

xmos®



XMOS 音频解决方案

特点与优势



采用XMOS方案的市场领导者



... 上面仅为现有客户群中的一部分



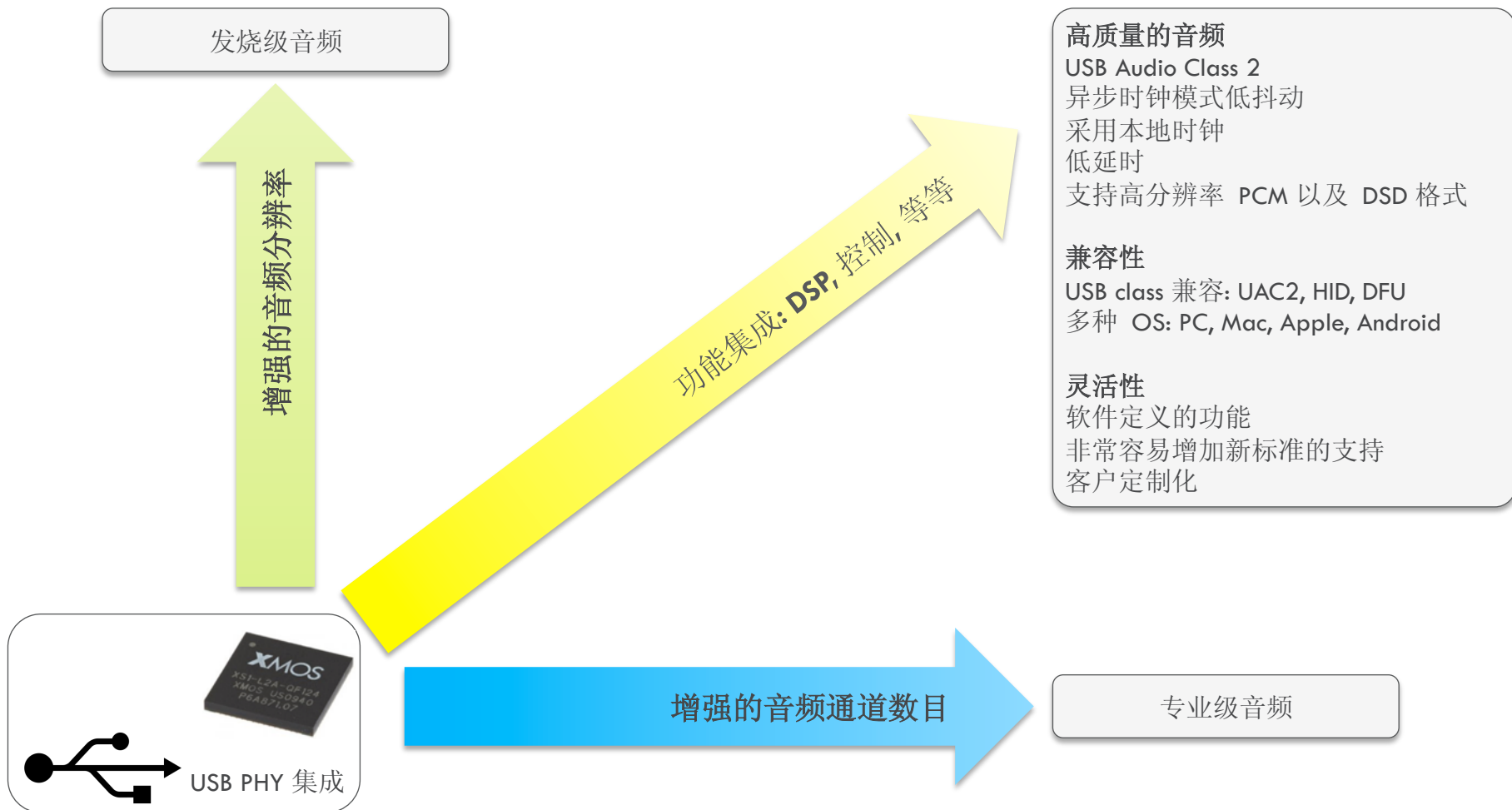
XMOS方案的特点及优势

特点	优势
基于XMOS xCORE-USB设备, 集成了USB	拥有高扩展功能特性的一系列芯片可供选择
High-speed USB 2.0 高速设备 USB class 兼容: UAC2, HID, DFU	多种操作系统即插即用
软件实现的音频连接	高灵活性! 可以选择各种音频接口去满足您的需求: I2S, TDM, S/PDIF, ADAT, MIDI, ... 可以选择各种控制接口去满足您的需求: I2C, UART, SPI, GPIO, ... 增加您的 DSP 算法, 混音等等, ... 特别是新的需求出现时, 能够灵活地升级实现
USB Audio Class 2.0 异步时钟模式	超低时钟抖动(Jitter), 高性能的音频传输
基于本地板载的音频时钟	可以实现自己的时钟方案
低延时 (可以到达小于 3ms)	理想的‘现场级’的应用方案
完整的软硬件参考设计	现有软件中已经存在各种配置加速更快地出产品 方便地定制, 以满足您的特定需求 软件允许设计重用
软件实现经过了量产验证	稳定, 加快产品上市时间
高分辨率音频格式支持	PCM 格式到 384kHz, 32bits Native DSD 64 与 DSD 128 DSD over PCM (DoP)



XMOS音频应用建议

强大的硬件 + 灵活的软件 = 高扩展性的方案





操作系统兼容性

Standards compliant USB 2.0 device, with USB Audio Class 2.0 support

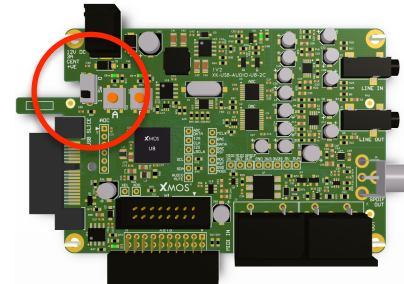
Will therefore work with any USB host platform that supports UAC2.0:

- ✓ Mac
 - Native UAC2.0 support in OS X 10.6 and above
- ✓ Windows:
 - UAC2.0 support with driver in XP, Vista, 7, 8, 8.1
- ✓ iOS
 - Through camera connector kit
 - Separate **MFfi customer program**
- ✓ Android
 - Native support where Android includes UAC2.0 host support
 - Either in the Android implementation, or via an App
- ✓ Linux
 - *Should* work where UAC2.0 host support is included
Not tested or supported

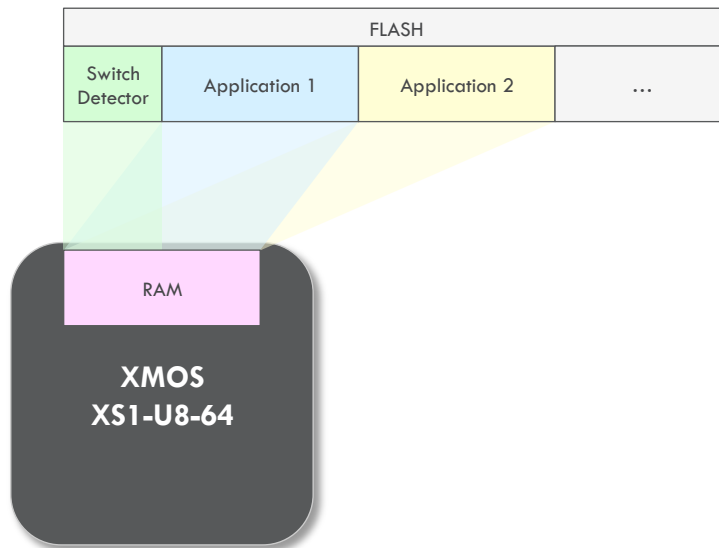


Software Switching Example

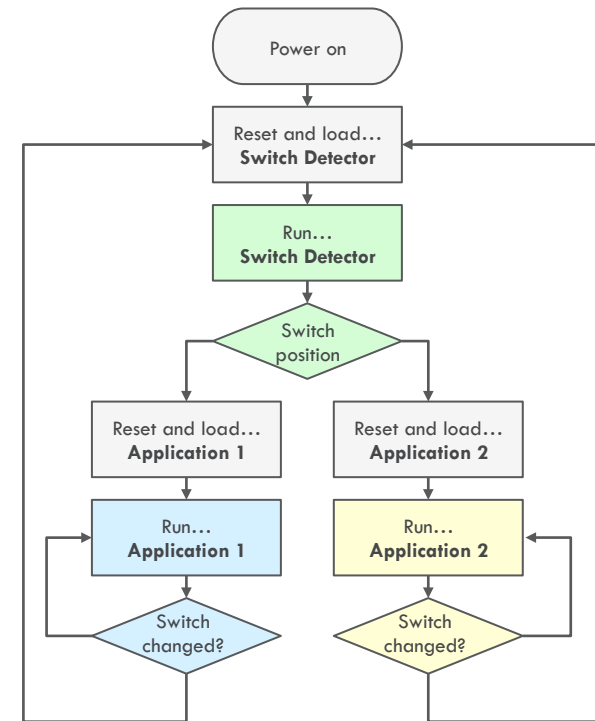
Multi-Function Audio platform includes a user switch:



Example 'Switch Detector' application uses switch position to load software(s) dynamically:



User experiences instant functionality change



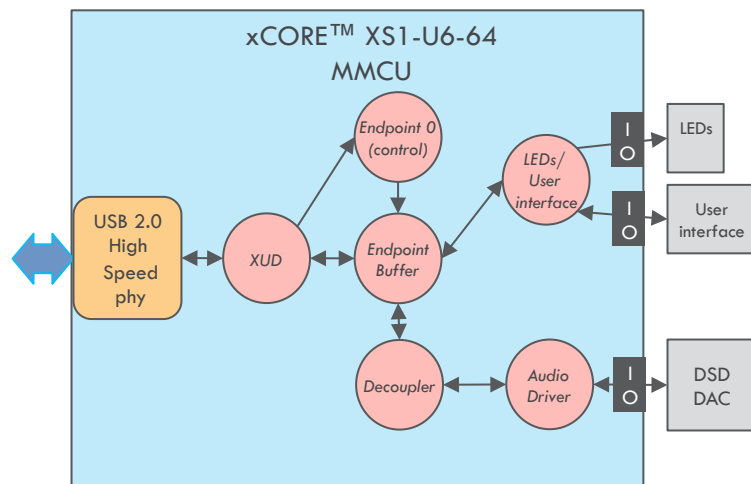


USB Audio 可以做什么



耳放产品

Core Diagram:



Sony Walkman
Headphone amplifier



Sony Walkman



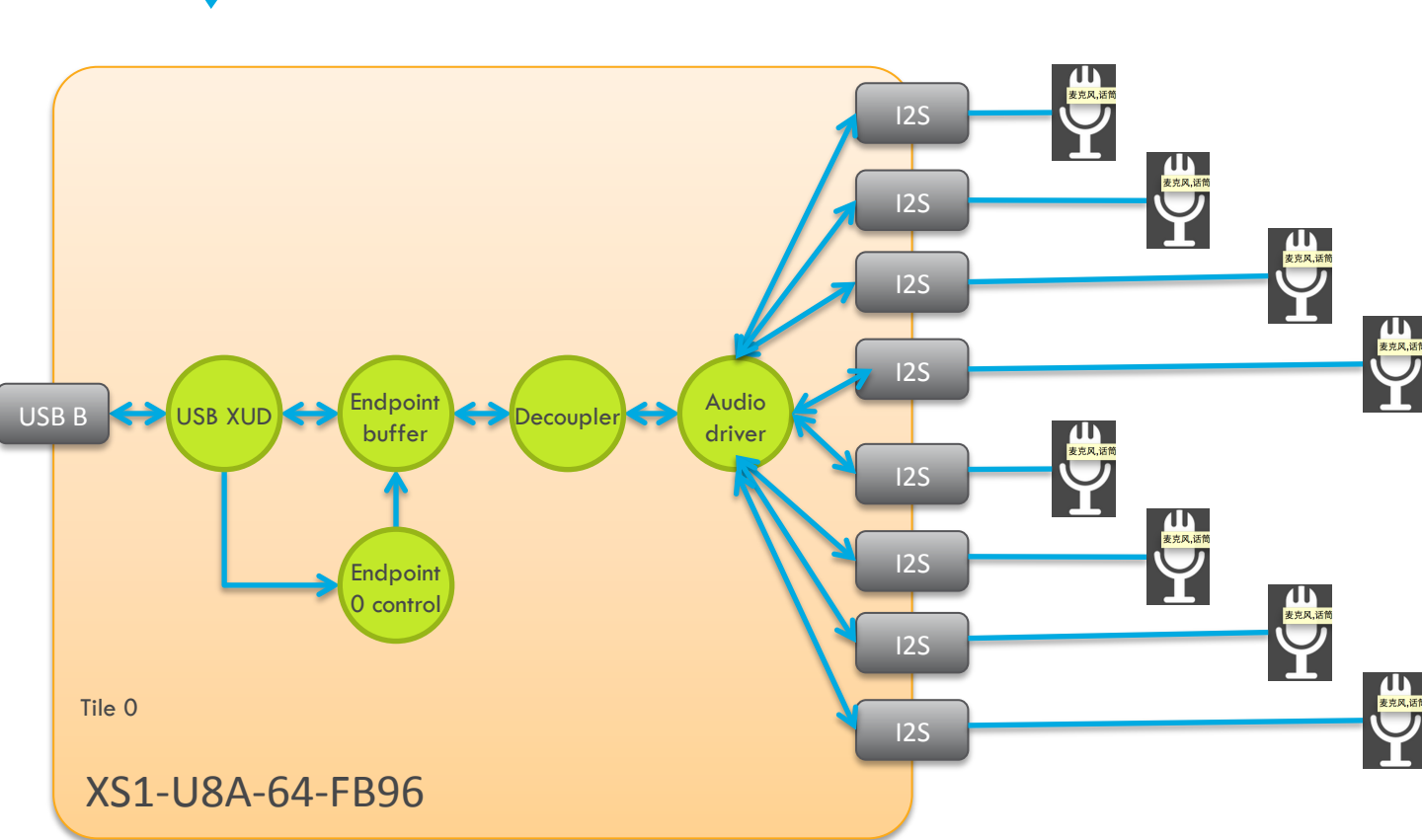


头戴式耳机

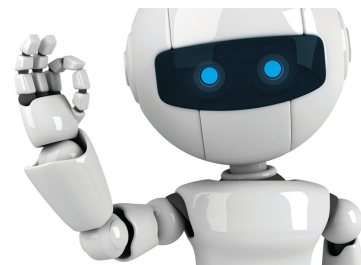




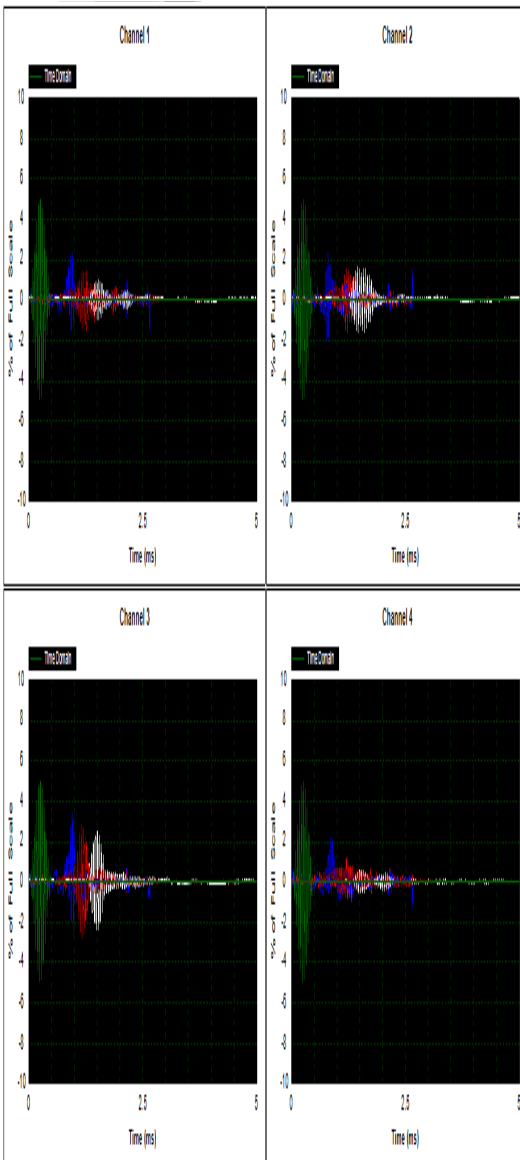
USB 麦克风



Blue
Microphones



MULTICORE MICROCONTROLLERS



调音台



SHURE



"The XMOS USB Audio solution gave our engineers the perfect starting point. Its flexibility allows us to easily customize the processor to our exact requirements. The single XMOS device replaces a number of components from our previous designs, dramatically upgrading our standard sound specifications, and reducing our material cost." Jerome Henry, Chief Brand Officer for Vestax.



桌面型高清播放器



网购您的
音乐生活!



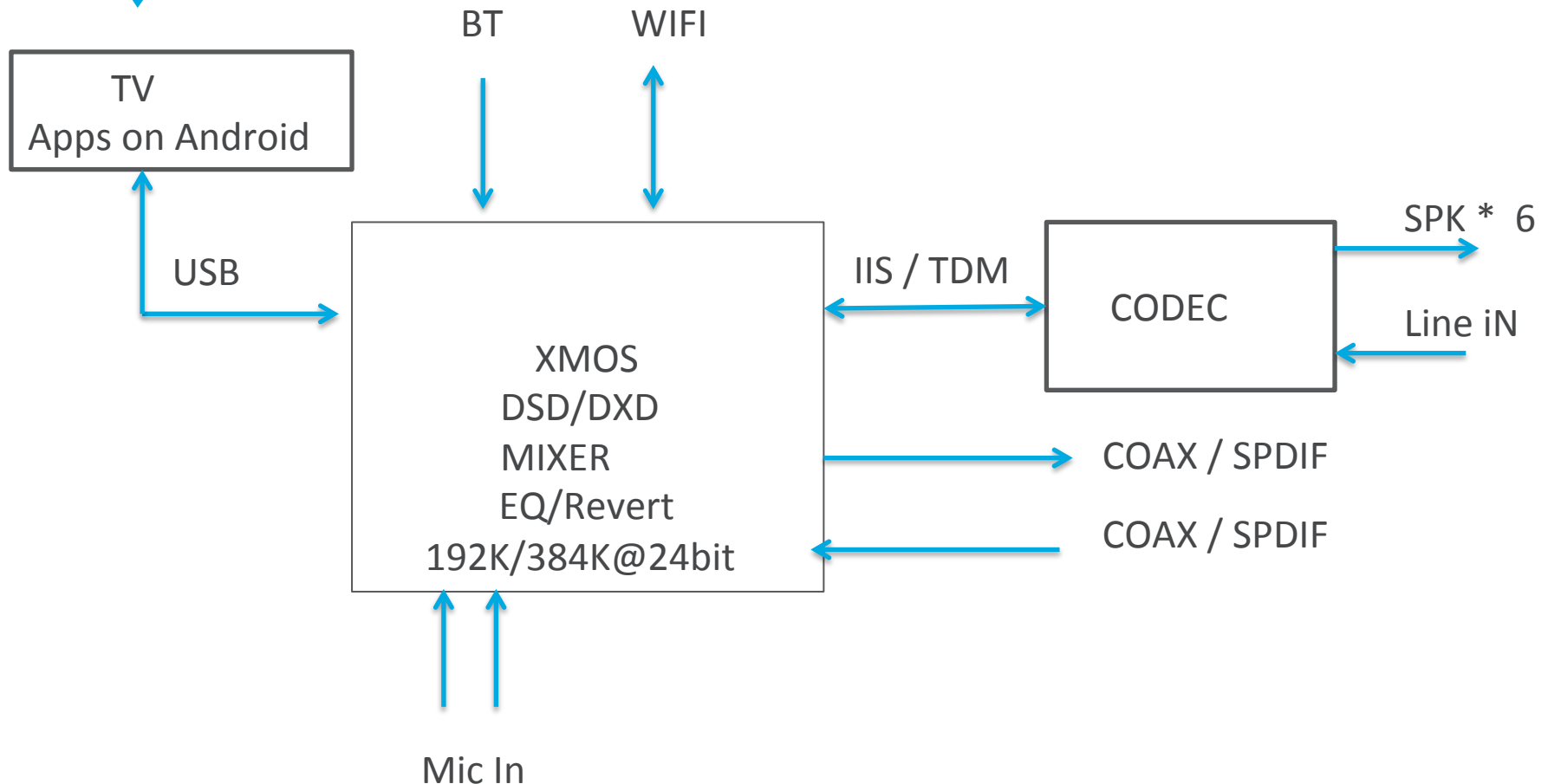


激光电视





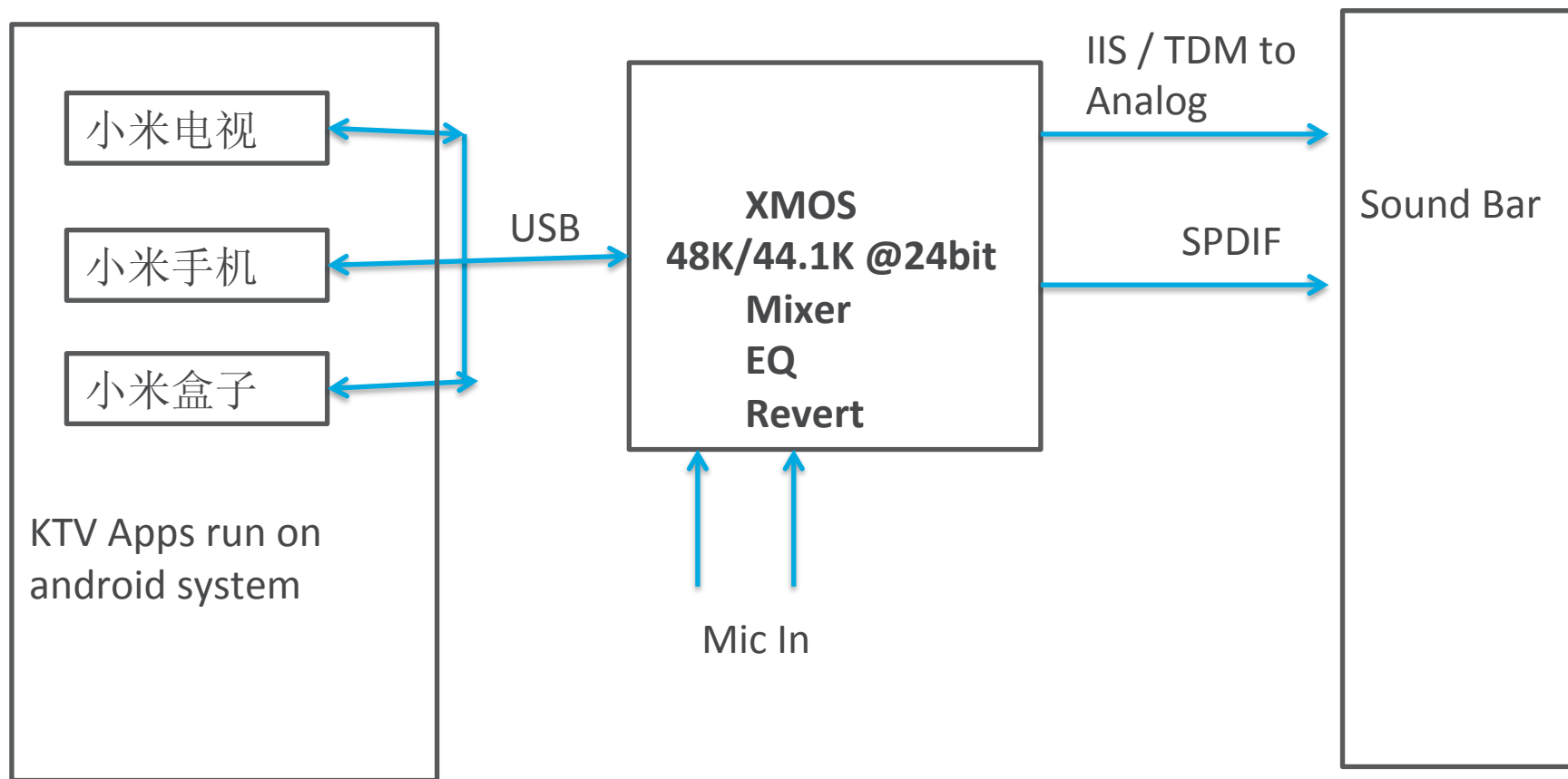
SoundBar 5.1 / 7.1 音箱



For KTV System ,need app runs on android/TV



KTV 盒子





有其他更好的想法？



请试试Xmos 开发工具

- 1.0.0
2014-10-01
[App Note Software](#)

[AN00126: USB Printer Device Class](#)

- 1.0.0
2014-10-01
[App Note Software](#)

[AN00129: USB HID Device Class](#)

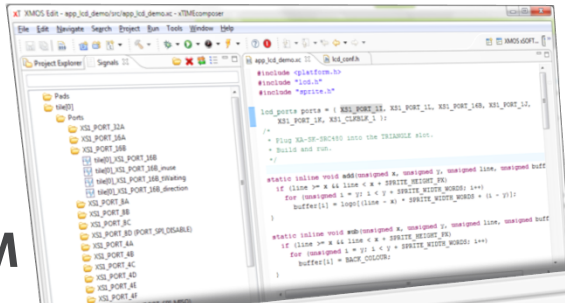
- 1.0.0
2014-10-01
[App Note Software](#)

[AN00136: USB Vendor Specific Device](#)



xTIMEcomposer STUDIO

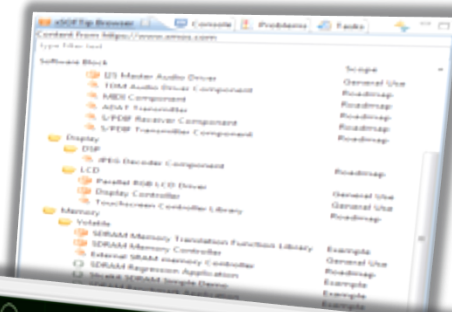
xSIM



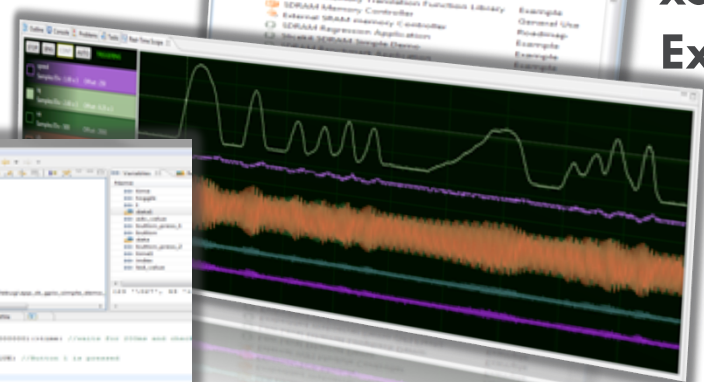
xTA



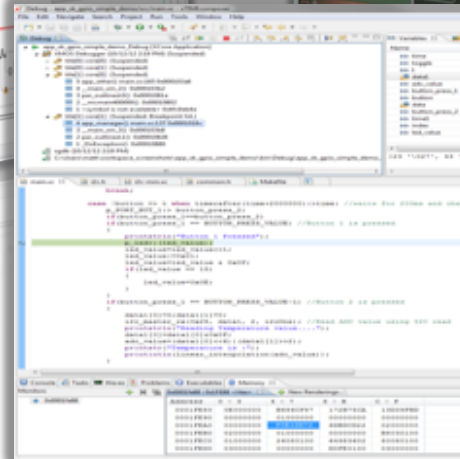
xSOFTip
Explorer



xSCOPE



xDE



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