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Jon Peddie Research

DTV: The Components and Forecast

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THE BUSINESS OF GRAPHICS AND MULTIMEDIA

Jon Peddie Research

- Founded in 2001 - *our 18th year*
- Focus and emphasis on Digital Technology, Multi Media, and Graphics
- Consulting and market research - Advisor to industry leaders and financiers
- Bi-weekly report, various Digital Technology Market Studies

The Business of Multimedia and Graphics

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TV Jeopardy

- RCA used this term in 1934 annual report
  - *Answer: What is High Definition TV?*
- NHK demonstrates this in 1984
  - *Answer: What is the first HDTV with 1,125 lines of resolution?*
- What is $549?
  - *Samsung 26" w/Built in HDTV tuner CRT TV*
- Year 2015
  - *Answer: What is the year where most developed countries will shut analog TV signals?*

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North America

- United States
  - *Dec. 1996 adopts ATSC standard*
  - *1344 Stations in 211 Markets Delivering in Digital (Dec. 2004)*
  - *Fully integrated HDTV sets by 2007*
  - *Analog shutoff - December 31, 2006 or when 85 percent of U.S. TV households have the capability to receive Digital TV signals (whichever is later)*
- Canada
  - *Adopt ATSC standard in 1997*
  - *First DTV broadcast in 2001*
  - *No set conversion timetable*
- Mexico
  - *ATSC standard (July 2004)*
  - *No set conversion timetable*

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Asia

- China
  - *10 digital channels currently available in China*
  - *Government is targeting 100M digital TV households by 2008*
  - *Full transition to Digital by 2015*
- Japan
  - *Started DTV in Dec. 2003 and nationwide 2006*
  - *Government mandate to fully convert to digital by 2011*
- South Korea
  - *Commercial service started in 2001*
  - *Nationwide coverage by 2005*
  - *Analog shutoff approx. 2010 (95% of the households transition to digital television)*

Europe

- Germany
  - *Berlin launched in 2002 and analog switch off in 2003*
  - *Expected 70% coverage in 2005*
  - *Analog switch off in 2010*
- France
  - *Free DTV terrestrial Mar. 2005*
  - *35% coverage at launch*
  - *Switch off 2010*
- Italy
  - *70% coverage by 2004 end*
  - *Switch off Dec. 2006*
- Spain
  - *DTBV launched in 2000*
  - *Switch off 2012*
- UK
  - *95% consumers must have DTV equipment*
  - *BBC believes switchover will occur in 2012*

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Digital TV System Diagram

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Facts & Predictions

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DTV Market

- The worldwide DTV market for 2004 was $384M
- Growth of 95% from 2003 to 2004

FACTS

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Semiconductor Influences

- Continued panel pricing drops will cause
  - *Greater pricing pressures on semiconductor companies*
  - *CE companies to increase use of merchant semiconductor solutions*
- Challenge the current leaders
  - *Existing players and startups*
  - *Asian companies*
- Complex user functions will reside outside of the TV
- Too many players and not enough customers to sustain the current number of suppliers
  - *Mergers*
  - *Bankruptcies/Sale of Technical & Brand Assets*

Predictions

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Semiconductor Market Opportunity

Video Decoder & Image Processors

Growth to $1.9B in 2007

- ***CAGR 37%***

Predictions