Enjoy high definition multimedia, everywhere

Connecting all digital media devices in the home, Connected Living creates a new kind of multimedia experience. Wherever you are in your home and regardless of where the content came from, you can make the most of next-generation multimedia appliances that deliver true-to-life audio and video.

NXP offers solutions for a broad range of Connected Living devices from (high definition) digital TVs, PCs, set-top boxes (STB), personal video recorders (PVR) and digital media adapters (DMA) to digital picture frames, mobile phones, personal digital assistants (PDA), and personal media players (PMP).

We are also driving development of the key enabling standards and technologies for Connected Living devices, such as the new 802.11n wireless standard, our own Near Field Communication (NFC) technology, RF FE connectivity modules and DRM.

However, it is open standards that ultimately drive product and software innovation because they are hardware-independent and easier to use. That dramatically cuts development time, cost and complexity, contributing to market growth. And it's great news for developers like you.

Therefore, we have taken a leading role in the Digital Living Network Alliance (DLNA), and are also fully committed to industry-wide open standards like Universal Plug and Play (UPnP) and the CE Linux Forum (CELF).

Ease of Use

To fully experience the benefits of Connected Living, all these connected devices need to be very easy to use. At NXP, we have implemented three features in our Connected Living solutions to enhance the user experience: 'Follow-me' mode for watching TV, content aggregation and remote programming.

'Follow-me' mode for watching TV

A typical Connected Living situation is when you are watching a program in one room and want to temporarily 'pause' the program and continue watching it in another room (e.g. start in the living room and then continue later in the bedroom). Our Connected Living solutions offer this functionality with one single button.

Content aggregation

With digital video and audio content available on multiple devices in the house, you could eventually have problems simply finding the right content on the right device. Most consumers are typically not even interested in the server at all. So in Connected Living, the details of servers are hidden from the end-user. When audio content is requested, all audio-files in the home-network are displayed irrespective of where they are stored.

Remote programming

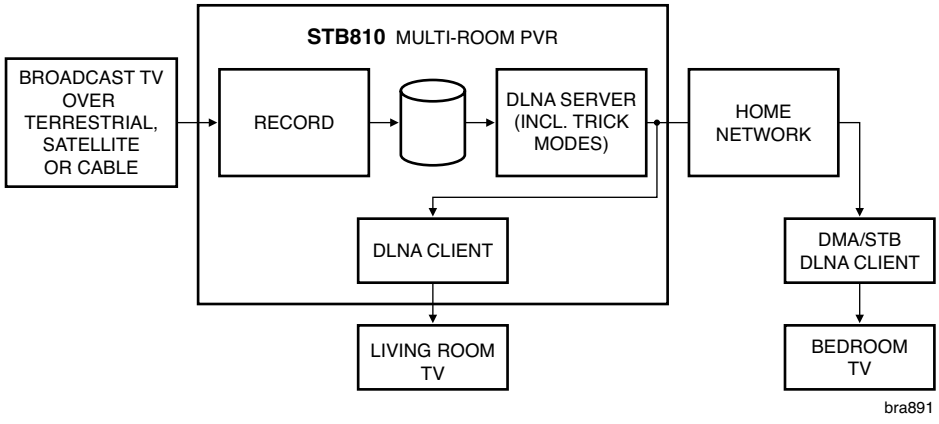
If you don't need to know where your digital content is stored to be able to access it, then you should also be able to program your devices from any Connected Living client.

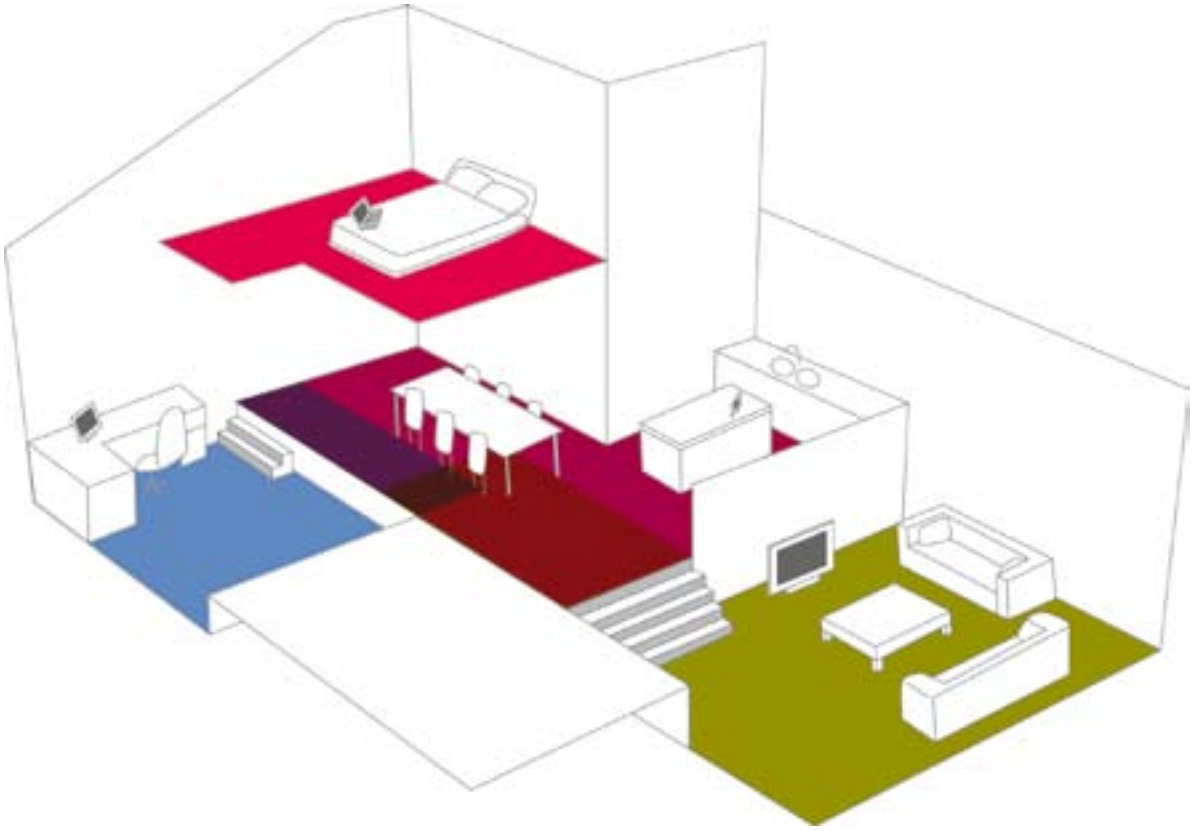
Networked MR-PVR

The networked Multi Room PVR (MR-PVR) is based on our STB810 system solution. It delivers all the normal advantages of a PVR: recording both Standard Definition and High Definition content to hard disk, time-shifting of live content and instant replay. In addition, it allows content to be accessed from any Connected Living client such as a Digital Media Adapter (DMA) or Personal Media Player (PMP). These (tuner-less) clients can also use one of the available tuners in the networked MR-PVR to receive live broadcasts. And using the latest DLNA standards, it is also possible to start or program recordings on the MR-PVR from a Connected Living client.

The MR-PVR is built around the Nexperia home entertainment engine PNX8950, running an industry standard Linux operating system. It features a dual ATSC front-end solution based on the NXP TUV1236 tuner, which features an integrated channel demodulator. Our PVR application software has been extended with a UPnP media server to allow other clients to make use of the resources in the networked MR-PVR. Connectivity between the networked MR-PVR and the dedicated MR-PVR clients is based on Metalink's 802.11 (pre)n wireless connectivity solution. Alternatively, it can be connected using an industry standard Ethernet connection.

The MR-PVR clients are currently also based on our STB810 system. The MR-PVR client supports playback of stored HD video content and remote programming of the networked MR-PVR, in addition to allowing the user to watch live broadcasts or listen to stored music.





Digital Media Adapter

The Digital Media Adapter (DMA) solution is based on our Nexperia Media Processor PNX1502. It allows you to browse content on a PC or Networked PVR from the comfort of your living room. Using a remote control, you can select pictures to be displayed from the PC, whilst playing back your favorite MP3's in the background. It also allows you to playback compressed video files from your PC over a wired or wireless network connection.

The DMA is built on the Nexperia Media Processor PNX1502, running Mediabolic's award-winning middleware. The DMA is compliant to UPnP and DLNA standards and is also Intel ViiV compliant.

The connectivity of the DMA is based on mini-PCI modules that can use standard 802.11g network modules and are prepared to use Metalink's 802.11 (pre)n wireless connectivity solution. Alternatively, it can be connected using an industry standard Ethernet connection.

Audio hub

The audio hub server allows you to store your entire music collection. Music is stored in MP3 format on the audio hub's hard disk and can either be ripped from CD using the built-in CD-drive or transferred from a PC using the media server PC software.

Capable of supporting up to five clients per server, it allows you to play back your favorite music wherever you want. In addition to standard playback, the audio clients also offer the possibility for a 'follow-me' mode where music can be transferred from one client to another and a 'party' mode, where the same music is played back from all available clients in the house.

The Audio hub 1.5 solution is based on our PNX8706 solution running our own middleware. UPnP compliant, it offers the possibility to share music on non-dedicated clients such as a DMA or PMP.

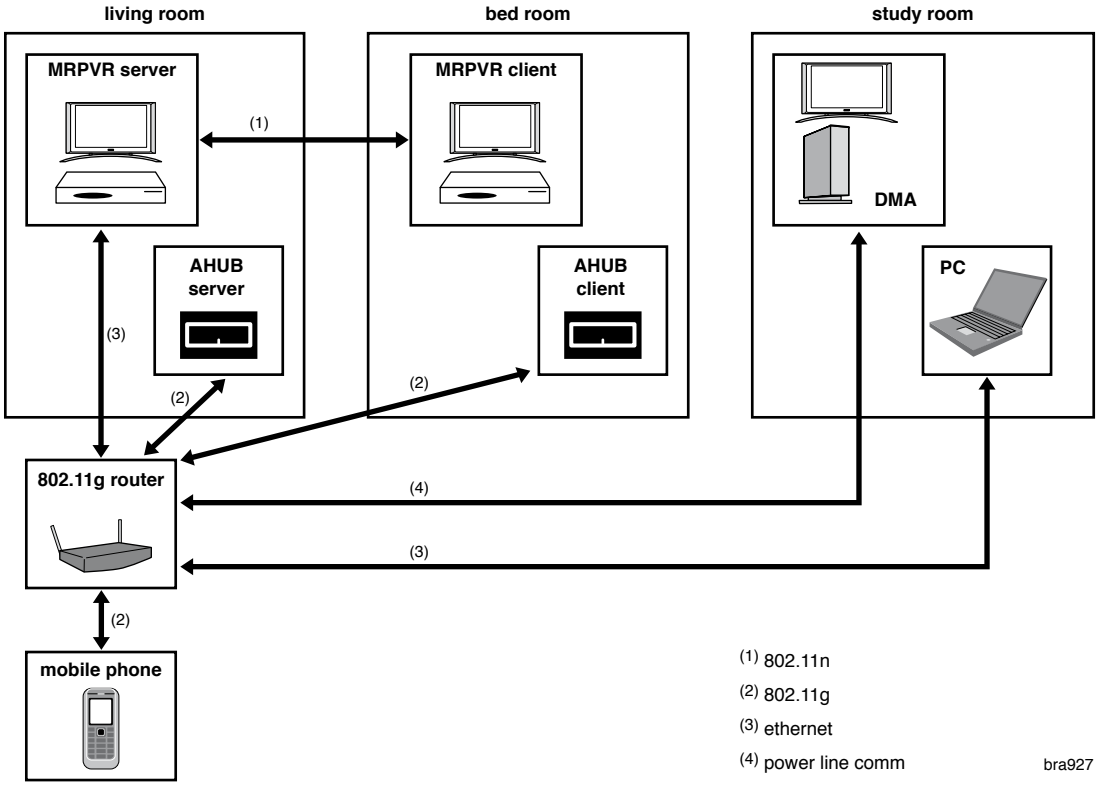
Connectivity for the audio hub server and clients is based on mini-PCI modules that use standard 802.11b/g network modules. Alternatively, they can be connected using an industry standard Ethernet connection.

PC server

The PC server is based on a standard Windows XP PC with a multi-tuner card. This tuner card lets you receive live broadcasts from satellite or terrestrial broadcasts and view them on the PC monitor. It is also possible to view one program while recording another to the hard drive.

Commonly used to store digital photographs, music and video files, the PC is a full member of our Connected Living concept. In addition to standard PC functionality, UPnP server software allows other UPnP-compliant devices to make use of the PC's resources.

On top of the standard Microsoft Windows XP operating system, a UPnP media server has been installed to provide content resources to the other Connected Living devices. The PC server is connected to other devices using an industry standard Ethernet connection.



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