## Programming VS1000 Audio Module using VSIDE

- Connect VS1000 Audio Module to USB-UART cable.
   GND (black)
  - TX (yellow)
  - RX (green)
  - Leave +5V unconnected for now
- 2. Ground (pin 22) to xCS (pin 12). This prevents boot from SPI FLASH during power-up.
- 3. Attach USB-UART cable to the USB port
- 4. Connect +5V (red) to the module's VDD (pin 32). This powers up the module.





- 5. Disconnect the connection between Ground (pin 22) and xCS (pin 12). This restores the normal operation of the xCS pin.
- 6. Start VSIDE, select the solution you want to program, the select Prommer/Flasher Utility from the Project menu.

👹 SDPlayerQueue - VSIDE									
File Edit	Proj	ect Build Debug Tools	Window Help						
Solution Brows	2	Add existing item New folder	Alt+Shift+A	READ					
Solution		Prommer/Flasher Utility	Ctrl+Shift+W	ue :					
⊿ @ SDP		Start serial port monitoring	Ctrl+Shift+M						
50 50 He		Generate Makefile		peci irmv					
🔺 🔄 AS ເດີ ແ		Properties		ippe					
Otł	ner		the WAV decode:						
			If you want more free i	t, ya insti					

7. Select the correct programmer: VS1000 SPI FLASHER (24-bit). Press Next until you get to start programming.

1	Prommer/Flasher Uti	lity ? 💌	🛑 Prommer/Flasher Utility	? 💌	Prommer/Flasher Utility
	Prommer Image Target platform: Prommer module: Description:	Write V\$1000 V V\$1000 SPI Flasher (24-bit) V\$1000 EEprommer (16-bit) This V\$1000 promer can program SPI Flash memory chips with 24-bit address space. Communication is handled via UART cable.	Prommer Image Write Select an object file to generate the image from: Emulation-Debug/SDPlayerQueue.coff Brow	···	Prommer         Image         Write           VS1000 SPI Flasher (24-bit) <ul></ul>
		Back Next Cancel	Back Next	Cancel	Back Next Cancel

**Note:** if you are programming the VS1000 Audio Module firmware, you must choose the flasher version "VS1000 SPI Flasher (24-bit) (Writes pre-generated EEPROM image)".



8. Programming progress is also seen in the debug window.



VS1000 SPI EEPROM Write Utility (uniprom1k24) Supports EEPROMS with 24bit address (128 kilobytes to 16 megabytes) Erasing blocks: 0000 0004 0008 000c Programming eeprom.img. This does not erase old image. Verify Error. You may need to erase chip. Done. Reseting chip.

If the programming fails, like in the above (Verify Error), check that you have removed the grounding from the xCS pin before running the programmer.



- 9. If the USB-UART cable appears as the wrong COM port, or the module does not respond, you get an error message.
- 10. If the connection to the module can not be established, select Settings, and you can change the UART port manually or use the auto-detect option. If the auto-detect does not find a chip, detach and re-attach the USB-UART cable and try again.

Solution 'SDPlayerQ	ueue' Opt	ions			_		?
Solution Configuration:	Emulati	on-Debug			•	Conf	îg Manager
Configurations De	bugging	Overlays					
Debug mode:	HW Em	ulation					•
-HW Emulation Settin	ngs						
Use JTAG interf	ace (VS100	5 only)					
Serial port:	COM3		- [	Au	todete	ect	
Initial speed:	11520	) ·	-	Autodetect scan tries to locate co	s all Co	OM ports ed VSDSI	s and P
Target speed:	11520	) ·	•	nardware. This n noments to com	nay ta plete.	ke a few	
Speed multiplier:	1		🖶 на	ardware detect	ed	×	
- Target Settings			G	Chip type	: VS10	000	
Chip type:	VS1000	)		Initial spe	ed: 11	.5200	•
Clock speed:	12.288	MHz		OK			
Monitor file:							wse
Exec Addr:	0x50						
							Close

11. When done, return to the programming screen and try to start the programming again.