aSPI28W

User Guide

USB writer for aMTPxxM series

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Install Software In Windows XP

1. Right-click on the aSPI28W zip file, and click [Extract All...].



2. Click [Next] .



3. Click [Next].

解壁縮精靈	
選擇一個目的 ZIP保存檔中的檔:	案將被解壓縮至您選擇的位置。
	選擇資料夾來解壓縮檔案。 檔案會解壓縮這個目錄①: ts and Settings\Writer\sSPI28W_V100 激覽(R) 密碼(P)
-	正在解壓縮
	<上一步(B) 下一步(D) 取消

4. Windows will start to extract files.

解壓縮精靈	×
選擇一個目的 ZIP保存檔中的檔	案將被解壓縮至您選擇的位置。
	選擇資料夾來解壓縮檔案。 檔案會解壓縮這個目錄①: Its and Settings\Writer\aSPI28W_V100 激覽(R) 密碼(P)
	<上一步(B) 下一步(B) 取消



5. Select [Show extracted files], then click [Finish].



6. Windows will extract all files in the same directory with the zip file.

aSP128 W_¥100		
檔案(F) 編輯(E) 檢視(V) 我的最愛(<u>A)</u> 工具(T) 説明(H)	
③上一頁 - ⑤ - 🎓 🛄- 網	址①() D:\Documents and Settings\	Writer%SPI28W_V100
 檔案及資料夾工作 ✓ 建立新的資料夾 ◇ 將這個資料夾發佈到網站 ◇ 共用這個資料夾 	名稱 aSPI28W_V100 Doc Driver Tools Aus aSPI28W.exe Setup ini	大小 類型 檔案資料夾 檔案資料夾 檔案資料夾 檔案資料夾 885 KB 應用程式 1 KB Notepad

■ Install Software In Windows 7

1. Right-click on the aSPI28W zip file, and click [Extract All...].



2. Select [Show extracted files when complete], then Click [Extract].

🕞 🚹 Extract Compressed (Zipped) Folders	•
Select a Destination and Extract Files	
Files will be extracted to this folder:	
C:\Users\APLUS\Desktop\aSPI28W_V100	Browse
Show extracted files when complete	
	Extract Cancel



3. Windows will start to extract files.

Files will be extra	cted to this folder:	
C:\Users\APL	Copying 17 items (6.57 MB)	• • • • • • • • • • • • • • • • • • •
Show extra	Copying 17 items (6.57 MB)	
	from aSPI28W_V \aSPI28W_V1 to aSPI28W_V \aSPI Discovered 17 items (6.57 MB)	28W_V1
	More details	ncel

4. Windows will extract all files in the same directory with the zip file.





Install Driver In Windows XP

1. Connect aSPI28W to your computer by USB cable.



2. When first time connect aSPI28W to the computer, windows will show "Found New Hardware Wizard" windows, select [No, not this time], then click [Next].



3. Select [Install from a list or specific location (Advanced)], then click [Next].



4. Select or click and follow below graph to assign the driver.

尋找新增硬體精靈	瀏覽資料夾 ? 🔀
請選擇您的搜尋和安裝選項。	▶️選擇包含您的硬體的資料夾。
 ● 在這些位置中搜尋最好的驅動程式(≦) 使用下列核取方塊來限制或擴充包括本機路徑和可卸除式媒體的預設搜尋,將安裝找到的最佳驅動程式。 2 搜尋可卸除式媒體(軟碟, CD-ROM)(M) 2 搜尋時包括這個位置(②): 3 瀏覽(R) E:\as\$P128 W_V100\Driver ③ 瀏覽(R) ● 不要搜尋,我將選擇要安裝的驅動程式(④) > 選擇這個選項來從清單中選取裝置驅動程式。Windows 不保證您所選取的驅動程式最符合您的硬體。 	 ● 点面 ● 我的交件 ● 我的電腦 ● OS_Vista (C:) ● OS_XP (D:) ● Data (E:) ■ aSP128W_V100 4 ● Daver ● Daver ● Teels
6.	要瀏覽任何子資料 夾,諸按上述+號。
<上一步图 下一步图 > 取消	5. 確定 取消



5. Windows will copy the driver to your PC and start to install.



6. Click [Finish] to end of install driver.





Install Driver In Windows 7

1. Connect aSPI28W to your computer by USB cable.



2. Click and follow below graph to open [Control Panel] .





3. Click and follow below graph to open [Hardware and Sound] .



4. Click and follow below graph to open [Device Manager] .





5. You can find aMTP32M in the list.



6. Right-click aMTP32M icon, and click [Update Device Software...].

🚔 Device Manager		
File Action View Help		
	Q 🔛 😡 🐻	
APLUS-WIN7		
D I Computer		
Disk drives		
Human Interface Device	ces	
IDE ATA/ATAPI control	ollers	
Keyboards		
Mice and other pointing	ng devices	
Network adapters		
▲ Dther devices		
PC Writer for alv	Jackson Deiters Sefferenze	
Ports (COM & LRT)	Opdate Driver Software	
Processors	Disable	
Sound, video and g	Uninstall	
 System devices Universal Serial Bus 	Scan for hardware changes	
	Properties	
Launches the Update Driver Softwa	are Wizard for the selected device.	

7. Click and follow below graph to install driver manually.



8. Select or click and follow below graph to assign the driver.



9. Windows will start to install driver to your PC.



10. When the driver install, if windows show the below message, please click [Install this driver software anyway].





11.Click [Close] to end of install driver.





Build A Program Data

1. Double click aSPI28W icon to open software.



2. Click [Tools] \rightarrow [Editor] to open "aMTP Series Sound editor".

aSPI28W USB writer	
Option Tools About	
Write Editor	Writer Connect
Erase	
Write	
Verify	100%

3. Click [Device] to select the device you want.

aMTPxxM Sound	Editor								×
File Device Mod	e Vout Build Ab	out							
aMTP16	M V			Sec	tion No.	Edge	Holdable	Retrigger	•
aMTP32	M			Sec	tion 0	Level	UnHoldable	Retrigger	
aMTP64	M			Sec	tion 1	Level	UnHoldable	Retrigger	
				Sec	tion 2	Level	UnHoldable	Retrigger	
divi 1912				Sec	tion 3	Level	UnHoldable	Retrigger	
👝 aSPI28W_V11	.0			Sec	tion 4	Level	UnHoldable	Retrigger	
Doc 🚞				Sec	tion 5	Level	UnHoldable	Retrigger	
Driver				Sec	tion 6	Level	UnHoldable	Retrigger	
Tools				Sec	tion 7	Level	UnHoldable	Retrigger	
				Sec	tion 8	Level	UnHoldable	Retrigger	
				Sec	tion 9	Level	UnHoldable	Retrigger	
				Sec	tion 10	Level	UnHoldable	Retrigger	
				Sec	tion 11	Level	UnHoldable	Retrigger	
File Name	Rate	Size	%	Sec	tion 12	Level	UnHoldable	Retrigger	Ŧ
				File	Name		Rate	Busy	
- 14702214	VT.i.	DVA/NA			004 (100)				
alvi i P32IVI	Key frigger	PVVIVI	Usage: 6660	08/4194	304 (1%)				

4. Click [Mode] to select the mode you want.

aMTPxxM Sound	Editor								×
File Device Mod	e Vout Build Abo	ut							
🖃 c: [] 🛛 🔍	Key Trigger			Section	n No.	Edge	Holdable	Retrigger	
(⊖ C:\	Sequential			Section	n 0	Level	UnHoldable	Retrigger	
🗁 Users	CPU Parallel			Section	n 1	Level	UnHoldable	Retrigger	
APLUS	CDLL Serial			Section	n 2	Level	UnHoldable	Retrigger	
🗁 Desktop	CPO Sellal			Section	n 3	Level	UnHoldable	Retrigger	
aSPI2	MP3			Section	n 4	Level	UnHoldable	Retrigger	
Doc 🔨				Section	n 5	Level	UnHoldable	Retrigger	
Driver				Section	n 6	Level	UnHoldable	Retrigger	
1 00IS				Section	n 7	Level	UnHoldable	Retrigger	
				Section	n 8	Level	UnHoldable	Retrigger	
				Section	n 9	Level	UnHoldable	Retrigger	
				Section	n 10	Level	UnHoldable	Retrigger	
				Section	n 11	Level	UnHoldable	Retrigger	
File Name	Rate	Size	%	Section	n 12	Level	UnHoldable	Retrigger	Ŧ
				File Na	me		Rate	Busy	
aMTP32M	Key Trigger	PWM	Usage: 6660	08/419430	4 (1%)				

• More detailed description of "Mode", please refer to aMTP32M data sheet.



5. Click [Vout] to select the voice mode you want.

aMTPxxM So	und Editor								×
File Device I	Mode Vout Build Al	out							
🗏 с: []	PWM			s	ection No.	Edge	Holdable	Retrigger	•
(⊖ C:\	DAC			s	ection 0	Level	UnHoldable	Retrigger	
🕞 Users				s	ection 1	Level	UnHoldable	Retrigger	
APLUS				s	ection 2	Level	UnHoldable	Retrigger	
🗁 Desktop				s	ection 3	Level	UnHoldable	Retrigger	
🛛 🔭 aSPI28W	_V110			s	ection 4	Level	UnHoldable	Retrigger	
Doc 🔁				s	ection 5	Level	UnHoldable	Retrigger	
Driver				s	ection 6	Level	UnHoldable	Retrigger	
Tools				s	ection 7	Level	UnHoldable	Retrigger	
				S	ection 8	Level	UnHoldable	Retrigger	
				S	ection 9	Level	UnHoldable	Retrigger	
				S	ection 10	Level	UnHoldable	Retrigger	
				s	ection 11	Level	UnHoldable	Retrigger	
File Name	Rate	Size	%	S	ection 12	Level	UnHoldable	Retrigger	Ŧ
					ile Name		Rate	Busy	
aMTP32M	Key Trigger	PWM	Usana: 666(08 / 410	04304 (1%)				

- PWM can directly drive speaker to save cost, but volume is smaller than DAC
- DAC need external amplifier to driver speaker. The volume depends on the amplifier and louder than PWM.
- More detailed description of DAC or PWM, please refer to aMTP32M data sheet.

6. Use Block-1 to select a directory, and Block-2 will list all of wave file in this directory.

aMTPxxM Sound Edite	or									×
File Device Mode V	/out Build	About								
🗐 c: []	•	10K.wav			ר	Section No.	Edge	Holdable	Retrigger	-
🗁 C:\		14K.wav				Section 0	Level	UnHoldable	Retrigger	
🗁 Users		16K.wav				Section 1	Level	UnHoldable	Retrigger	
APLUS		18k.wav				Section 2	Level	UnHoldable	Retrigger	
🗁 Desktop		8K.wav				Section 3	Level	UnHoldable	Retrigger	
🗁 wave		tp1.wav				Section 4	Level	UnHoldable	Retrigger	
		tp2.wav				Section 5	Level	UnHoldable	Retrigger	
		tp4.wav				Section 6	Level	UnHoldable	Retrigger	
						Section 7	Level	UnHoldable	Retrigger	
						Section 8	Level	UnHoldable	Retrigger	
I Block-1		B	ock	(-2		Section 9	Level	UnHoldable	Retrigger	
				· -		Section 10	Level	UnHoldable	Retrigger	
					_	Section 11	Level	UnHoldable	Retrigger	
File Name	Rate	e Si	ze	%		Section 12	Level	UnHoldable	Retrigger	-
						File Name		Rate	Busy	
aMTP32M Key	Trigger	PWM		Jsage: 6660	8/4	194304 (1%)				



7. Double click file name in Block-2 to assign file into Block-3. Only Block-3 files will occupy memory space.

aMTPxxM Sour	nd Editor										×
File Device M	ode Vout	Build	About	t							
🖃 c: []		-	10K.wa	v			Section No.	Edge	Holdable	Retrigger	
🕞 C:\			12K.wa 14K.wa	v v			Section 0	Level	UnHoldable	Retrigger	
🗁 Users			16K.wa	V			Section 1	Level	UnHoldable	Retrigger	
APLUS			18k.wa	V			Section 2	Level	UnHoldable	Retrigger	
🗁 Desktop			8K.wav	v			Section 3	Level	UnHoldable	Retrigger	
📂 wave			tp1.wa	v			Section 4	Level	UnHoldable	Retrigger	
			tp2.way	V			Section 5	Level	UnHoldable	Retrigger	
			tp4.wa	V			Section 6	Level	UnHoldable	Retrigger	
							Section 7	Level	UnHoldable	Retrigger	
							Section 8	Level	UnHoldable	Retrigger	
				Block	-2		Section 9	Level	UnHoldable	Retrigger	
				Dieci			Section 10	Level	UnHoldable	Retrigger	
							Section 11	Level	UnHoldable	Retrigger	
File Name		Rate	e	Size	%		Section 12	Level	UnHoldable	Retrigger	Ŧ
8K.wav		800	0	73878	1.8%		File Name		Rate	Busy	
10K.wav		1000	0	81268	1.9%						
12K.wav		1200	0	57760	1.4%						
14K.wav		1400	0	279414	6.7%						
16K.wav		1600	0	1512866	36.1%						
18k.wav		1800	0	484079	11.5%						
20K.wav		2000	0	675901	16.1%						
tp1.wav		1204	18	41587	1.0%						
tp2.wav		1204	18	12290	0.3%						
tp3.wav		1204	18	10235	0.2%						
tp4.wav		1204	18	15639	0.4%						
	D	loc	1/2								
	D	ioc	K-2								
aMTP32M	Key	Trigger		PWM	Usage: 331	152	5 / 4194304 (78%))			

The wave file must be 8-bit, mono format, and less then 20KHz sampling rate.

8. You can right-click a file name in Blick-3 and click [Remove] to remove it.

aMTPxxM Sound Edito	r								×
File Device Mode V	out Build	About							
🖃 c: []	-	10K.wav			Section No.	Edge	Holdable	Retrigger	
🕞 C:\		12K.wav 14K.wav			Section 0	Level	UnHoldable	Retrigger	
🕞 Users		16K.wav			Section 1	Level	UnHoldable	Retrigger	
APLUS		18k.wav			Section 2	Level	UnHoldable	Retrigger	
🗁 Desktop		8K.wav			Section 3	Level	UnHoldable	Retrigger	
📂 wave		tp1.wav			Section 4	Level	UnHoldable	Retrigger	
		tp2.wav			Section 5	Level	UnHoldable	Retrigger	
		to4.wav			Section 6	Level	UnHoldable	Retrigger	
					Section 7	Level	UnHoldable	Retrigger	
					Section 8	Level	UnHoldable	Retrigger	
					Section 9	Level	UnHoldable	Retrigger	
					Section 10	Level	UnHoldable	Retrigger	
					Section 11	Level	UnHoldable	Retrigger	
File Name	Rate	Size	%		Section 12	Level	UnHoldable	Retrigger	Ŧ
8K.wav	0000	\$878	1.8%		File Name		Rate	Busy	
10K.wav	Remove	1208	1.9%						
12K.wav	12000	57760	1.4%						
14K.wav	14000	279414	6.7%						
16K.wav	16000	1512866	36.1%						
18k.wav	18000) 484079	11.5%						
20K.wav	20000	675901	16.1%						
tp1.wav	12048	3 41587	1.0%						
tp2.wav	12048	3 12290	0.3%						
tp3.wav	12048	3 10235	0.2%						
tp4.wav	12048	3 15639	0.4%						
	D lack	2							
	DIOCK	-5							
aMTP32M	Key Trigger	PWM	Usage: 331	1525	5 / 4194304 (78%)			

9. Selected a section in Block-4 and assign waves by double click file name in Block-3, Block-5 will show Bock-3 assigned files played in Block-4 sections.

aMTPxxM Sound Editor									×
File Device Mode Vo	ut Build /	About							
🖃 c: []	v 1	l0K.wav			Section No.	Edge	Holdable	Retrigger	~
(⊖ C:\	1	L2K.wav			Section 0	Level	UnHoldable	Retrigger	
🕞 Users	i	l6K.wav			Section 1	Level	UnHoldable	Retrigger	
APLUS	1	l8k.wav			Section 2	Level	UnHoldable	Retrigger	
🗁 Desktop	2	UK.wav K.wav			Section 3	Level	UnHoldable	Retrigger	
📂 wave	t	p1.wav			Section 4	Level	UnHoldable	Retrigger	
	t	p2.wav			Section 5	Level	UnHoldable	Retrigger	
		p3.wav p4.wav			Section 6	Level	UnHoldable	Retrigger	
					Section 7	Level	UnHoldable	Retrigger	
					Section 8	Level	UnHoldable	Retrigger	
					Section 9	Level	UnHoldable	Retrigger	
					Section 10	Leve	UnHoldable	Retrigger	
					Section 11	Leven	UnHoldable	Retrigger	
File Name	Rate	Size	%		Section 12	Level	UnHoldable	Retrigger	Ŧ
8K.wav	8000	73878	1.8%		File Name		Rate	Busy	
10K.wav	10000	81268	1.9%		101/		10000	- Cost	
12K.wav	12000	57760	1.4%		10K.wav		10000	0	
14K.wav	14000	279414	6.7%		12K.wav		12000	0	
16K.wav	16000	1512866	36.1%		14K.WdV		12049	0	
18k.wav	18000	484079	11.5%		ψ5.wav		12040	0	
20K.wav	20000	675901	16.1%						
tp1.wav	12048	41587	1.0%						
tp2.wav	12048	12290	0.3%						
tp3.wav	12048	10235	0.2%						
tp4.wav	12048	15639	0.4%						
	Dlast					Pla	cle 5		
	PIOCH	(-5				DIC	CK-5		
aMTP32M Key Trigger PWM Usage: 3311525 / 419									

 In this example, when you trigger Section 1, the chip will play : 10K.wav + 12K.wav + 14K.wav + tp3.wav 10. You can right-click or double click a file name in Block-5 and click button to remove, change sequence or choose the Busy pin output when played.

^{aus} al	MTPxxM S	Sound Ed	litor												×
File	Device	Mode	Vout	Build	Abou	t									
	c: []			-	10K.wa	v			Section No.		Edge	н	oldable	Retrigger	•
B	C:\				12K.wa 14K.wa	av av			Section 0		Level	Un	Holdable	Retrigger	
1 De	Users				16K.wa	v			Section 1		Level	Un	Holdable	Retrigger	
	APLUS				18k.wa	IV			Section 2		Level	Un	Holdable	Retrigger	
	-> Desktop				8K.way	1V /			Section 3		Level	Un	Holdable	Retrigger	
2	😁 wave				tp1.wa	v			Section 4		Level	Un	Holdable	Retrigger	
					tp2.wa	v			Section 5		Level	Un	Holdable	Retrigger	
					tp4.wa	v v			Section 6		Level	Un	Holdable	Retrigger	
									Section 7		Level	Un	Holdable	Retrigger	
									Section 8		Level	Un	Holdable	Retrigger	
									Section 9		Level	Uni	Holdable	Retrigger	
									Section 10		Level	Uni	Holdable	Retrigger	
									Section 11		Level	Uni	Holdable	Retrigger	
File	Name			Rate	e	Size	%		Section 12		Level	Un	Holdable	Retrigger	-
8K.1	wav			800	0	73878	1.8%		File Name				Rate	Busy	
10K	.wav			1000	0	81268	1.9%		101/ 101/				10000	0	
12K	.wav			1200	0	57760	1.4%		10K.Way				12000		
14K	.wav			1400	0	279414	6.7%		14	Remo	ve	· · · · ·	14000		
16K	.wav			1600	0	1512866	36.1%		17.	LL.	-	++	12048	0	
18k	.wav			1800	0	484079	11.5%		05.1	Up		+	12040	0	
20K	.wav			2000	0	675901	16.1%			Down		1			_
ф1.	wav			1204	18	41587	1.0%			Busy	1				
tр2.	wav			1204	18	12290	0.3%			-	/				
ф3.	wav			1204	18	10235	0.2%			-					
ф4.	wav			1204	18	15639	0.4%								
													-		
											BIOC	:К-	5		
č	MTP32M		Key	Trigger		PWM	Usage: 331	1525	/ 4194304	(78%)					



11. You can right-click or double click a section in Block-4 and click button to choose edge, holdable and re-trigger function .

aMTPxxM Sound Edito	or							×
File Device Mode V	out Build Al	bout						
🖃 с: []	▼ 10k 12k	K.wav		Section No.	Edge	Holdable	Retrigger	
🗁 C:\	144	C.wav		Section 0	Level	UnHoldeble	Retrigger	
Users	16k 18k	(.wav (.wav		Section 1 Section 2	Edge		Retrigger Retrigger)
🗁 Desktop	20k 8K.	wav		Section 3	Level		Retrigger	
📂 wave	φ1 φ2 φ3	.wav .wav		Section 4 Section 5	Holdable		Retrigger Retrigger	
	φ3 Φ4	.wav		Section 6	UnHoldable		Retrigger	
				Section 7 Section 8	ReTrigger		Retrigger Retrigger	
				Section 9	Non-Retrigg	jer 🗾	Retrigger	
				Section 10	Level	UnHoldable	Retrigger	
				Section 11	BI devel _1	UnHoldable	Retrigger	
File Name	Rate	Size	%	Section 12		UnHoldable	Retrigger	-
8K.wav	8000	73878	1.8%	File Name		Rate	Busy	
10K.wav	10000	81268	1.9%	10K way		10000	0	
12K.wav	12000	57760	1.4%	12K way		12000	0	
14K.wav	14000	279414	6.7%	14K way		14000	0	
16K.wav	16000	1512866	36.1%	to3 way		12048	ő	
18k.wav	18000	484079	11.5%	φ5.₩4		12040	Ŭ	
20K.wav	20000	675901	16.1%					
tp1.wav	12048	41587	1.0%					
tp2.wav	12048	12290	0.3%					_
tp3.wav	12048	10235	0.2%					
tp4.wav	12048	15639	0.4%					
aMTP32M	Key Trigger	PWM	Usage: 33115	25 / 4194304 (78%	6)			

 More detailed description of "Edge", "Holdable" and "Re-Trigger", please refer to aMTP32M data sheet.



12. You can also click top entry [Edge], [Holdable] or [Retrigger] in Blick-4 to choose a trigger function for all sections.

aMTPxxM So	und Edi	tor										×
File Device M	Mode	Vout	Build	Abou	t							
			_	10K w:	21/		_				_	
			· ·	12K.wa	av			Section No.	Edga	Set All Section To	Edge	
🗁 C:\				14K.wa	av			Section 0	ev	C ALLO T	Luge	.)
Users				16K.wa	av av			Section 1	Lov	Set All Section To	Level	
APLUS				20K.wa	av			Section 2	Level	UnHoldable	Retrigger	
Desktop				8K.way	/			Section 3	Level	UnHoldable	Retrigger	_
e marc				tp2.wa	IV IV			Section 4	Level	UnHoldable	Retrigger	_
				tp3.wa	v			Section 5	Level	UnHoldable	Retrigger	_
				tp4.wa	IV			Section 6	Level	UnHoldable	Retrigger	_
								Section 7	Level	UnHoldable	Retrigger	_
								Section 8	Level	UnHoldable	Retrigger	_
								Section 9	Level	UnHoldable	Retrigger	_
								Section 10	Block		Retrigger	
							_	Section 11	DIECK		Retrigger	
File Name			Rate	2	Size	%		Seculi 12	Level	UNHOIDADIE	Keuiggei	
8K.wav			8000	D	73878	1.8%		File Name		Rate	Busy	
10K.wav			1000	0	81268	1.9%		10K.way		10000	0	
12K.wav			1200	0	57760	1.4%		12K.way		12000	ő	
14K.wav			1400	0	279414	6.7%		14K.way		14000	0	
16K.wav			1600	0	1512866	36.1%		tn3.way		12048	0	
18k.wav			1800	0	484079	11.5%		4				
20K.wav			2000	0	675901	16.1%						
tp1.wav			1204	8	41587	1.0%						
tp2.wav			1204	8	12290	0.3%						
tp3.wav			1204	8	10235	0.2%						
tp4.wav			1204	8	15639	0.4%						
aMTP32M		Key	Trigger		PWM	Usage: 331	1525	6 / 4194304 (78%)			



13.You can use [File] → [Save] / [Load] to save current editing or load previous editing..

aMTPxxM Sou	nd Editor										×
File Device M	ode Vout	Build	Abou	t							
Save		•	10K.wa	av			Section No.	Edge	Holdable	Retrigger	-
Load			14K.wa	av			Section 0	Level	UnHoldable	Retrigger	
Users			16K.wa	av			Section 1	Level	UnHoldable	Retrigger	
APLUS			18k.wa	IV IV			Section 2	Level	UnHoldable	Retrigger	
🕞 Desktop			8K.way	/			Section 3	Level	UnHoldable	Retrigger	
📂 wave			tp1.wa	v			Section 4	Level	UnHoldable	Retrigger	
			tp2.wa	V			Section 5	Level	UnHoldable	Retrigger	
			tp4.wa	V			Section 6	Level	UnHoldable	Retrigger	
							Section 7	Level	UnHoldable	Retrigger	
							Section 8	Level	UnHoldable	Retrigger	
							Section 9	Level	UnHoldable	Retrigger	
							Section 10	Level	UnHoldable	Retrigger	
							Section 11	Level	UnHoldable	Retrigger	
File Name		Rate	e	Size	%		Section 12	Level	UnHoldable	Retrigger	-
8K.wav		800	0	73878	1.8%		File Name		Rate	Busy	
10K.wav		1000	0	81268	1.9%		10K way		10000	,	
12K.wav		1200	0	57760	1.4%				12000	0	
14K.wav		1400	0	279414	6.7%		12K.Wav		12000	0	
16K.wav		1600	0	1512866	36.1%		to2 way		12049	0	
18k.wav		1800	0	484079	11.5%		(po.wav		12040	0	
20K.wav		2000	0	675901	16.1%						
tp1.wav		1204	18	41587	1.0%						
tp2.wav		1204	18	12290	0.3%						
tp3.wav		1204	18	10235	0.2%						
tp4.wav		1204	18	15639	0.4%						
aMTP32M Key Trigger PWM Usage: 3311525 /							4194304 (78%)				

14. When you finish edit, use [Build] to build a program file.

aMTPxxM Sound	aMTPxxM Sound Editor									
File Device Mod	le Vou <mark>t</mark> Build	About								
🖃 c: []		10K.wav			Section No.	Edge	Holdable	Retrigger	•	
(C)		12K.wav			Section 0	Level	UnHoldable	Petrigger		
		14K.wav			Section 1	Level	UnHoldable	Betrigger	-	
		18k.wav			Section 2	Level	UnHoldable	Retrigger		
Desktop		20K.wav			Section 2	Level	UnHoldable	Retrigger		
wave		ok.wav			Section 4	Level	UnHoldable	Retrigger		
		tp2.wav			Section 5	Level	UnHoldable	Retrigger		
		tp3.wav		_	Section 6	Level	UnHoldable	Retrigger		
		tp4.wav			Section 7	Level	UnHoldable	Retrigger		
					Section 8	Level	UnHoldable	Petrigger		
					Section 0	Level	UnHoldable	Retrigger	-11	
					Section 10	Level	UnHoldable	Retrigger		
					Section 10	Level	UnHoldable	Retrigger		
					Section 12	Level	UnHoldable	Retrigger		
File Name	Rate	e Size	%		Secuon 12	Level	UNHOIDADIE	Reingger		
8K.wav	8000) 73878	1.8%		File Name		Rate	Busy		
10K.wav	1000	0 81268	1.9%		10K way		10000	0		
12K.wav	1200	0 57760	1.4%		12K way		12000	0		
14K.wav	1400	0 279414	6.7%		14K way		14000	ő		
16K.wav	1600	0 1512866	36.1%		to3 way		12048	ő		
18k.wav	1800	0 484079	11.5%		φ3.000		120-10	- Ŭ		
20K.wav	2000	0 675901	16.1%							
tp1.wav	1204	8 41587	1.0%							
tp2.wav	1204	8 12290	0.3%							
tp3.wav	1204	8 10235	0.2%							
tp4.wav	1204	8 15639	0.4%							
aMTP32M	Key Trigger	PWM	Usage: 331	1525	/ 4194304 (78%	o)				

15.Select a directory, and give it a name to save it.

aMTPxxM Sound Editor							23
File Device Mode Vout Build	About				_		
4448 Save As 1.				_ ×	Idable	Retrigger	•
Desisten b			Saarsh Daskton	0	oldable	Retrigger	
Desktop			• Search Desktop	P	oldable	Retrigger	
Organize 🗙 New folder				: 🗸 🙆	oldable	Retrigger	
longunize · · · · · · · · · · · · · · · · · · ·				· ·	oldable	Retrigger	
🔶 Eavorites 📩 Na	me	Size	Item type	Date modifie 📤	oldable	Retrigger	
Desites 5	1.11				oldable	Retrigger	
	Libraries				oldable	Retrigger	
👢 Downloads 🛛 📢	Homegroup				oldable	Retrigger	
🔛 Recent Places 📃 👔	APLUS			E	oldable	Retrigger	
p 🔤	Computer				oldable	Retrigger	
🔚 Libraries					oldable	Petrigger	
Documents					oldable	Petrigger	-
A Music						reengger	
					Rate	Busy	
Pictures					10000	0	
Videos 🗧					12000	0	
				-	14000	0	
🔹 Homegroup 🛛 🗧 🗸 🗸 🕹		III		E.	12048	0	
File name: Sample)			•			
Save as type: aMTDwM1	na File (* Ioa)			-			
Save as type. ant PANY EC	bg the (hog)	3					
 Hide Folders 		(Save	Cancel			
			\sim				
					_		
	Dia/2.4	00115					
aivi 1932Mi Key Trigger	PWM	Usage: 33115	25/4194304(/8%)				

16. Wait few seconds, software will show build result.





17. You will get a program data (*.data), and function table (*.log) as below :

Sample.log Sample.data



Program Data To aMTPxxM (DBMFL-STD2)

1. Connect aSPI28W USB writer to the demo board DBMFL-STD2.



2. Double click aSPI28W icon to open software.



3. Check writer already connected.

aSPI28W USB writer	
Option Tools About	
Writer	Writer Connect
Erase	
Verify	100%

4. Click [...] to load a aMTPxxM program file (*.data).

aSPI28W USB writer	r			
Option Tools Abo	out			
Writer			Writer Co	nnect
Erase Write Verify				100%
Jus Open				×
🔾 🗢 📃 Desktop 🕨		- ↓	Search Desktop	٩
Organize New fold	der			
 ★ Favorites ▲ Desktop ▲ Downloads ▲ Recent Places ■ Libraries ▲ Documents ▲ Music ▲ Pictures ▲ Videos 	Name Cibraries Homegroup APLUS Computer Network Sample.data	Size It	em type ATA File	Date modified 2011/12/5 上午:
K Homegroup I Computer ▼ File	name: Sample.data	"" • •	l ata Memory Eile (*.d Open ▼	lata) ▼ Cancel

5. Software will get programmed file check sum , then show on the file path left.

aSPI28W USB writer	- • •
Option Tools About	
Writer	Writer Connect
Erase	
Write Getting Check Sum	
Verify	31%
aspizew USB writer	
Option Tools About	
Option Tools About Writer	Writer Connect
Option Tools About Writer Erase D0C2 C:\Users\APLUS\Desktop\Sample.data	Writer Connect
Option Tools About Writer Erase D0C2 C:\Users\APLUS\Desktop\Sample.data Write Load Completed!	Writer Connect

6. Click [Write] to program the file to aMTPxxM chip.

aSPI28W USB writer	
Option Tools About	
Writer	Writer Connect
Erase D0C2 C:\Users\APLUS\Desktop\Sample.data	
Write Load Completed!	
Verify	100%

7. Check power or battery already removed, then click [Yes].



8. Software will start to erase, program and verify automatically.

aSPI28W USB writer	
Option Tools About	
Writer	Writer Connect
Erase D0C2 C:\Users\APLUS\Desktop\Sample.data	
Write Erasing	
Verify	34%



9. When write successfully, software will show "Verify completed".

aSPI28W USB writer	- • •
Option Tools About	
Writer	Writer Connect
Erase D0C2 C:\Users\APLUS\Desktop\Sample.data	
Write Verify completed!	
Verify	100%

10. You can do erase or verify only by [Erase] or [Verify] .

aSPI28W USB writer	- • 💌
Option Tools About	
Writer	Writer Connect
Erase D0C2 C:\Users\APLUS\Desktop\Sample.data	
Write Verify completed!	
Verify	100%

11.Now, you can remove aSPI28W USB writer , connecting power and speaker to play . About how to use DBMFL-STD2, please refer [DBMFL-STD2 user guide] .



Program Data To aMTPxxM (DBMFL-ENG2)

1. Connect aSPI28W USB writer to the demo board DBMFL-ENG2.



2. Double click aSPI28W icon to open software.



3. Check writer already connected.

aSPI28W USB writer	
Option Tools About	
Writer	Writer Connect
Erase	
Write	
Verify	100%

4. Click [...] to load a aMTPxxM program file (*.data).

aSPI28W USB writer			l	
Option Tools Abou	t			
Writer			Wri	ter Connect
Erase Write Verify				
Jus Open				×
🚱 🗢 💻 Desktop 🕨		- - 4 9	Search Deskt	op 🔎
Organize 🔻 New folde	er			:= - 1 0
★ Favorites ▶ Desktop ▶ Downloads ₩ Recent Places ■ Libraries ■ Documents ▶ Music	Name	Size 3,172 KB	Item type DATA File	Date modified 2011/12/5 上午:
E Pictures Videos Homegroup Computer Tile n.	∢ ame: Sample.data		Data Memory	File (*.data) ▼
		(Open	Cancel

5. Software will get programmed file check sum, then show on the file path left.

aSPI28W USB writer	
Option Tools About	
Writer	Writer Connect
Erase	
Write Getting Check Sum	
Verify	31%
aspi28W USB writer	
Option Tools About	
Writer	Writer Connect
Writer Erase D0C2 C:\Users\APLUS\Desktop\Sample.data	Writer Connect
Option Tools About Writer Erase D0C2 C:\Users\APLUS\Desktop\Sample.data Write Load Completed!	Writer Connect

6. Click [Write] to program the file to aMTPxxM chip.

aSPI28W USB writer	
Option Tools About	
Writer	Writer Connect
Erase D0C2 C:\Users\APLUS\Desktop\Sample.data	
Write Load Completed!	
Verify	100%

7. Check power or battery already removed, then click [Yes].



8. Software will start to erase, program and verify automatically.

aSPI28W USB writer	
Option Tools About	
Writer	Writer Connect
Erase D0C2 C:\Users\APLUS\Desktop\Sample.data	
Write Erasing	
Verify	34%



9. When write successfully, software will show "Verify completed".

aSPI28W USB writer	- • •
Option Tools About	
Writer	Writer Connect
Erase D0C2 C:\Users\APLUS\Desktop\Sample.data	
Write Verify completed!	
Verify	100%

10. You can do erase or verify only by [Erase] or [Verify] .

aSPI28W USB writer	- • 💌
Option Tools About	
Writer	Writer Connect
Erase D0C2 C:\Users\APLUS\Desktop\Sample.data	
Write Verify completed!	
Verify	100%

11.Now, you can remove aSPI28W USB writer, connecting power and speaker to play. About how to use DBMFL-ENG2, please refer [DBMFL-ENG2 user guide].



Program Data To aMTPxxM (Single Chip Program)

◆ aSPI28W PIN CONFIGURATIONS

Ver 1.2



Pin Number	Pin Name	Description
1	WP	Write Protect
2	RSTB	Reset Pin
3	SCK	Serial Data Clock
4	CE	Chip Enable
5	PWR	Power VDD
6	NC	
7	SO	Serial Data Output
8	SI	Serial Data Input
9	GND	Power Ground
10	HOLD	Data Hold

• Single Chip Program

Connected aSPI28W USB writer to below circuit through program pin, then you can start to program aMTPxxM.



• Warning: aSPI28W PWR pin will offer power to circuit. So before connecting to aSPI28W, you must remove any other power source and device which may input signal to circuit.



Program Data To aMTPxxM (In-Circuit Program)

◆ aSPI28W PIN CONFIGURATIONS



Pin Number	Pin Name	Description
1	WP	Write Protect
2	RSTB	Reset Pin
3	SCK	Serial Data Clock
4	CE	Chip Enable
5	PWR	Power VDD
6	NC	
7	SO	Serial Data Output
8	SI	Serial Data Input
9	GND	Power Ground
10	HOLD	Data Hold

aSPI28W

• In-Circuit Program (Writer Provide Supply)

Connected aSPI28W USB writer to your application circuit through program pin, then you can start to program aMTPxxM with your application circuit.



• Warning: aSPI28W PWR pin will offer power to circuit. So before connecting to aSPI28W, you must remove any other power source and device which may input signal to circuit.

• In-Circuit Program With (User Provide Supply)

Connected aSPI28W USB writer to your application circuit through program pin and provide VDD, then you can start to program aMTPxxM with your application circuit.



• User provide supply VDD, VDD need between 3.3V and 3.6V.

• In-Circuit Program With LDO (User Provide Supply)

Connected aSPI28W USB writer to your application circuit through program pin and provide VDD, then you can start to program aMTPxxM with your application circuit.



• User provide supply VDD, VDD need between 3.3V and 3.6V.

• In-Circuit Program With LDO (Writer Provide Supply)

Open J001, then connected aSPI28W USB writer to your application circuit through program pin. Now you can start to program aMTPxxM with your application circuit.



- Warning: aSPI28W PWR pin will offer power to circuit. So before connecting to aSPI28W, you must open J001 to prevent power into LDO VOUT pin.
- When program finished, remove aSPI28W first, then close J001 to start voice play.



HISTORY

Ver 1.2 [Remove] Section : Single Chip Program (User Provide Supply) [Modify] Section: In-Circuit Program With LDO (User Provide Supply).	2012/01/06
Ver 1.1 [Modify] aSPI28W pin configurations. [Modify] Section: Program and In-circuit program.	2012/01/04
Ver 1.0 The 1 St version user guide for aSPI28W USB writer.	2011/12/05