

Emerging Display Technologies

3D Television Strategies and Markets

By Riddhi Patel, Director

Forecast**Frequency**

- 5-year annual

Measures

- Units
- Market Value
- ASPs

Regions Covered

- Worldwide
- China
- Eastern Europe
- Japan
- Latin America
- MEA
- North America
- Rest of Asia-Pacific
- Western Europe

3-D TV Technologies

- Autostereoscopic 3-D
- Stereoscopic with Glasses
- Lenticular Lens
- Parallax Barrier
- Shutter Glasses
- Anaglyph
- Patterned Retarder
- Active Shutter Glasses—Time-Sequential
- Dual-Panel LCD

3-D TV Market Drivers

- 3-D Broadcast Content
- 3-D Movie Content
- 3-D Gaming Content
- 3-D Content Quality
- 3-D Compatibility
- Industry Standards
- Screen Sizes and Pricing
- TV Brand Strategies

3-D TV Forecast Scenarios

- Cynical
- Realistic
- Upbeat

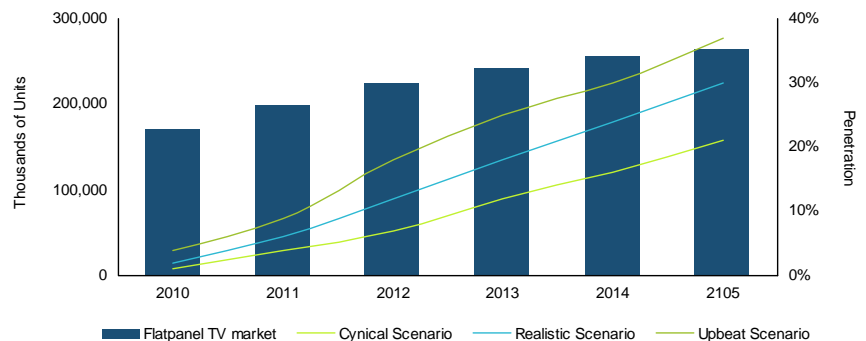
Thanks to the blockbuster success of Avatar and massive investments in 3-D games, films, and TV programming, 3-D technology is set to revolutionize the way video content is produced, delivered and experienced.

Television brands and display manufacturers are counting on 3-D to accelerate replacement cycles and justify premium prices. But with 3-D capable sets only just beginning to enter the market, and few 3-D titles available for viewing, the growth in demand for 3-D TV is anything but certain.

In this unique report, iSuppli considers 3-D from every angle: competing technologies, content development, brand strategies, and pricing. Rather than offer a single outlook for the future of 3-D TV, iSuppli presents three forecast scenarios, from cautious to optimistic, based on significantly different sets of assumptions.

iSuppli has long been recognized for providing accurate and unbiased projections of emerging television technologies. If your company is concerned about the impact of 3-D, our perspectives will help you to cut through the hype and gain a clear understanding of where this market is heading.

Comparing the Three Scenarios of 3-D TV Shipments and Forecast

**Key Issues Addressed:**

- What technologies are used to deliver a 3-D image on TV? What are their relative advantages and disadvantages?
- What are the main drivers and impediments to 3-D TV consumer adoption?
- How quickly will the market for 3-D televisions develop?
- Which companies are best positioned to create and fulfill demand for 3-D TV systems?

Applicable To:

- Brand manufacturers, display manufacturers, OEMs, ODMs, content providers
 - Market strategy
 - Product planning
 - Product marketing
 - Business development
- Financial Investors
 - Equities
 - Venture capital
 - M&A

Lead Analyst**Riddhi Patel, Director**

Riddhi Patel is one of the top analysts in the world covering the television market and value chain. Her clients include the leading TV companies, LCD panel makers, consumer retailers and investment firms.

Riddhi's proprietary research is extensive. Every week, she and her team of analysts track the pricing and promotional activities of major TV retailers, both brick-and-mortar and on-line. And every month, Riddhi analyzes the buying preferences of thousands of television consumers, enabling her to provide deep insights into the features, price points, and service offerings that influence TV buying behavior.

Riddhi is also the creator of iSuppli's unique BRIC TV Market Tracker, which closely monitors the television value chains in the world's four largest emerging markets: Brazil, Russia, India, and China.

Prior to joining iSuppli in 2002, Riddhi served in senior analyst positions at Raza Foundries, Aberdeen Group and Gartner/Dataquest. She has an MBA in marketing from South Gujarat University, Surat, India, as well as a BS in Physics from MS University Vadodara, India.

Table of Contents

Introduction

Executive Summary

- 3-D TV Defined

Findings and Implications

Technology Talk—3-D Options for Consumer TV

- Autostereoscopic—No Special Eyewear Required
- Stereoscopic or 3-D with Glasses
- Passive Colored Glasses or Anaglyph
- Passive Polarizer Glasses—Patterned Retarder
- What is the Ideal 3-D Technology?
- Potential Impact on Display Industry
- 3-D Content
- Standards are Critical

3-D TV Overview

- 3-D TV Defined
- 3-D TV is Coming but is the Consumer Ready?
- 3-D TV Market—What is in Store?
- Brands and Their Current Strategies

3-D Content on the Rise

In Summary

Appendix A: Assumptions

Appendix B: Definitions (Products, Applications, Regions)

Appendix C: Research Methodology

Figures

3-D TV Shipments and Forecast, 2010-2015

3-D Technologies Classified

Illustration of Lenticular Lens 3-D Technology Operating Principle

Lenticular Lens Sheet Placed at a Slant Over an LCD Display

Illustration of Parallax Barrier 3-D Technology Operating Principle

Illustration of Sharp's Implementation of Parallax Barrier 3-D

Optical Filter Array Positioned at a Slant to the Pixel Grid in a Newsight Display

Illustration of Patterned Retarder 3-D Operating Principle

Time-sequential 3-D with Active Shutter Glasses Operating Principle

Illustration of Common Frame-compatible Spatial Multiplexing Compression Mechanisms

A Simplified View of 3-D Ecosystem Components

Comparing the Three Scenarios of 3-D TV Shipments and Forecast, 2010-2015

3-D TV shipments, Revenues and ASPs for Pessimistic Scenario, 2010-2015

3-D TV Shipments, Revenues and ASPs for Realistic Scenario, 2010-2015

3-D TV Shipments and Forecast by Region—Realistic Scenario, 2010-2015

3-D TV Shipments and Forecast by Technology—Realistic Scenario, 2010-2015

3-D TV Shipments, Revenues, and ASPs for Optimistic Scenario, 2010 to 2015

Tables

Comparison of Major 3-D Display Technologies

Assumptions for the Various 3-D TV Shipments and Forecast Scenarios

TV Brands and Their Approach to 3-D for Consumer TV Applications

List of Available Broadcast by Country Television Systems Forecast Assumptions