



CM6631A USB DAC Firmware Configuration Tool User Manual

Rev. 1.0
November 01, 2013

Revision History

Revision	Date	Description	Editor
1.0	2013/11/01	First released	Anise Yang

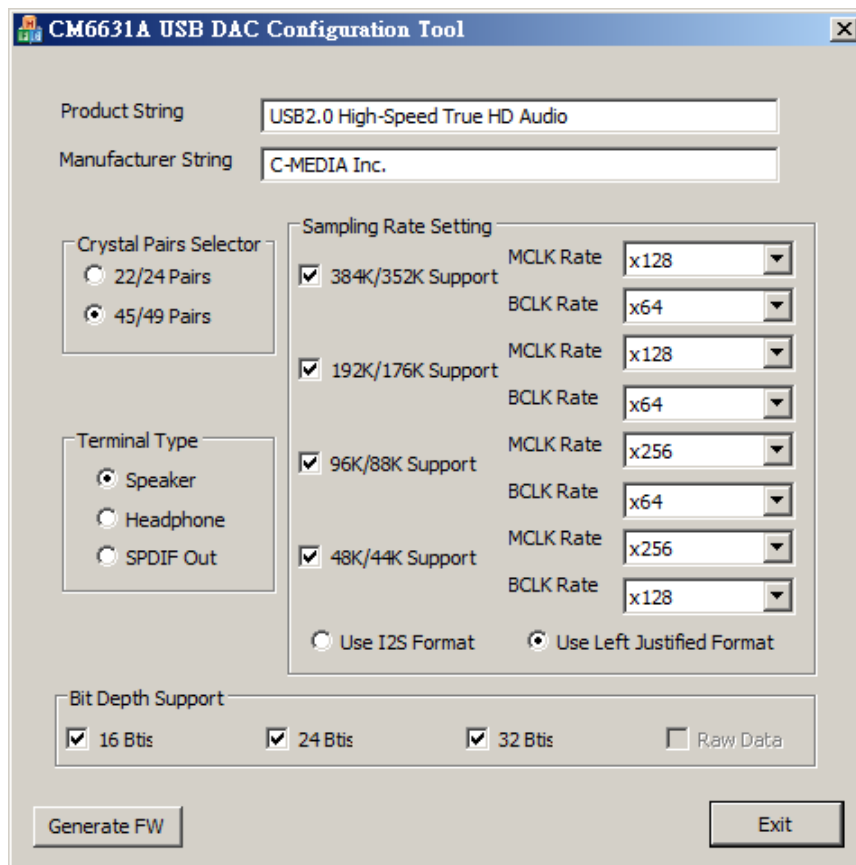
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I. Introduction

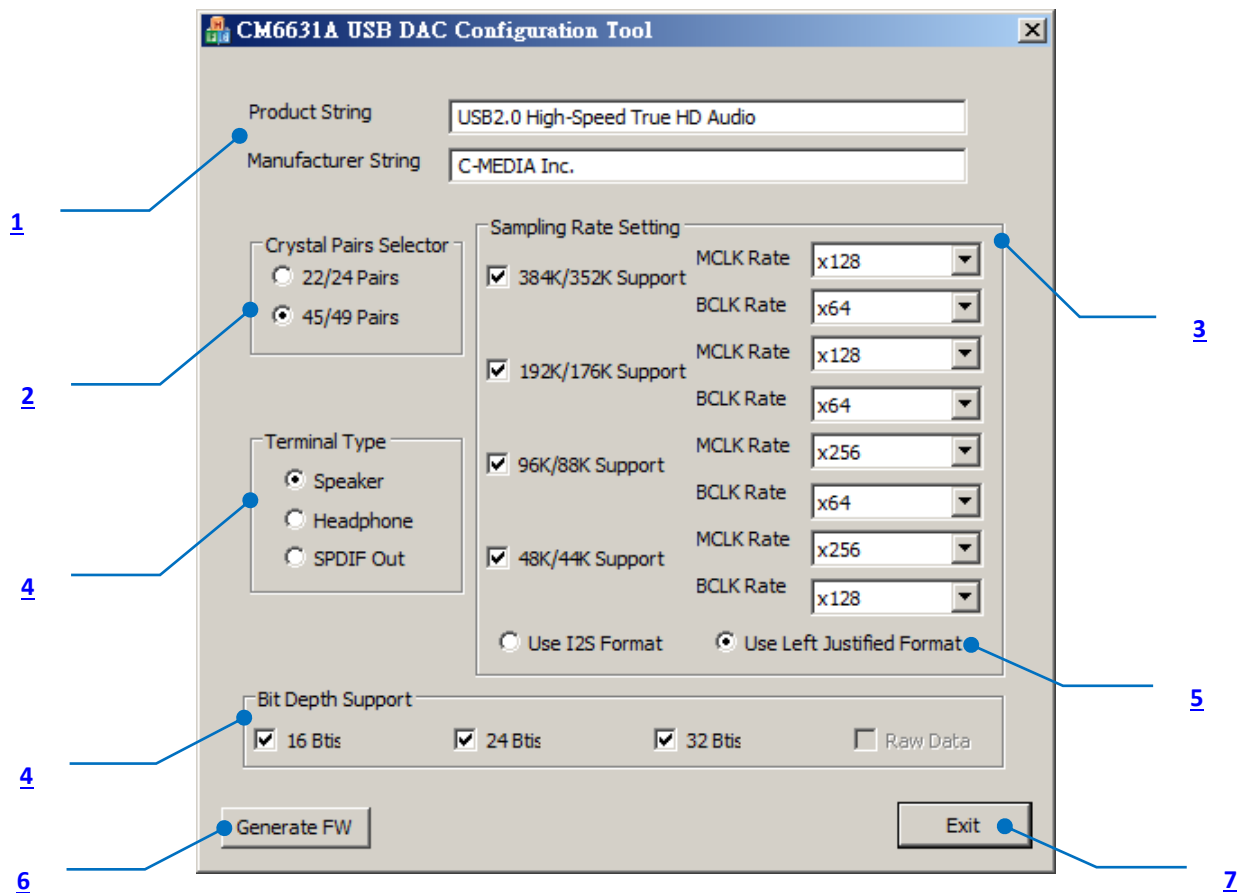
C-Media provides a CM6631A USB DAC Firmware Configuration Tool for manufacturer to generate a hex file.

1. Execute the CM6631ADACKit.exe file; you can see a GUI as below.



II. Function Introduction

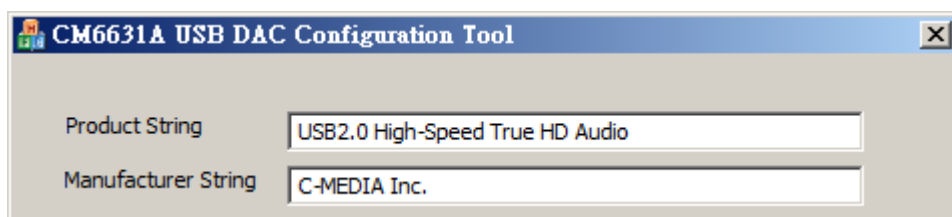
Please refer to related HW DAC spec. to select a properly value for every items and then general a FW hex file.



1. Product Information

Please fill related information to these fields.

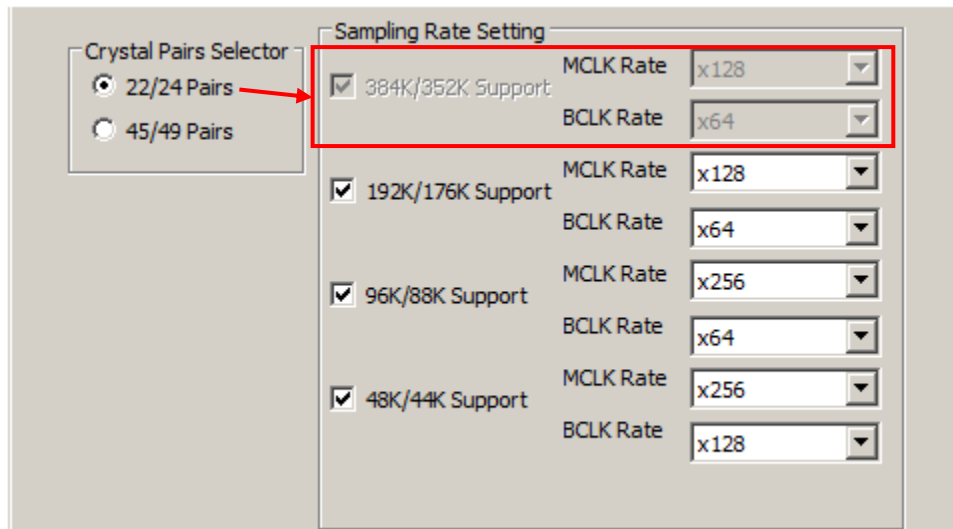
- Product String
- Manufacture String



2. Crystal Pairs Selector

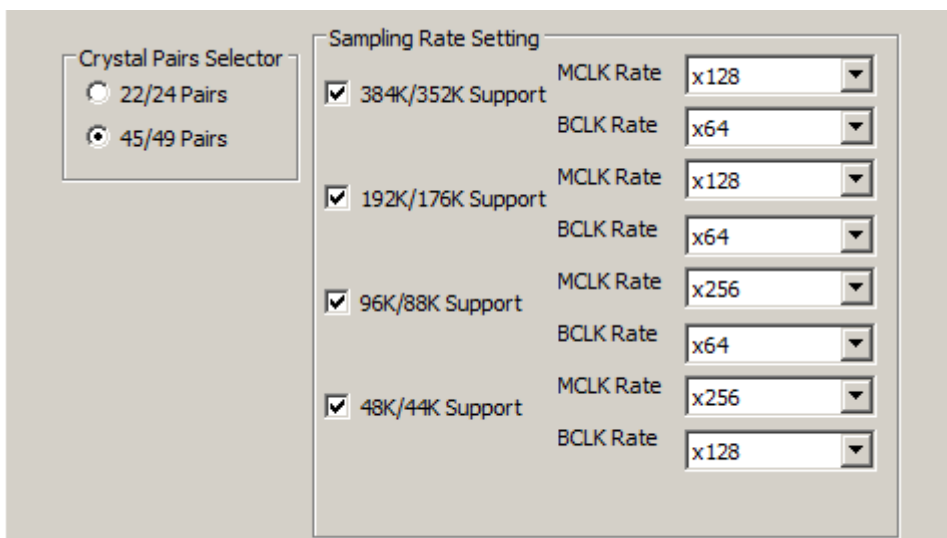
Please set the Crystal Pairs to 22M/24M Pairs or 45M/49M Pairs, in the 22M/24M Paris, the sampling Rate has a limitation as below figure.

● 22/24 Pairs



Crystal Pairs Selector		Sampling Rate Setting	
<input checked="" type="radio"/> 22/24 Pairs		<input checked="" type="checkbox"/> 384K/352K Support	MCLK Rate: x128 BCLK Rate: x64
<input type="radio"/> 45/49 Pairs		<input checked="" type="checkbox"/> 192K/176K Support	MCLK Rate: x128 BCLK Rate: x64
		<input checked="" type="checkbox"/> 96K/88K Support	MCLK Rate: x256 BCLK Rate: x64
		<input checked="" type="checkbox"/> 48K/44K Support	MCLK Rate: x256 BCLK Rate: x128

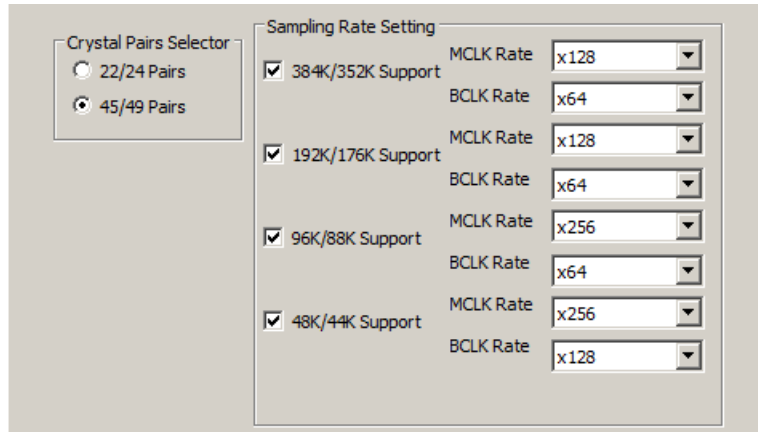
● 45/49 Pairs



Crystal Pairs Selector		Sampling Rate Setting	
<input type="radio"/> 22/24 Pairs		<input checked="" type="checkbox"/> 384K/352K Support	MCLK Rate: x128 BCLK Rate: x64
<input checked="" type="radio"/> 45/49 Pairs		<input checked="" type="checkbox"/> 192K/176K Support	MCLK Rate: x128 BCLK Rate: x64
		<input checked="" type="checkbox"/> 96K/88K Support	MCLK Rate: x256 BCLK Rate: x64
		<input checked="" type="checkbox"/> 48K/44K Support	MCLK Rate: x256 BCLK Rate: x128

3. Sampling Rate Setting

After the Crystal Pairs setting, please keep to setting the sampling rate.



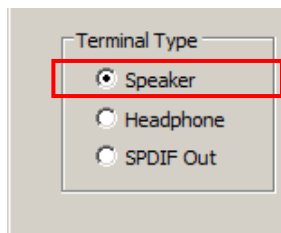
Sampling Rate Table:

384K/352K Support	MCLK Rate	x128
		X256
	BCLK Rate	X64
		X128
192K/176K Support	MCLK Rate	X256
		X128
	BCLK Rate	X64
		X128
96K/88K Support	MCLK Rate	X256
		X512
	BCLK Rate	X64
		X128
48K/44K Support	MCLK Rate	X256
		X512
	BCLK Rate	X64
		X128
		X256

4. Terminal Type & Bit Depth Support

This setting item can determine the Terminal type for the HW output design, and this setting also relate to Bit Depth support items.

Speaker:



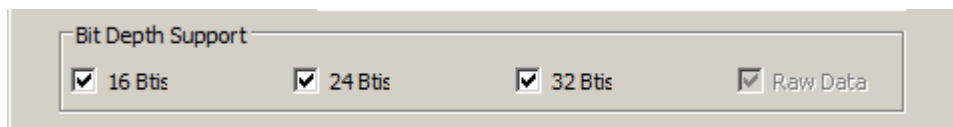
Terminal Type

☒ Speaker

☐ Headphone

☐ SPDIF Out

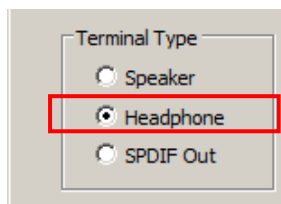
Bit Depth support:



Bit Depth Support

☒ 16 Btis ☒ 24 Btis ☒ 32 Btis ☒ Raw Data

Headphone:



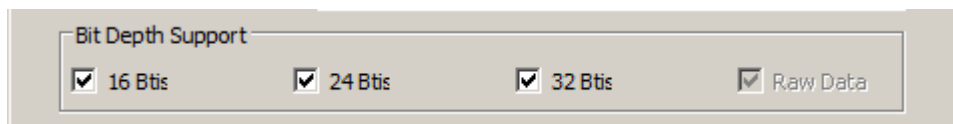
Terminal Type

☐ Speaker

☒ Headphone

☐ SPDIF Out

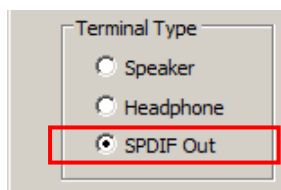
Bit Depth support:



Bit Depth Support

☒ 16 Btis ☒ 24 Btis ☒ 32 Btis ☒ Raw Data

SPDIF Out:



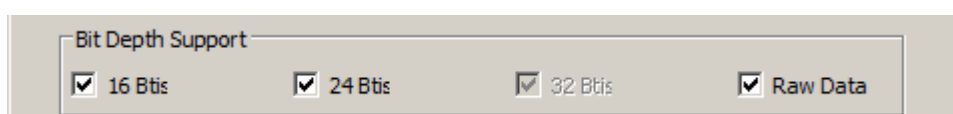
Terminal Type

☐ Speaker

☐ Headphone

☒ SPDIF Out

Bit Depth support:

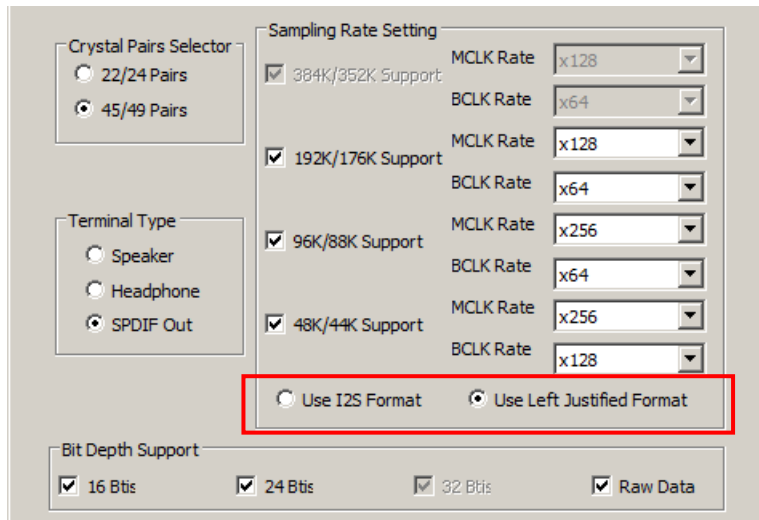


Bit Depth Support

☒ 16 Btis ☒ 24 Btis ☒ 32 Btis ☒ Raw Data

5. HW Mode Type

Please refer to related HW DAC spec. to select a format to “I2S format” or “Left Justified Format”.

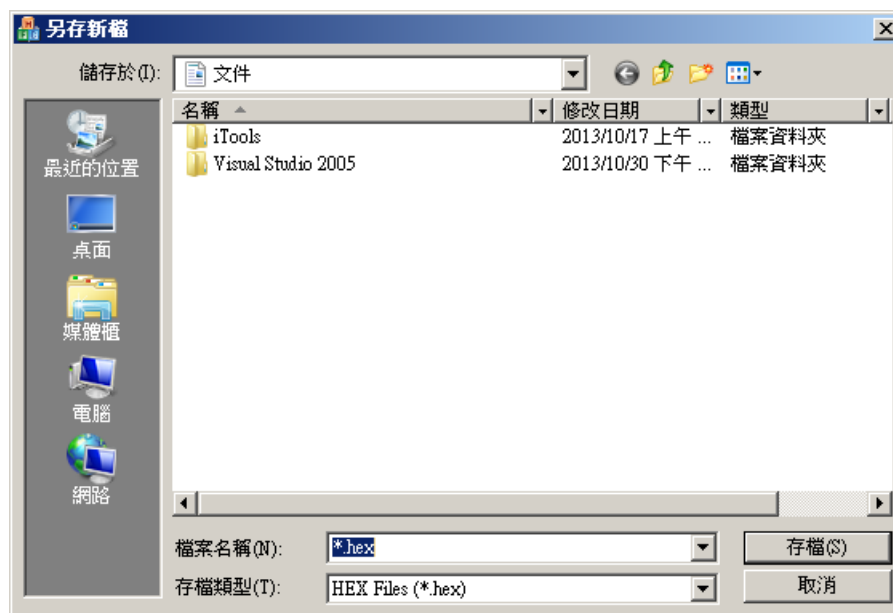


6. Generate FW

After all setting was finish, please press “Generate FW” button to generate a hex file. You can use Firmware Update tool to update this firmware to your device.



Save as...



7. Exit

You can press “Exit” button to terminate this tool.

