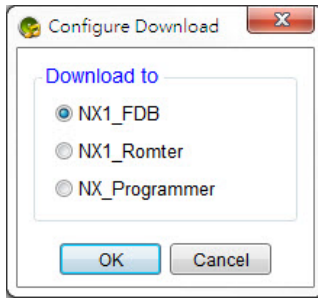
Note: Only NX_Programmer supports NX1 / NX1EF series.

2.2.4 Help

The following menu will appear by clicking [Help]:
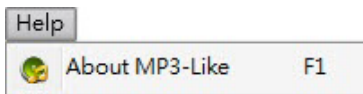
About MP3-Like: Show current *MP3-Like* version and the contact information for technical support.

2.3 Shortcut

IC Body: Select IC Body.

SPI Flash: Choose SPI Flash type.

Note: Only support NX11P / NX13P / NX11FS / NX13FS series to choose SPI Flash.

2.4　Audio File Edit Zone

All audio files are displayed in this zone; user can use the keys, mouse to drag or right-clicking menu to add/delete audio files.

No.: Sequence. (Starting from 1 sequentially)

Title: Display the song's name.

Duration: Length of sound playback, namely "minutes: seconds: millisecond".

Sound Quality: Users could set the sound quality of converted files in accordance with their demands.

Loundess: After setting Main Volume, users could adjust the loudness of each converted file precisely in accordance with their demands.

Optimize: Press `Optimize` for utilizing ROM Size to approach 100%, that will help to optimize the sound quality.
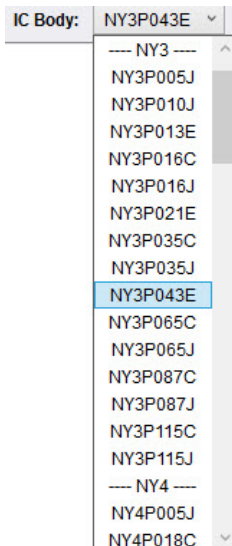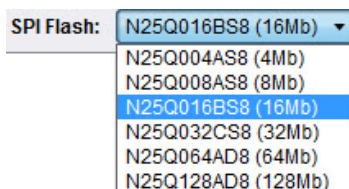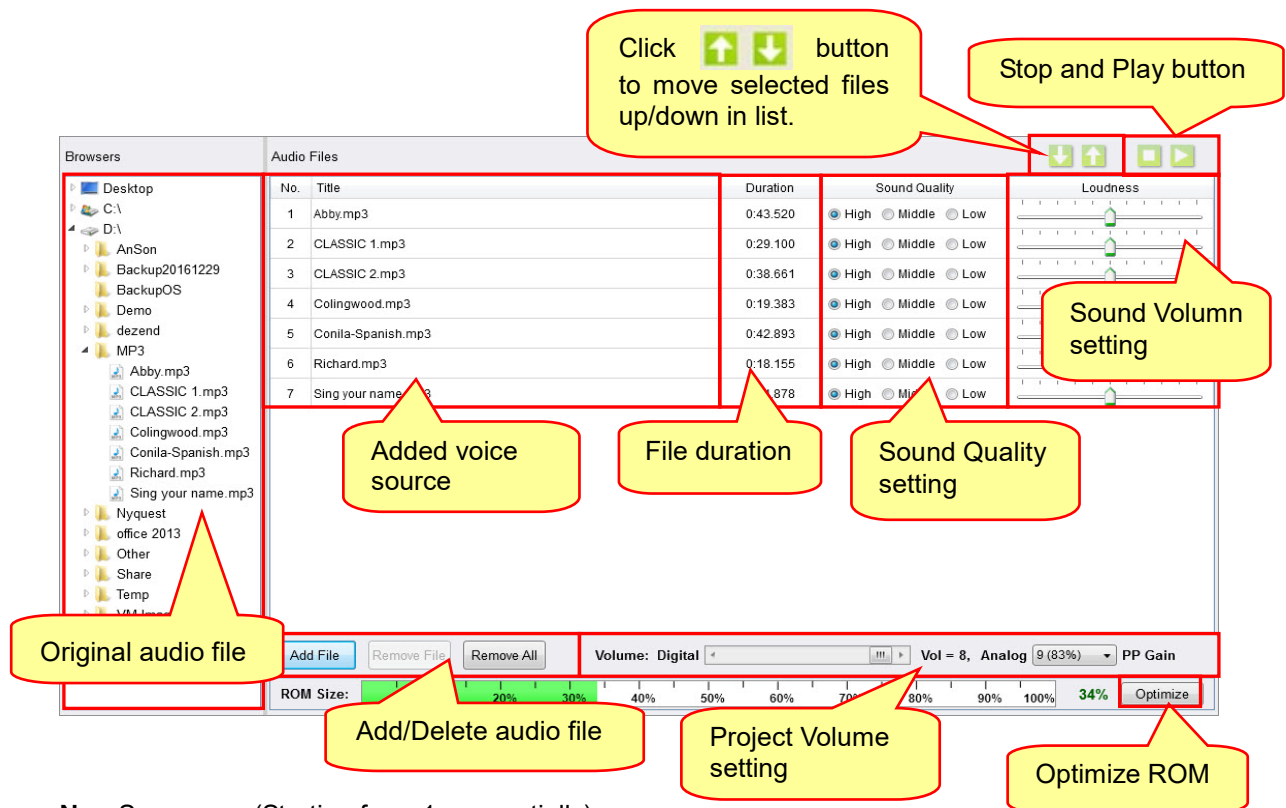
Note:

1. *Once user presses the "Optimize" button, it will gray out `Optimize` and can not be pressed again. User could press this button again on conditions that user adds/deletes files or changes setting.*

2. *When user adds/deletes files or changes setting, the program will re-estimate ROM Size in default. If user wants to set Optimize again, please re-press `Optimize` button.*

3. *When the estimated ROM Size exceeds 100%, the Optimize function could not be used.*

4. *If MP3-Like is in the procedure of "Try Me!" or "Download", user could not use the Optimize function.*

2.4.1   How to add Audio File in *MP3-Like*

Click [Add File]   To add audio file.

Select desired file then press [Open] .

The newly added files will automatically appear within the playlist, as figure below.
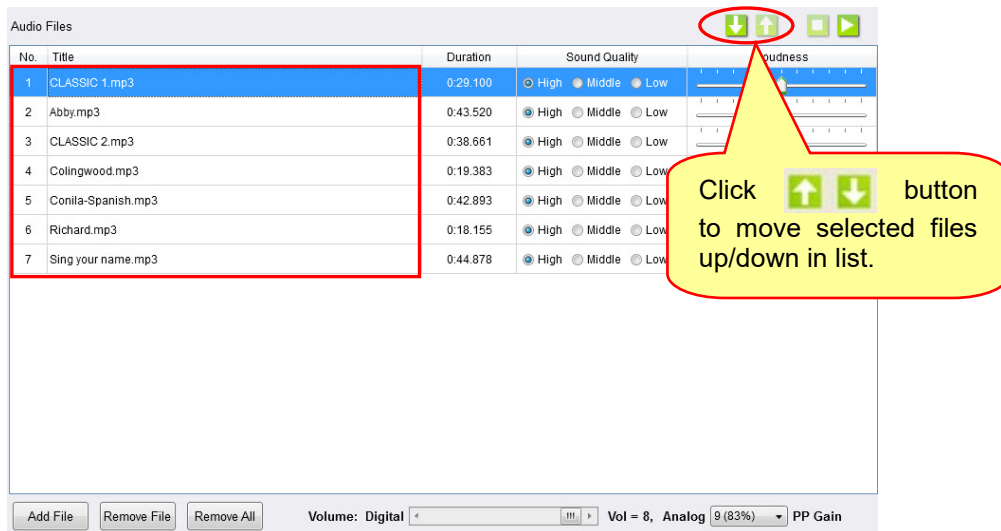
2.5 Status Bar

Status Bar is for showing the current status of *MP3-Like* including ROM Size, Progress, and Device status.
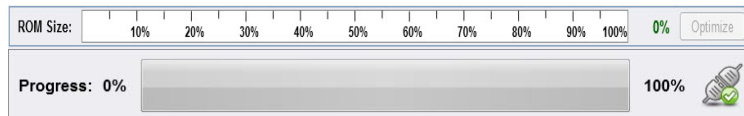
2.5.1 ROM Information

Display the current ROM size and the percentage of ROM usage. When the file is added, the system will assess the occupied ROM Size in advance and the percentage occupied by compiled file only will be shown after compilation. If the size of compiled file does not exceed the ROM size, the percentage area will be shown in green. Otherwise red color will be shown in that area.

The following figure shows that the size of compiled file does not exceed the capacity of ROM.

The following figure shows that the size of compiled file exceeds the capacity of ROM.

2.5.2 Progress

The progress bar on the lower left will display the current progress while user is executing "Try Me!" or "Download" function.

2.5.3 Hardware Status

Here displays the current state of the hardware connection, *MP3-Like* supports FDB_Writer, Q-FDB_Writer, Romter, NX_Programmer, OTP_Writer and Smart_Writer. Please make sure hardware equipped and connected in advance for trial-listing and downloading.

The following figure shows Hardware tool is disconnected.

The following figure shows Hardware tool is connected.

2.6 Rehearse with Download Function

User can press "Try Me!" or "Download" button to download the program to the Demo Board or OTP IC for trial-listening.

Try Me!: Click on "Try Me!" to download voice files to Demo Board or Romter for rehearsal (according to Configure Download setting). User can trial-listen for the project.

Download: Click on "Download" to start downloading file to the memory of OTP IC (with OTP Writer). After completion, user can place the programmed IC in desired module.

**Cancel:** Cancel the running "Try Me!" or "Download" function.

Note:

1. *Make sure hardware tool equipped and connected in advance, and ICE (display* ⚙️ *icon),* ⬛Try Me! *function only works when hardware tool is connected.*

2. *Users have to carry out "Try Me!" program before executing "Download" function.*

3. *When System is executing "Try Me!" or "Download" program, it will continue to execute current step even if the* ⬛Cancel *button is pressed.*

4. *Please note that* ⬛Cancel *button is not working when the program has proceeded to "write to OTP".*

5. *Please make sure the PA0 and PA1 pin of OTP IC are disconnected, otherwise it will lead to download failed.*

6. *When OTP_Writer (Ver.B), OTP_Writer (Ver.C), Smart_Writer (Ver.A) and NX_Programmer (supports NX1 series only) are connected to a computer simultaneously, executing "Download" will give priority to Smart_Writer (Ver.A).*

7. *After executing "Try Me!" in the End Customer Interface Mode, it generates the Demo.bin file to the installation directory and automatically deletes it when the program is closed.*

8. *When user executes the "Download" function for NX1 / NX1EF series, the UI will provide selections for downloading to IC, SPI Flash or both.*

3 *MP3-Like* Quick Start

User can create *MP3-Like* project based on the following six steps.

Step 1: Select desired IC Body.

Step 2: Add desired song to play.

Step 3: Set Sound Quality.

Step 4: Set Loudness.

Step 5: Set initial volume.

Step 6: Set Optimize.

Step 7: Trial-listen project.

Step 1: Select desired IC Body.
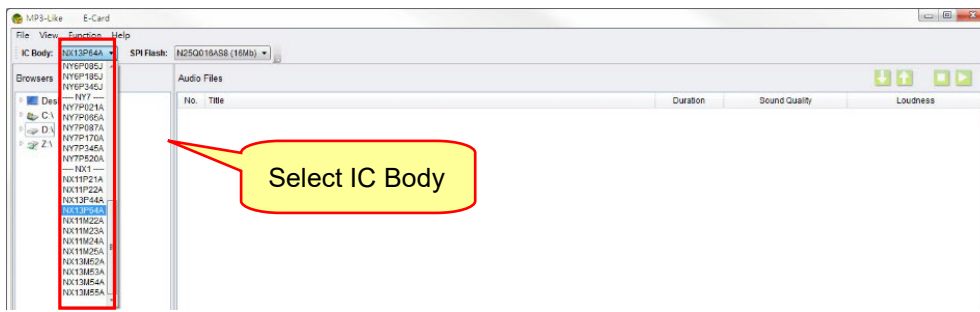
Step 2: Add desired song to play.

Three methods are available for adding audio files in Playlist window.

1. Directly left-click the desired files and drag them to the right of Play List.
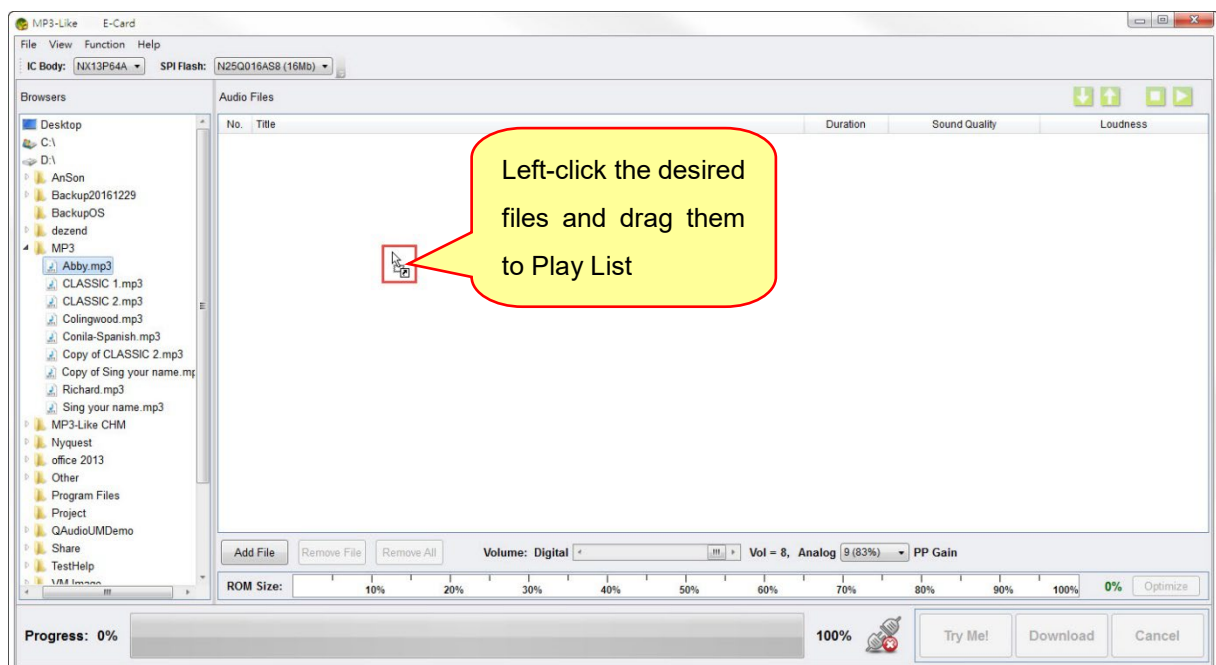
2. Click [Add File] button to add desired file to Play List.

Select file then press "Open"
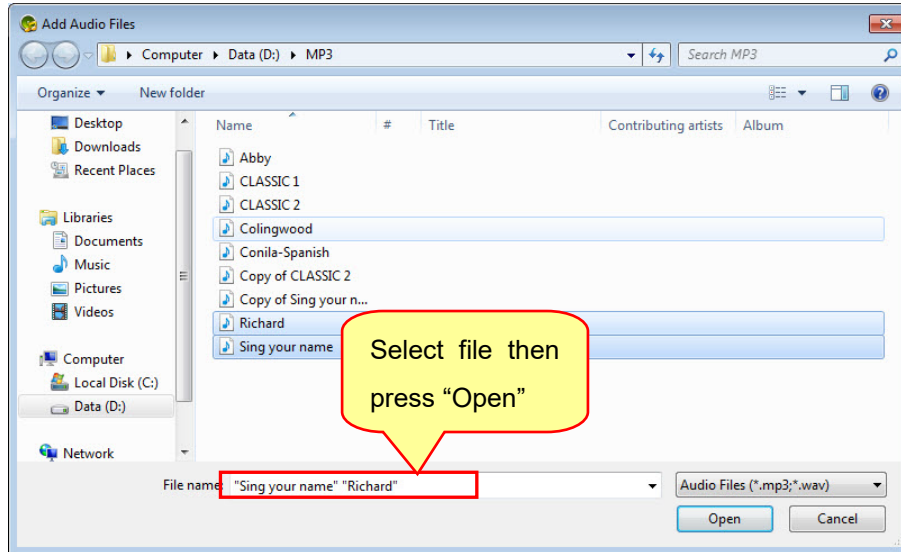
3. Right-click in drop-menu to select file.

Right-click to select file
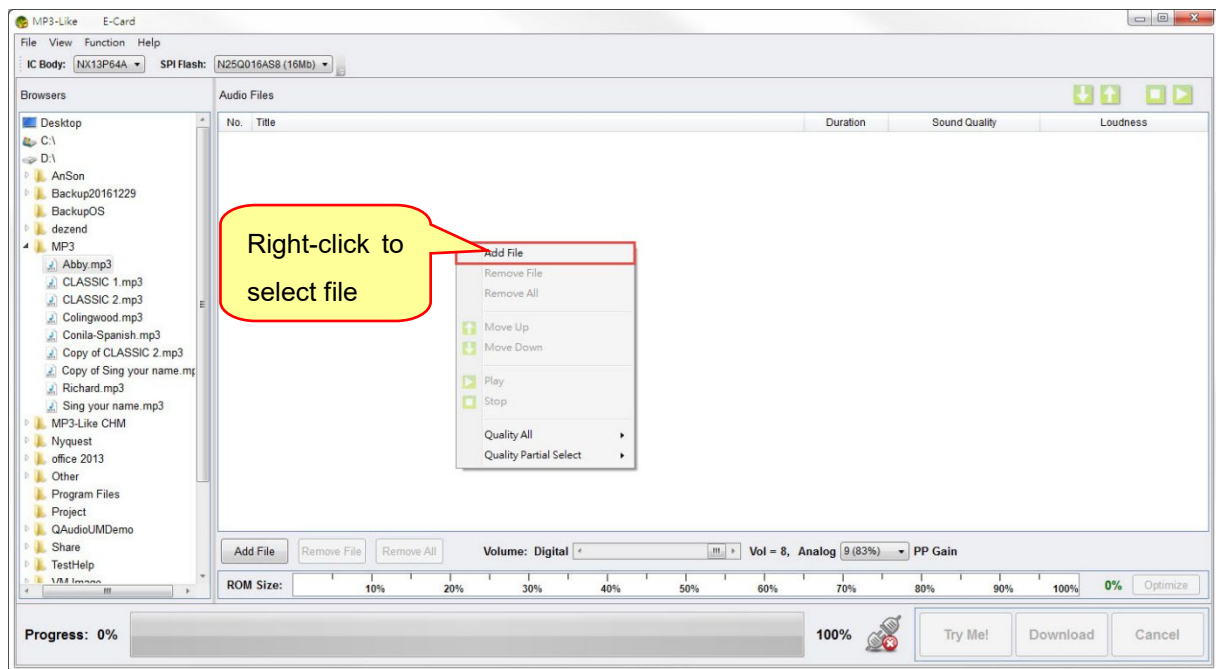
Step 3: Set Sound Quality.

Users can set Sound Quality for audio files playback, including "High", "Middle" and "Low" options, setting method is as following.

1. Click file listed for Sound Quality setting.
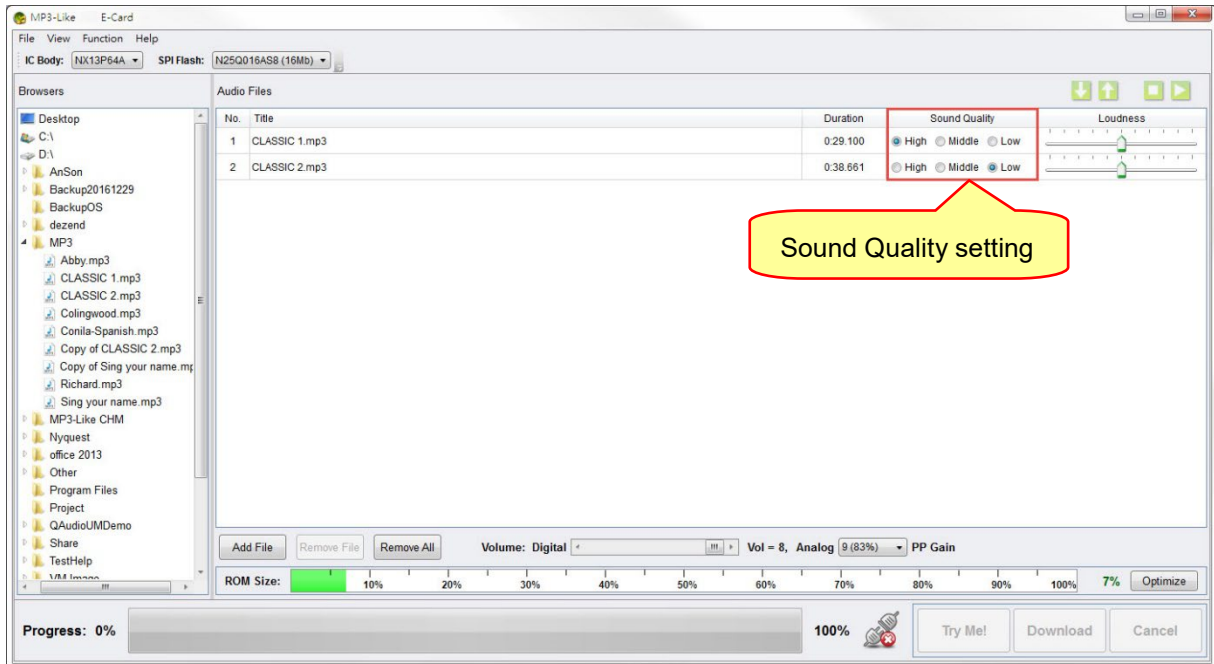
2. Right-click menu setting.
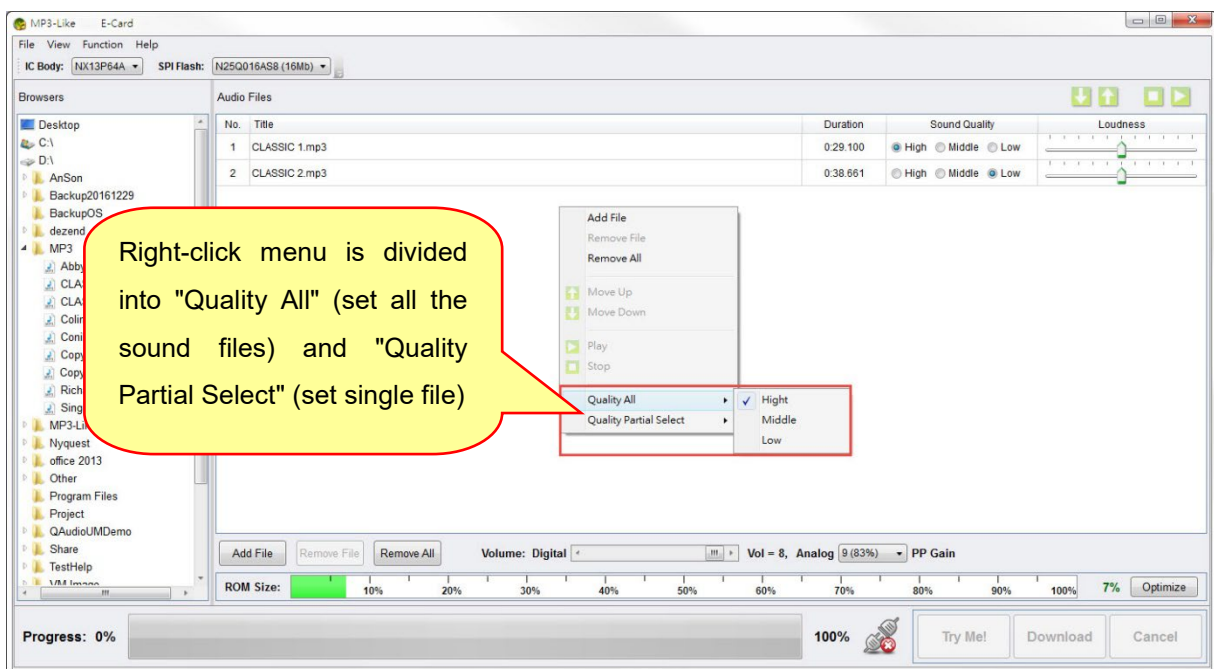
Note: Sound Quality setting is in connection with ROM Size. "High" Sound Quality has the best sound quality, but occupies the largest ROM Size.

Step 4: Set Loudness

Users could set the Loudness function of audio files by increasing/decreasing 5 dB levels, the procedure is as follows.

Select the Loudness volume scales manually
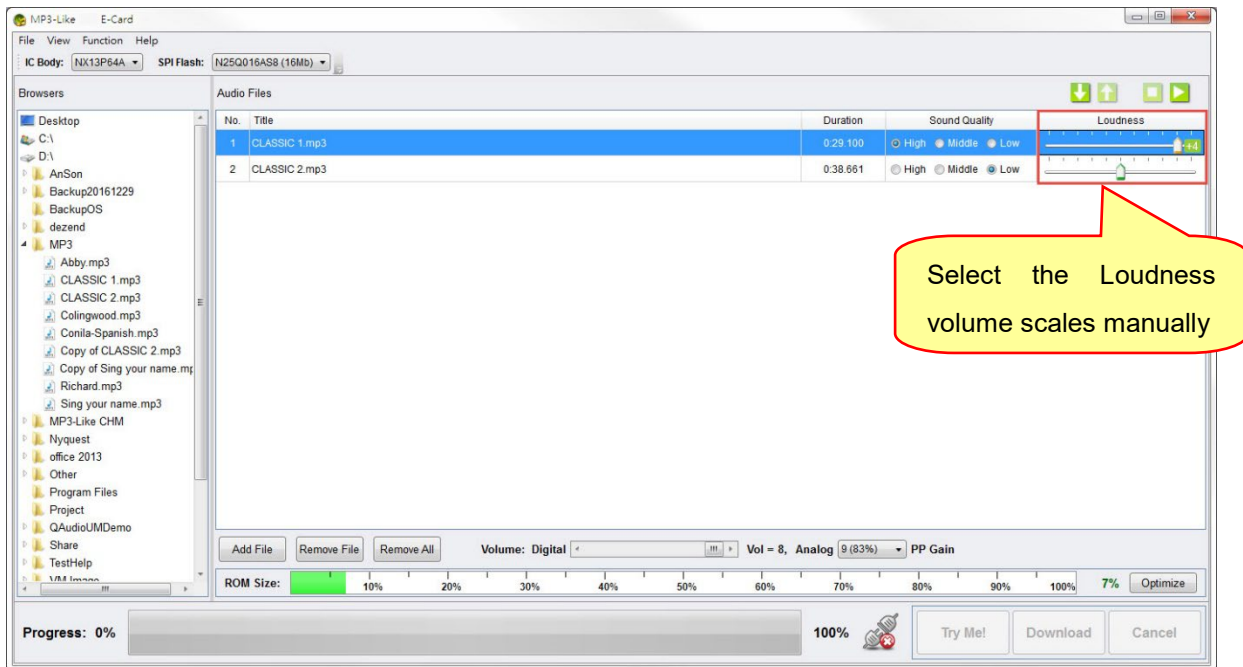
Step 5: Set initial volume.

Users can set the initial volume for playback, the procedure is as follows.

1. There are eight volume levels for NY5 Series, the default is Volume=8.

NY5 Series

There are eight levels of volume (from 1 to 8)

2. There are two volume levels for NY4 Series, the default is Volume=High.
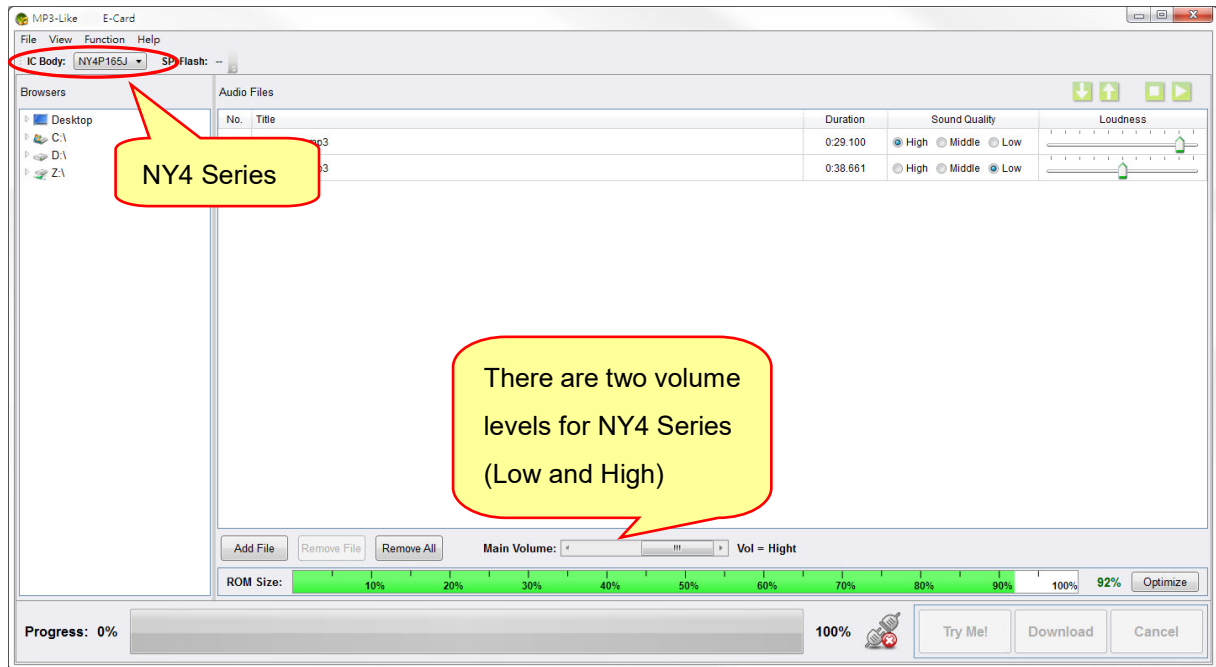
3. There are eight volume levels for NY5 Plus Series, the default is Volume=8.
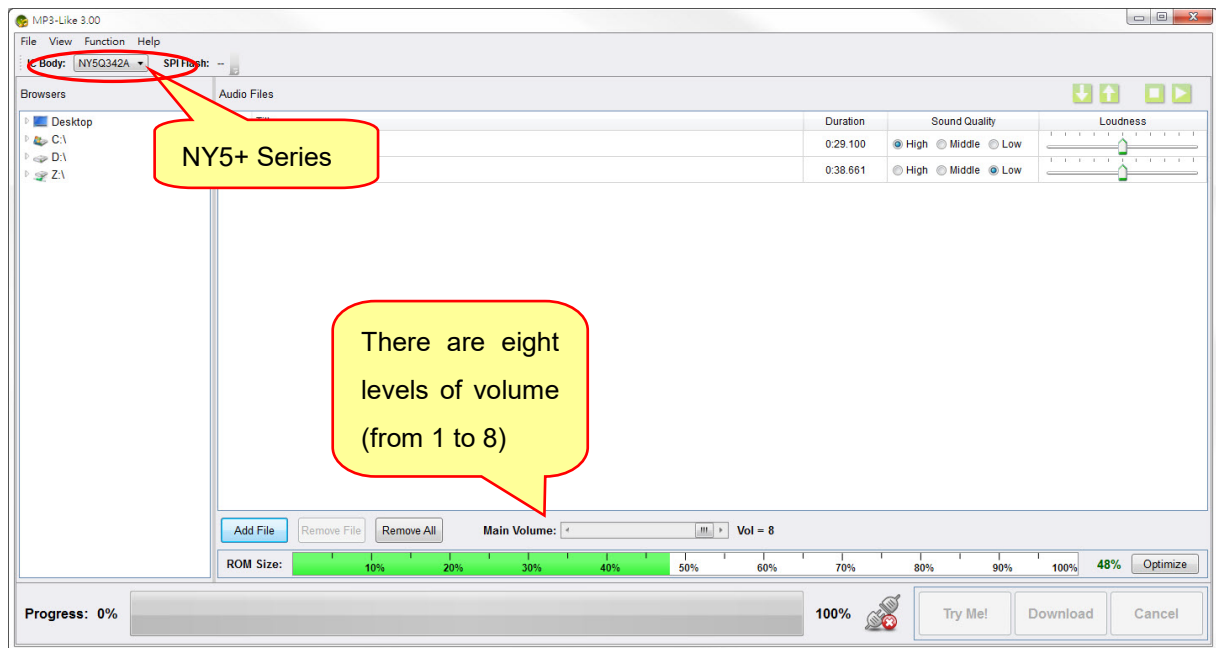
4. There are eight volume levels for NY6 Series, the default is Volume=8.
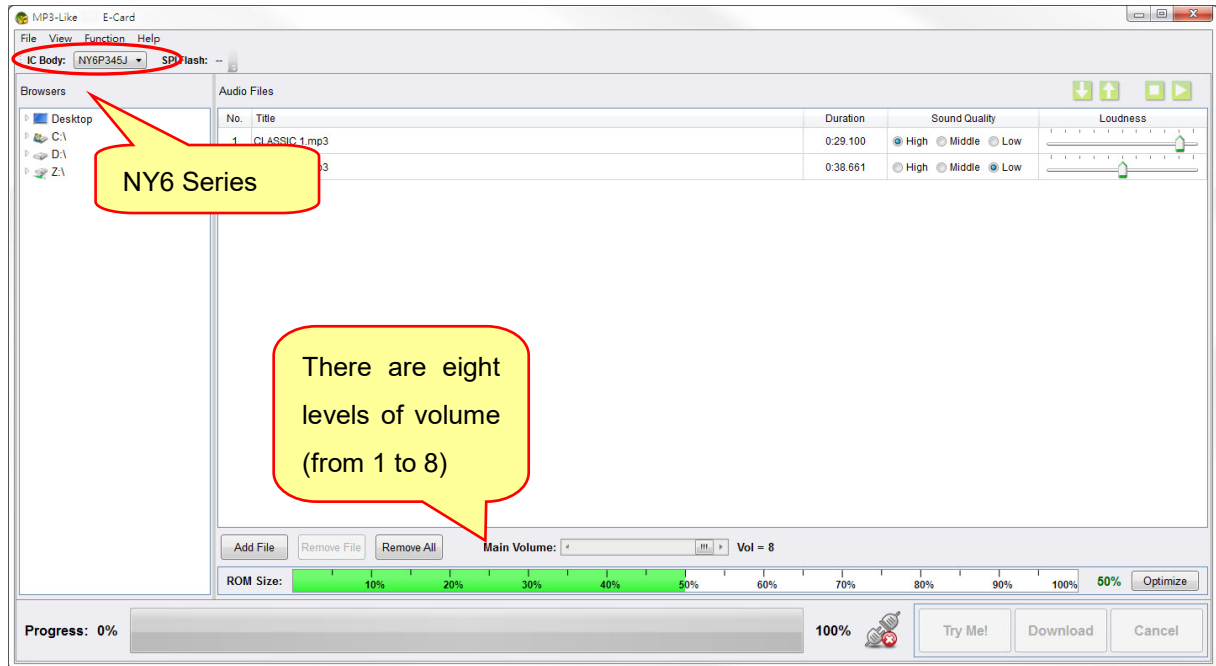
5. For NY7 series, Digital volume has 8 levels, the default is Volume=8; and Analog volume has 4 levels, the default is PP Gain=83%.
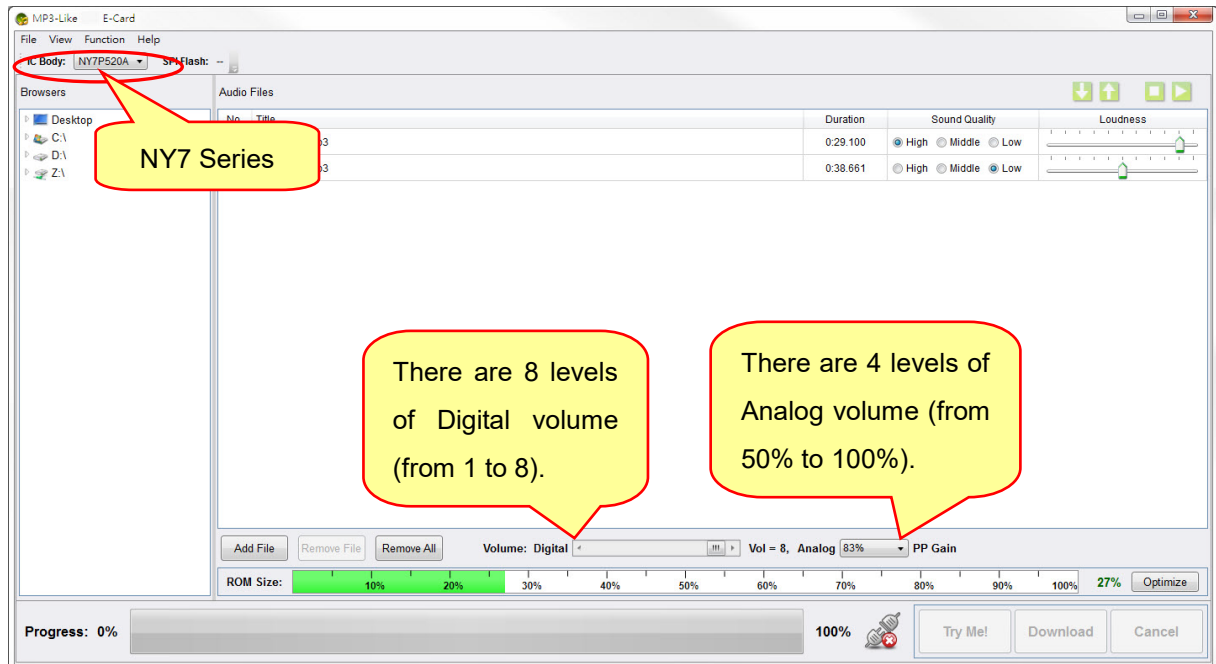
6. For NX1 series, Digital volume has 8 levels, the default is Volume=8; and Analog volume has 16 levels, the default is PP Gain=9.
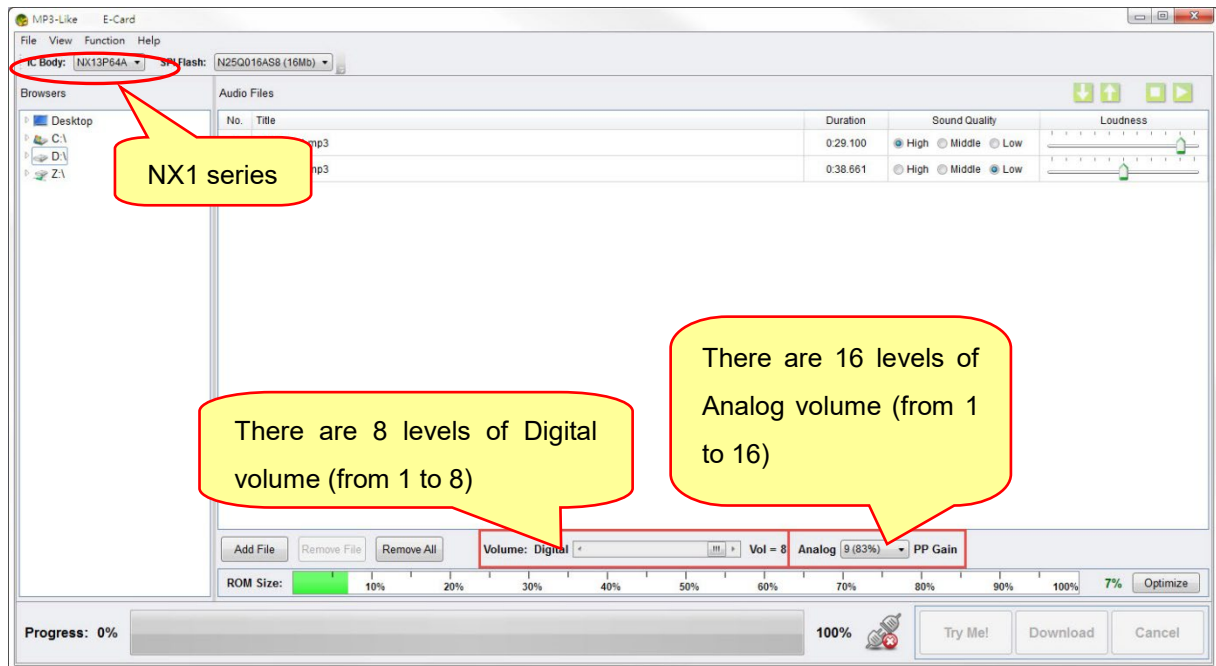
7. For NX1EF series, Digital volume has 8 levels, the default is Volume=8.
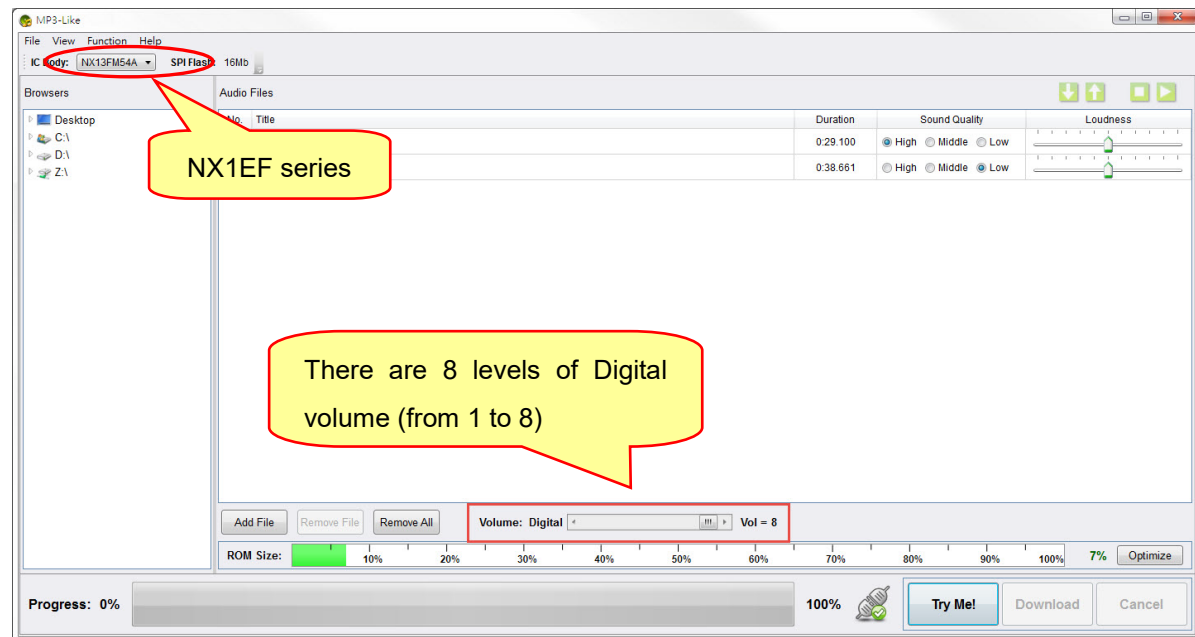
Step 6: Set Optimize

User could decide whether to set Optimize. If Optimize is applied, the ROM Size utilization will be increased for better sound quality. The procedure is as follows.

1. Before optimized, the ROM Size shows as 7%.

The ROM Size shows as 7%.

Then press [Optimize].
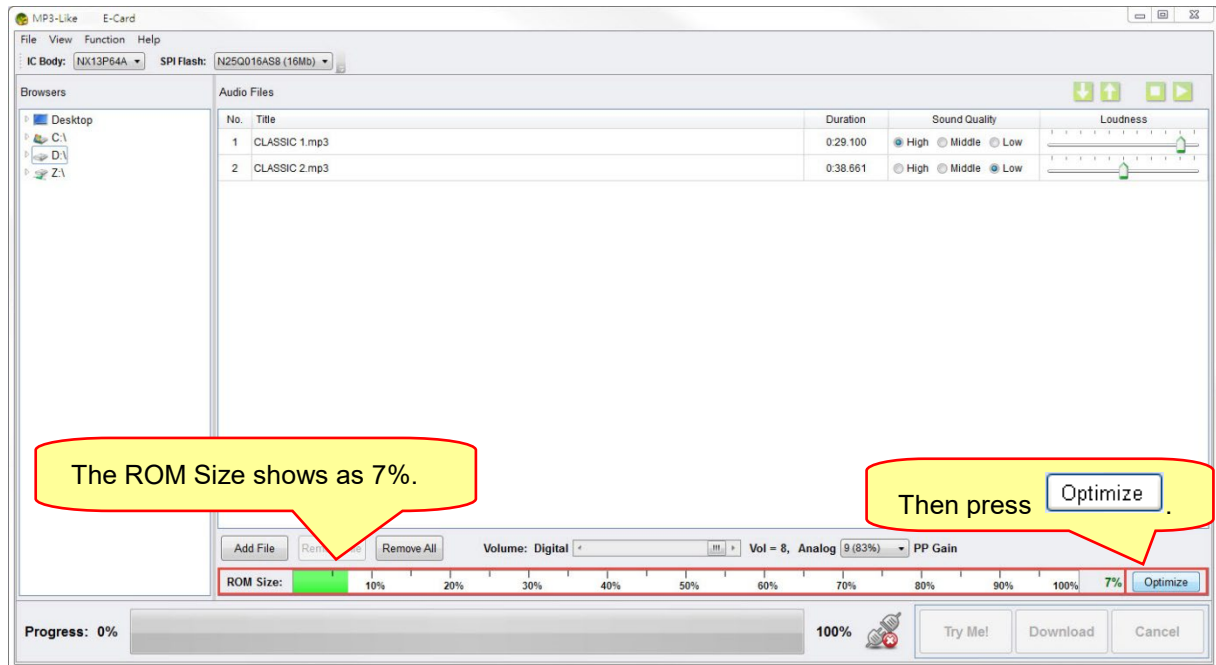
2. After pressing [Optimize], *MP3-Like* would start Optimize, then ROM Size shows as 12% immediately.
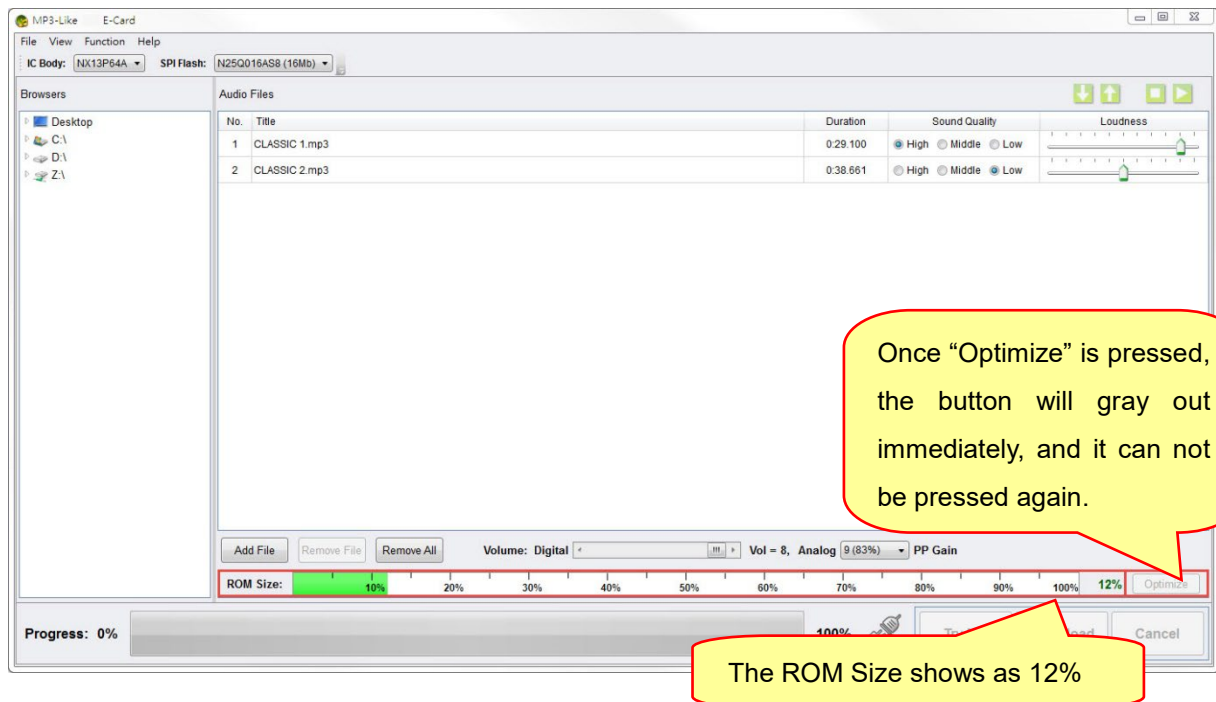
Once "Optimize" is pressed, the button will gray out immediately, and it can not be pressed again.

The ROM Size shows as 12%

Note:

1. Once user presses the "Optimize" button, it will gray out [Optimize] and can not be pressed again. User could press this button again on conditions that user adds/deletes files or changes setting.

2. When user adds/deletes files or changes setting, the program will re-estimate ROM Size in

default. If user wants to set Optimize again, please re-press   button.

3.   *When the estimated ROM Size exceeds 100%, the Optimize cannot be used.*

4.   *If MP3-Like is in the procedure of "Try Me!" or "Download", user caould not use the Optimize funcion.*

Step 7: Trial-listen project.

1.   After setting desired file and volume, user can do trial-listing, the procedure is as follows.
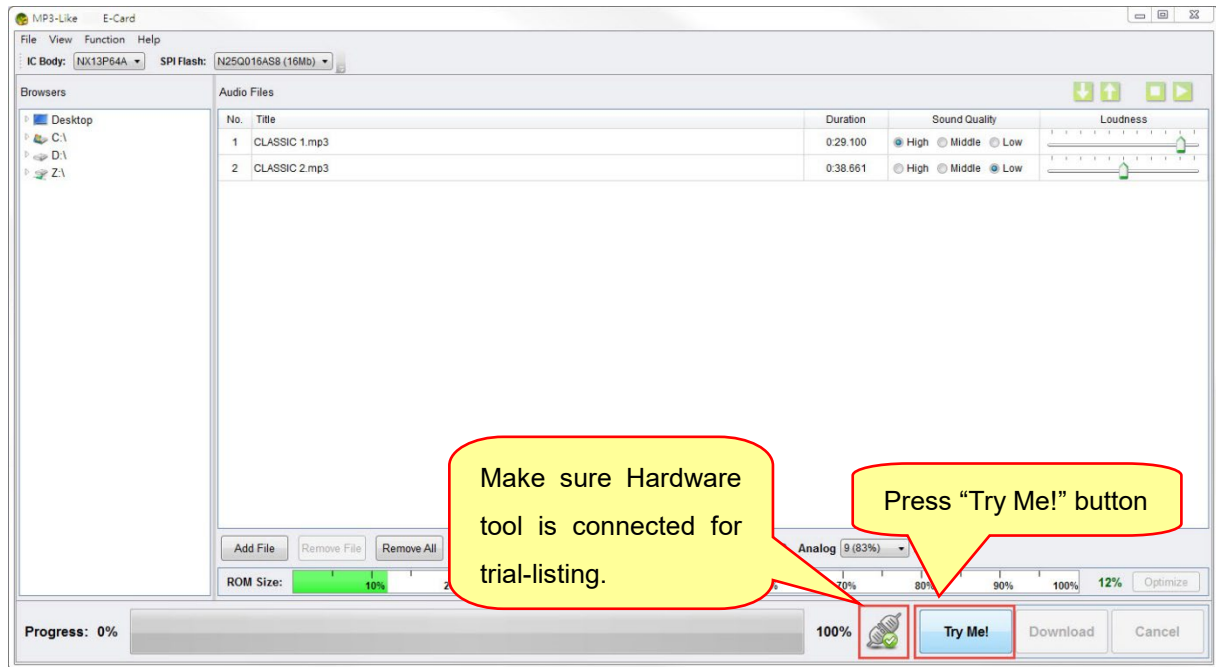
2.   Press "Try Me!" to compile the program, the progress bar on the lower left will display the current progress.
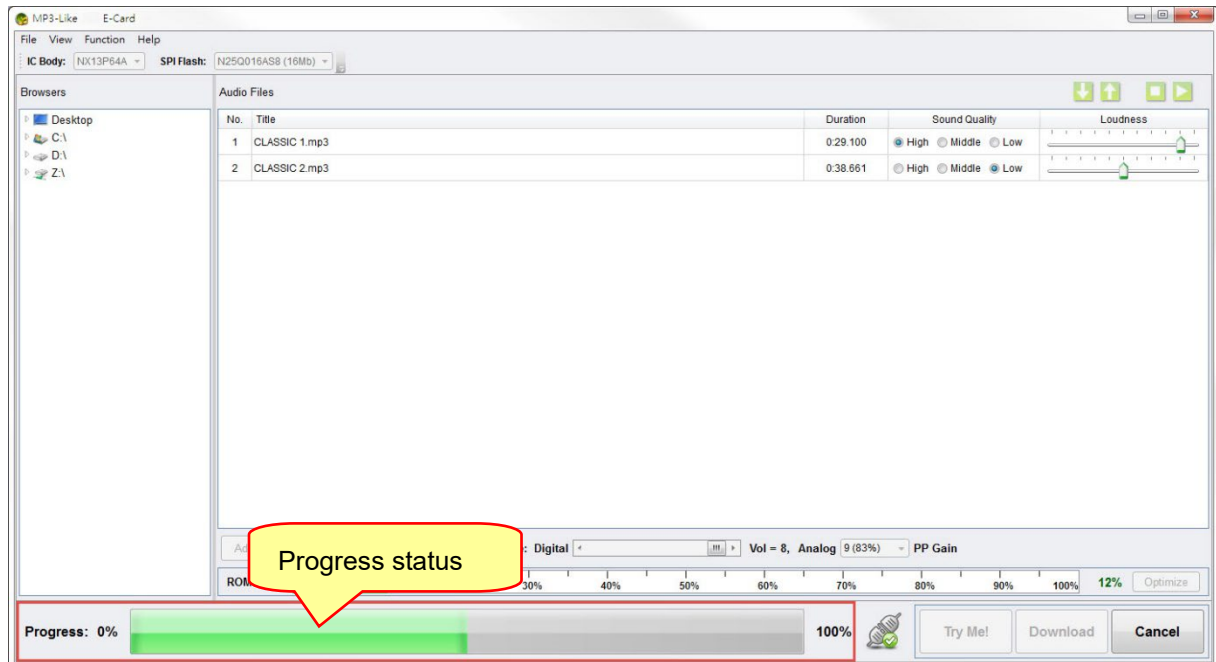
3. After download completed, user can do trial-listen with hardware tools.

After download completed, user can do trial-listen.

Total ROM size after compiled
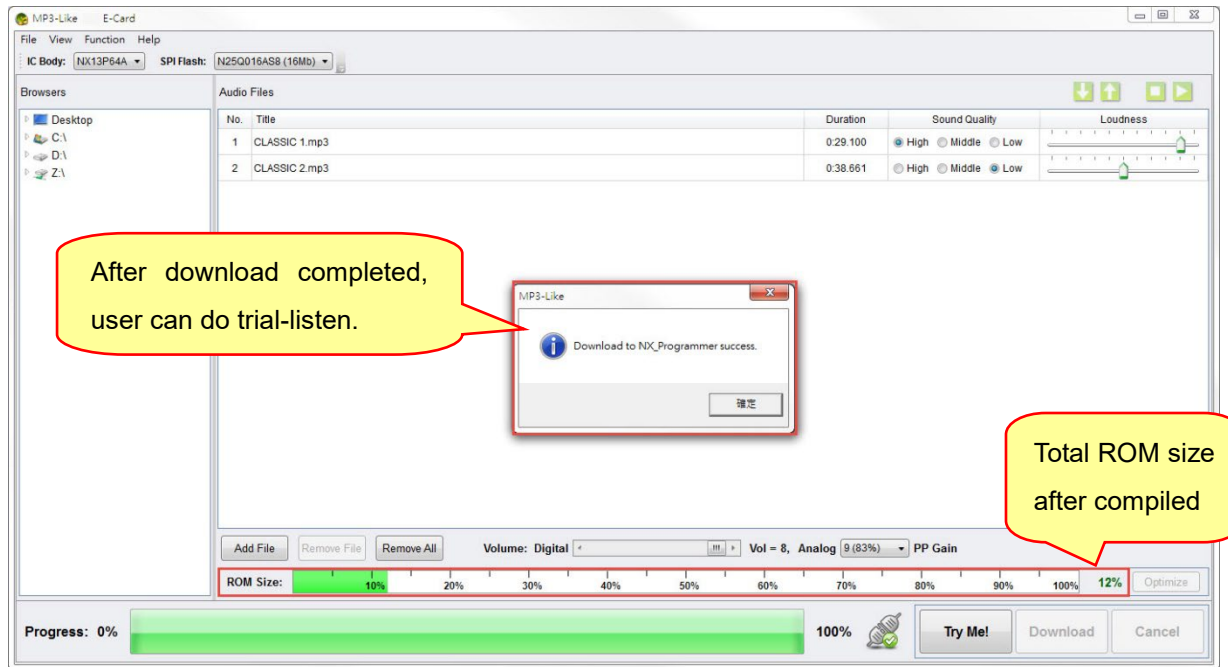
4. After audition confirmation, user can press "Download" button to write file to OTP IC.

User must execute "Try Me!" function in advance, then write file to OTP IC.
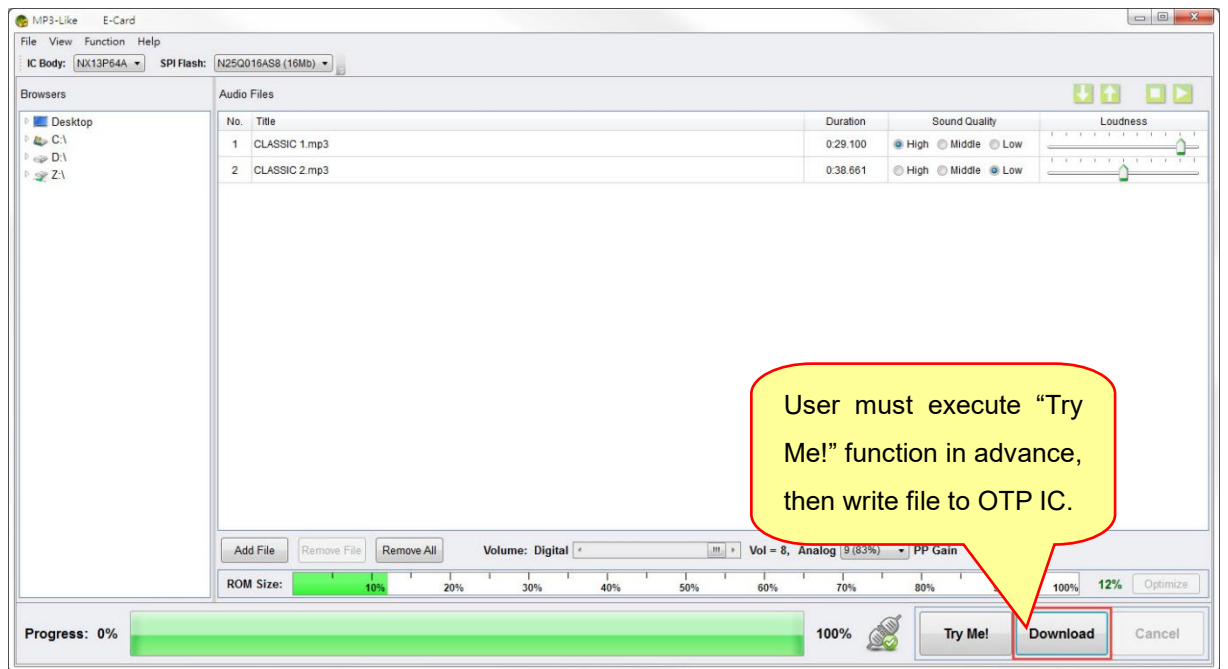
When user executes the "Download" function for NX1 / NX1EF series, the UI will provide user options for downloading files to IC, SPI Flash or both.
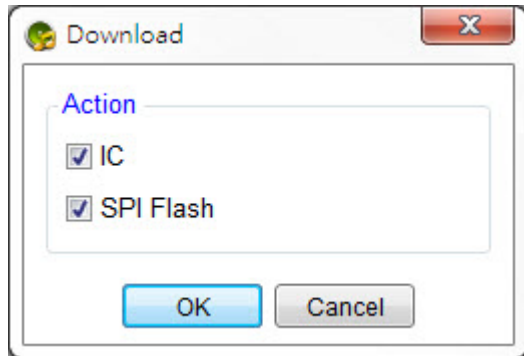
Note: When user wants to modify the setting or audio playlist, user needs to re-exectue "Try Me!" in order to perform "Download" again.

4 Revision History

<h2 style="text-align:center; color:blue;">Revision History</h2>

Version	Date	Description	Modified Page
1.0	2011/11/14	The first version.	-
1.1	2012/03/29	Add NY5P055 IC Body.	11
1.2	2012/05/24	1. Add the IC Body of NY4P045, NY3P010, NY3P016, NY3P035, NY3P065, NY3P087, and NY3P115. 2. Add View function to Menu. 3. Add the "Optimize" function. 4. Add Quick Start step 5 for Optimize settings.	11 6 7 15
1.3	2012/08/06	1. Add the "Loudness" function. 2. Add Quick Start step 4 for Loudness settings.	7 14
1.4	2012/11/19	Update pictures for MP3-Like 1.40 version.	-
1.5	2013/02/25	1. A display card and monitor that support 1024x768 resolution or higher. 2. Update pictures for MP3-Like 1.41 version. 3. Renew IC Body selection.	-
1.6	2013/08/26	Update software interface.	-
1.7	2013/11/25	Add NY2P010A IC Body.	-
1.8	2014/02/07	Update software interface.	-
1.9	2014/08/18	Add OTP_Writer (Ver.C) to support Download function.	10
2.0	2015/04/28	1. Support *Q-Speech* 3.0 above version. 2. Remove the NY3(A) series IC.	- -
2.1	2015/11/19	1. Add NY3P005B IC Body. 2. Add NY7P021A, NY7P065A, NY7P087A, NY7P170A, NY7P345A and NY7P520A IC Body.	- -

Version	Date	Description	Modified Page
2.3	2017/11/30	1. Update software interface. 2. Add FDB_Writer / Q-FDB_Writer to support "Download" function. 3. Add NX11P21A, NX11P22A, NX12P44A, NX12P88A IC body.	- 7 -
2.4	2018/02/22	1. Add NX11M22A, NX11M23A, NX11M24A and NX11M25A IC body. 2. Add Analog volume for NY7 series.	6 15
2.5	2018/08/23	1. Add NY3P005J, NY3P010J, NY3P016J, NY3P035J, NY3P065J, NY3P087J and NY3P115J IC body. 2. Add NY4P005J, NY4P018J, NY4P045J, NY4P065J, NY4P085J, NY4P105J and NY4P165J IC body.	- -
2.6	2018/12/14	1. Add NY5P085J IC body. 2. Add NX12P64A IC Body 3. Add NY6P085J, NY6P185J IC body. 4. Add NX_Programmer to support "Download" function. 5. The "Download" function supports NX1 series for selecting download to OTP, SPI Flash or both.	- - - 10 21
2.7	2019/08/15	1. Remove NX12P44A, NX12P64A IC body. 2. Add NY5P025J, NY5P055J, NY5P185J, NY5P345J、NY5P520J, NY5P720J IC body. 3. Add NY6P025J, NY6P055J, NY6P345J IC body. 4. Add NX13M52A, NX13M53A, NX13M54A, NX13M55A, NX13P44A, NX13P64A IC body.	- - - -
2.8	2019/11/13	1. Add NY5P1KJ0 and NY5P1K2J IC body. 2. Support the new hardware Smart_Writer (Ver.A).	- 10
2.9	2020/03/16	Add NY5P025B \ NY5P055B \ NY5P085B \ NY5P185B IC body.	6
3.0	2020/10/28	1. Remove NY3(B) series IC body. 2. Remove NY4(A) and NY4(B) series IC body. 3. Remove NY5(A) series IC body. 4. Remove NY5P025J / 055J / 085J / 185J IC body.	- - - -

Version	Date	Description	Modified Page
3.1	2021/04/16	1. Remove NY4P085J IC body. 2. Add NY6P025A IC body. 3. Add NX11S21A / NX11S22A IC body.	- - 6
3.2	2021/11/11	Add NY5Q020A / NY5Q040A / NY5Q060A / NY5Q092A / NY5Q172A / NY5Q342A IC body.	6 15
3.3	2022/04/27	Add NY5Q046A / NY5Q080A / NY5Q160A IC body and update SPI Flash type.	6
3.4	2022/11/18	1. Add NY5Q026A IC body. 2. Add NX13FS51A / NX13FM52A / NX13FM54A IC body.	- -
3.5	2024/11/27	1. Add IC bodies: NY3P016C / NY3P035C / NY3P065C / NY3P087C / NY3P115C, NY4P018C / NY4P045C / NY4P065C / NY4P085C / NY4P105C, and NX11FS20A / NX11FS21A / NX11FS22B / NX11FS23A / NX13FS61A / NX13FM62A / NX13FM64A. 2. Remove IC bodies: NY5P520J / NY5P720J / NY5P1K0J / NY5P1K2J / NY7P520J.	6 -
3.6	2025/08/27	Add IC bodies: NY3P013E / NY3P021E / NY3P043E / NY5Q019A / NY5Q039A / NY5Q159A / NX11FS2HA.	6