

AMD Aims to Enable Multimedia for Handheld Devices

Martin Reynolds

AMD's new group of Personal Connectivity Solutions (PCS) processors will enable multimedia for the next generation of handheld devices. AMD sees a good opportunity as handheld devices become more sophisticated.

NEWS ANALYSIS

Event

On 8 April 2002, Advanced Micro Devices (AMD) announced the Alchemy Au1100, its first processor from its newly formed PCS group. Although the Au1100 targets the mobile information appliance market, the PCS group will focus on bringing to market semiconductors for home networking equipment, Web tablets and eventually handheld devices. The creation of the PCS group follows AMD's acquisition of Alchemy Semiconductor in February 2002, and the initial products are based on Alchemy's product line.

Analysis

AMD's new PCS group will initially expand products it acquired when AMD bought Alchemy but will eventually move into a broader wireless networking system market. AMD thus signals its desire to open up a potentially lucrative market supplying customers with full sets of multimedia features for handheld and other wireless devices. The forecast numbers for handheld devices are impressive: Gartner Dataquest estimates worldwide personal digital assistant (PDA) shipments will total 15.5 million units in 2002 and 19.5 million units in 2003. Gartner forecasts cell phone shipments to exceed 400 million units in 2002. AMD wants a piece of this market.

As handheld devices grow in sophistication, the differences between cell phones and PDAs will become increasingly blurred. Future users of more powerful handheld devices will demand a variety of features, for example:

- Video decompression and compression
- MP3 playback
- 3D graphics
- Polyphonic synthesizers
- Multiple wireless subsystems
- Digital rights management
- Encryption technology
- Digital certificates

This growing sophistication creates a market opportunity for chips that can provide these kinds of system features. As more and more applications and storage connect remotely into the wireless network, handheld devices will increasingly act as the user's mobile connection to business and personal activities.

The key to success in this market is standardization and flexibility. To support its design investment and make a profit, AMD will have to sell many chips. However, AMD's use of the MIPS Technologies processor rather than the near-ubiquitous ARM (advanced RISC machines) standard will present a challenge in the key handheld and cell phone markets. Gartner would not be surprised to see AMD emulate or incorporate an ARM instruction set into this class of device in the future.

Analytical Source: Martin Reynolds, End-User Computing

Need to Know: Reference Material and Recommended Reading

- "Dual-Network Modems Give Notebooks High-Bandwidth Access" (FT-15-9728). Enterprises should deploy new notebook modems able to roam between 802.11b and cell phone networks even though they won't become a permanent part of the technology landscape. **By Martin Reynolds**
- "Ultrawideband Opens Wireless Networks to New Possibilities" (FT-15-5649). Although it's just one of many competing technologies, ultrawideband could offer a powerful form of short-range wireless communication. **By Martin Reynolds**

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