

Step to step

1. Select device.

The screenshot displays a teal interface with three application cards under the heading "Available EVM Apps". Each card features a TI logo icon, a title, and a brief description.

- TAS2555**: Characterize and tune your speakers with Smart Amp. Supports the TAS2555EVM board
- TAS2555 Stereo**: Characterize and tune your speakers with Smart Amp Supports the TAS2555 Stereo Setup
- I2C Master**: A generic I2C Master for all devices

Below these cards, there is a section titled "Available EVM Apps" with a refresh icon, containing one card:

- TAS2557**: Characterize and tune your speakers with Smart Amp. Supports the TAS2557EVM board

2. Enter "System Check" and perform the process.

The screenshot shows a teal interface with the heading "System Checks" and a TI logo icon. Below the heading is an icon of a checklist with a pencil and three items, two of which are checked. To the right of the icon, the text reads "Perform system diagnostics".

3. Select the "Tuning and Audio Processing".

The screenshot displays a teal interface with the heading "Tuning and Audio Processing" and a TI logo icon. Below the heading is an icon of a headset with a gear. To the right of the icon, the text reads "Customize filter types and settings for the selected hybrid flow".

Below the text, there are two panels showing equalizer settings:

Equalizer (Bandwidth)	Equalizer (Bandwidth)
Frequency	Frequency
Gain	Gain
Bandwidth	Bandwidth

The left panel shows a frequency of 2000 Hz and a gain of -300. The right panel shows a frequency of 5000 Hz and a gain of -300.

4. Select Tuning mode

Select Audio Mode			
Feature	ROM Mode 1	ROM Mode 2	Tuning Mode
6-instance EQ filters for speaker equalization	✓	✓	✓
I-sense and V-sense on I2S out for speaker protection	✗	✓	✗
Voltage limiter for Speaker guard and Battery guard	✓	✓	✓
Brown out protection	✓	✓	✓
ClassH	✓	✓	✓
Speaker thermal protection	✗	✗	✓
Speaker Excursion protection	✗	✗	✓
Smart Amp	✗	✗	✓
Smart EQ	✗	✗	✓
Speaker cavity leak detection	✗	✗	✓
Estimated temperature and Estimated excursion on I2S out	✗	✗	✓
	Select	Select	Select

5. Select Import:

PurePath™ Console - TAS2555

Tuning Snapshots Audio Player

App Center > TAS2555 Home > Audio processing (Tuning Mode) Import

Characterization Data

Speaker Type : closed

Re : 6.69 Ohm

Fs : 910 Hz

Smart Amp

Tune Smart Amp, Excursion Protection and Thermal Protection

Equalizer / SmartEQ Off

Cascaded Biquadratic filters for audio equalization.

Smart-EQ - Automatically corrects the speaker's SPL response at mid and high frequencies to achieve a flat or user-defined target curve.

Speaker Normalization

Measure and compensate for speaker impedance response.

6. Add script file and push "import".

Import Tuning/Char data

Importing to Device

- Equalizer
- Digital gain
- Smart Amp
- Smarteq
- Voice Mode
- Snapshots
- Characterization
- Device Control

Import Cancel

7. Select "End System Integration":



8. Select "Dump to Binary file".

9. Choose the settings.

App Center > TAS2555 Home > End System Integration

Select Your Option > Dump Binary File

Configuration Selection

Choose the settings to create the binary file

Application: Tuning Mode

Sampling Frequency: 48 KHz

Clock Source: MCLK

Clock Frequency: 12.288 MHz

Application	Sampling Frequency	Clock Source	Clock Frequency	Base

Burst Size (Bytes): 128

I2C slave address: 0x98

Prev Please ensure that the clock source is atleast 1.36 MHz for both Music and Voice modes for SmartAmp application (Tuning Mode). Next

10. Add file's name and path.

Snapshot Selection

Choose the snapshot with which the binary file should be created.

Application: Tuning Mode

48 KHz (Base Sampling Frequency)

1 SRTS

Base snapshot: SRTS

Take Snapshot

We will be creating a configuration settings (Dump Definition Configuration - DDC) and saving it along with .ppc3 file to enable you to tune in device later. Choose an appropriate name for the DCC settings for which binary files are generated.

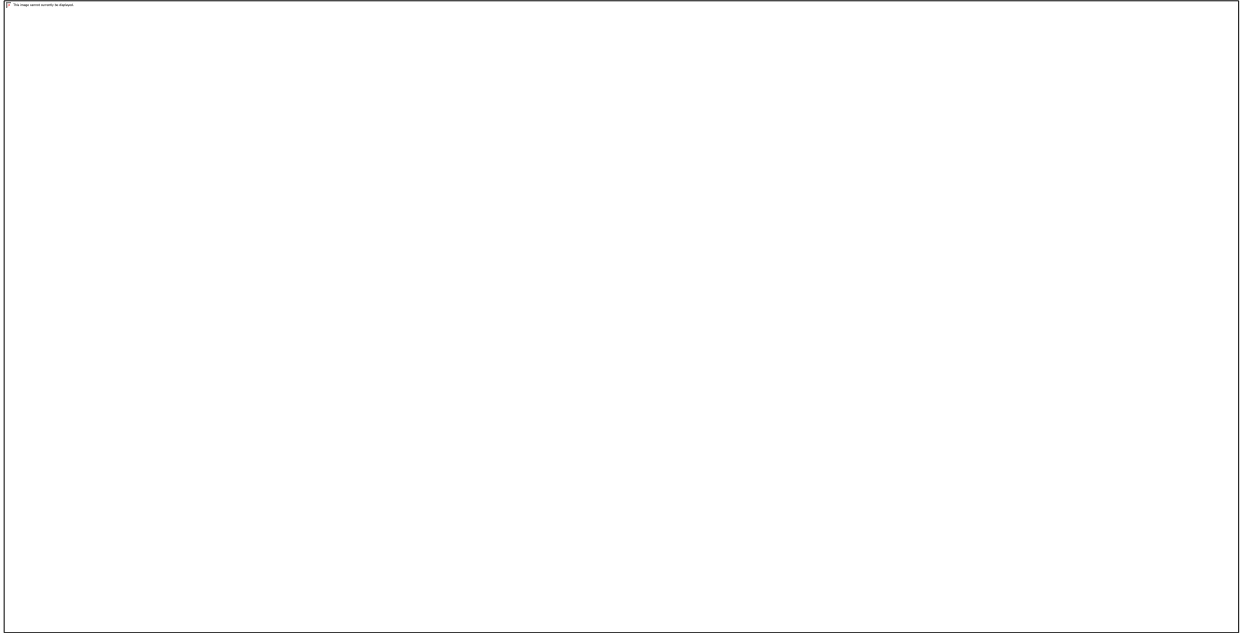
Example2

Choose path to save generated binary files

Example2_SRTS

Prev Next

11. Set parameters in Factory test and calibration



12. After that PPC3 will generate the binary files.