

STA013 MP3 Decoder Chip *Reduces Power Consumption*

Upgraded version needs less than 100mW, extending battery life.

by Andrea Onetti in Agrate

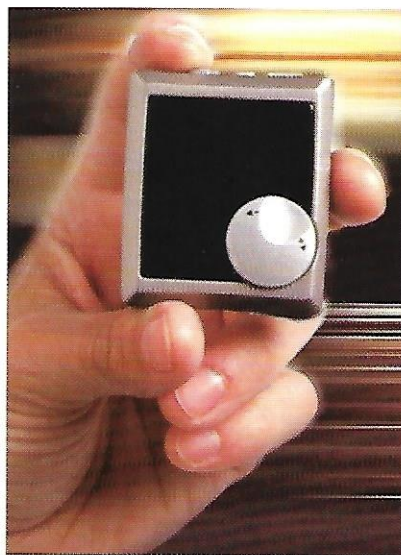


We are now shipping an enhanced version of the STA013 MP3 Decoder Chip that operates on voltages as low as 2.4V and reduces power consumption to less than 100mW, extending the play time of a typical portable player to more than eight hours using standard batteries. This version is still called STA013 and completely replaces the original type. By the end of the year we aim to reduce the consumption even more, down to below 50mW.

The STA013 also allows a functional improvement, adding ADPCM coding and decoding capabilities for voice recording without any change to the internal program code. Additional code required for this feature is simply

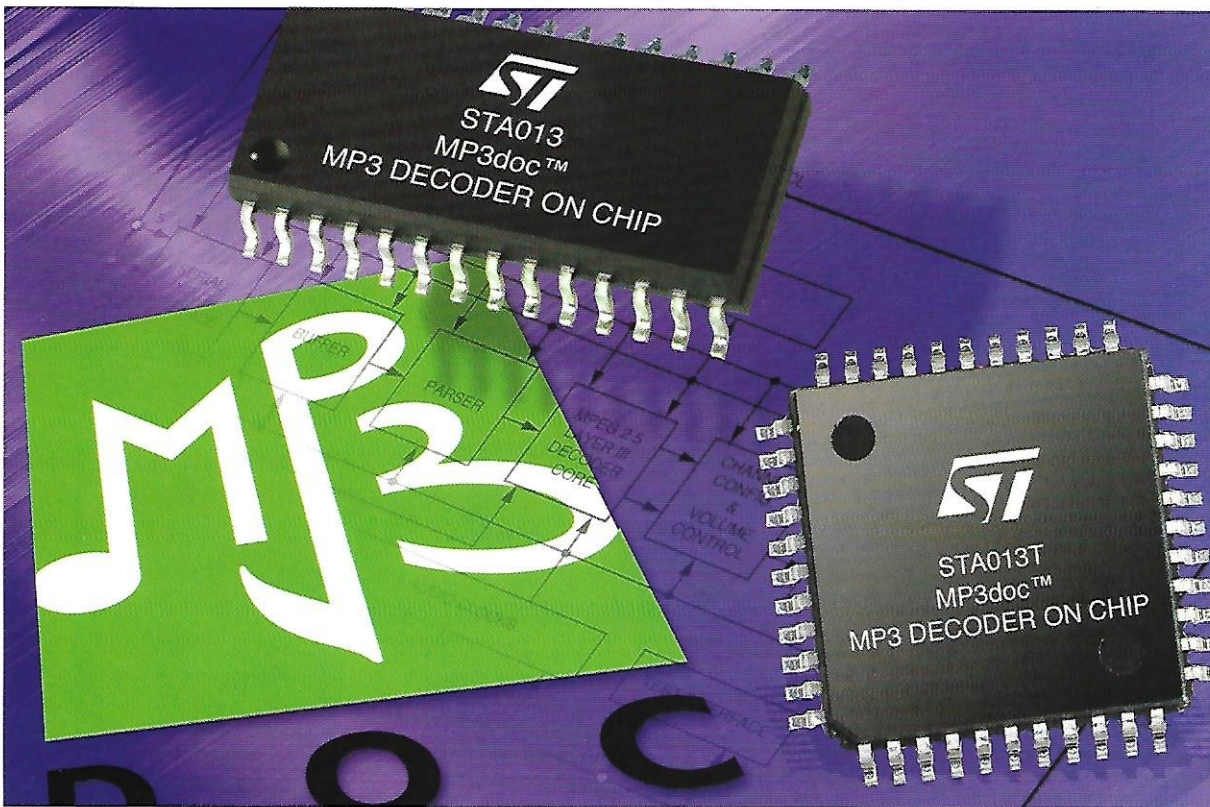
added to the initialization code in the system processor. This possibility of upgrading the chip even without changing the internal ROM code means that we can introduce new capabilities that work retroactively on chips already produced.

Meantime, the market for MP3 players has been given a boost by news from the US that the Record Industries Association of America (RIAA) has lost its lawsuit against Diamond Multimedia, the maker of the Rio portable MP3 player. RIAA tried to block the sales of MP3 players like Rio arguing that they allow copies of files to be made; Diamond Multimedia demonstrated that this is not the case because a file can be loaded into a Rio, but not read out.



An example of MP3 player containing ST components

Another sign of the growing acceptance of MP3 is the announcement that the Association of Copyright Owners and Publishers (ASCAP) — the US organization representing music copyright owners — has licensed its stock of four million copyrighted works of music to "mp3.com" for internet performances.



A new version of the STA013 is now available that reduces the power consumption to less than 100mW at 2.4V — the best performance on the market. Power consumption is very important in portable MP3 players because it determines the battery life.

Today most players on the market store music in flash memory, but this limits the amount of music that can be stored at a reasonable cost to no more than one hour. A new trend is towards the use of very small hard disk drives and RAM memory. The disk drive can store hundreds of MP3 music files which can be copied into the RAM for playing, minimizing the disk usage — partly to reduce consumption but also to ensure that the player is shockproof.



With the legal problems solved and high capacity players with a long battery life scheduled for

introduction in the third quarter we expect that the portable MP3 player will become a mass market consumer product before the end of this year. ST with its advanced STA013 player is well positioned to benefit from this boom.

For more information about the STA013 try searching www.st.com for "mp3" — there is a datasheet and application note. For other enquiries contact Andrea Onetti in Agrate (fax 050 - 6440). The best web site for MP3 news is www.mp3.com.

