



FAQ

What is HANA? What is HANA's mission?

HANA stands for the **H**igh-Definition **A**udio-Video **N**etwork **A**lliance. HANA is a cross industry alliance of content owner, service provider, consumer electronics and IT companies dedicated to providing consumers with a simple way to connect and enjoy high-definition entertainment anywhere in the home.

When was HANA formed? What companies are members of HANA?

HANA was incorporated in October 2005 and formally launched in December 2005. A current member roster is available at www.HANAalliance.org.

Why was HANA formed?

With a single focus on premium quality HD and the combined expertise from the four industry segments, HANA is uniquely positioned to bring HD to life for consumers. The HANA Solution enables consumers to easily connect all of their HANA devices using just one cable and access them with just one remote, freeing them from the existing complexities and time-consuming set-up procedures that impact the enjoyment of the HD experience.

HANA addresses HD requirements directly in order to realize the full potential of the HD market opportunity. Existing standards organizations and alliances have typically only included members from one or two of the industries most affected by the transition to HD. HANA's founding members include content owners and service providers, as well as CE and IT manufacturers, and software developers. Thus HANA solutions will address the entire range of issues, including bandwidth capacity, quality of service, ease of use, content protection and time to market, ensuring that the high value HD content that consumers want will be available everywhere in their homes.

What has HANA accomplished to date?

HANA has:

- Completed HANA 2.0 design guidelines
- Completed Phase 2 use cases
- Led CEA 2027-B and CEA 931-C
 - HANA Phase 2 products
- Enabled HANA over Coax with 1394 TA
- Added wireless extensions
- Held first interoperability PlugFest

How will consumers benefit from HANA?

HANA's focus is to deliver products that will simplify consumers' lives by eliminating the difficulties associated with connecting and controlling their entertainment devices. Consumers will be able to:

- View, pause and record more than five HD channels simultaneously with full quality of service;
- Share personal content between the IT and AV networks while protecting commercial HD content from piracy;
- Control all AV devices and access content with just a single remote per room;
- Use just a single cable to connect devices rather than multiple cables between all devices.

How will content providers benefit from HANA?

By creating a secure home network environment that respects the rights of content owners, multichannel video service providers and broadcasters, HANA can give consumers flexible and convenient access to more high-value HD content. In particular, the incorporation of Digital Rights Management and watermark verification of copyrighted content in the HANA architecture are key to ensuring that HD content can flow seamlessly across a wide range of consumer devices.

How will service providers benefit from HANA?

HANA enables new market opportunities for service providers. By providing a secure content protection zone for HD content, HANA will allow service providers to take advantage of the retail channel sooner while reducing capital expenditures and providing simple and reliable access to AV entertainment for their customers.

How will CE manufacturers benefit from HANA?

CE manufacturers will be able to deliver new and exciting products and features to their consumers, while simultaneously simplifying the user experience. Just as importantly, a product that rolls out today will not become obsolete every time something new is introduced. New products will be required to adhere to the baseline standard guaranteeing interoperability with existing products.

How will IT benefit from HANA?

HANA will enable consumers to move their personal content from the Internet and their PCs to their CE devices around the home. By developing a standards-based secure environment for the distribution of content, HANA can help improve the consumer experience, expand the community of networked media devices and create new market opportunities.

How does HANA relate to other industry groups?

HANA has a formal liaison with the 1394 Trade Association (1394 TA) and the Continental Automated Buildings Association (CABA).

HANA also works with other industry organizations such as:

- Consumer Electronics Association (CEA)
- CableLabs
- Motion Picture Association of America (MPAA)
- Advanced Television Systems Committee (ATSC)

HANA and Advanced Access Content System (AACCS) are both addressing content protection. Although the two organizations are working on different aspects of content protection, their efforts are complementary to one another. HANA expects to refer to AACCS specs as AACCS licensed products come to market.

HANA members believe that a dedicated HD AV network will provide quality of service, ease of use, economy and content security that are appropriate for HD content and which compliment the capabilities of traditional IT networks. HANA members are also members of other networking alliances including the Digital Living Network Alliance.

Why has HANA chosen to focus initially on IEEE 1394/FireWire™?

Initially, HANA is focused on IEEE 1394, also known as FireWire, for its home network solution. The advantage of 1394 is its ability to transport up to nine simultaneous HD streams at 400 Mbps. It also enables automatic device discovery, a system-wide clock to synchronize audio and video content, and guaranteed quality of service. As other technologies provide the connections with the necessary reliability and simplicity, HANA will embrace them as well. At the request of consumer electronics and cable manufacturers, it has become an FCC requirement on HD devices and tuners. The FCC mandate ensures a large pool of HD devices that HANA will be able to leverage. HANA also plans to base its guidelines on the new 1394 Over Coax standard.

What HANA products will be commercially available? When will they be available?

HANA compliant products will include enhanced HDTVs, AV HDDs, personal video recorders, set top cable boxes, next generation DVDs, home theaters and more. HANA products are currently undergoing market trials. The first commercial HANA products are expected to be commercially available in 2009. HANA is demonstrating the HANA solution at CEDIA 2008, by demonstrating how HD content can be shared through any content source at anytime.

Will there be a compliance or certification program?

HANA is addressing compliance and certification testing. HANA members are working to develop a certification program and also plan to host HANA developer conferences.

What's next for HANA?

HANA will continue to enhance capabilities and performance while maintaining backwards compatibility and interoperability. Looking ahead, HANA will:

- Address OpenCable Application Platform harmonization and interfaces;
- Continue to work with industry standards organizations;
- Enhance content protection and trust models;
- Develop reference designs;
- Enable compliance and certification testing.

Why join HANA?

Companies in the four industry areas – content providers, service providers, CE and IT – can work with other HANA members to help shape the future of HD and fulfill the HANA vision. HANA plans to address stronger content protection, wireless extensions, richer applications and user interfaces, advanced video compression, interactive HD content and enhanced security.

How does a company join HANA?

HANA membership is open to all companies involved in the digital entertainment industry. Information on how to join HANA is available at www.HANAalliance.org.