“Growth Scenario of 3D Consumer Market 2011”
The 3D New Wave and the Future Image

INDEX

1 Executive Summary

2 3D overview surrounding 3D Consumer

- 2.1 Trend of 3D movies
- 2.2 3 major elements of 3Dconsumer and actual status

3 3D consumer market overview and the analysis of challenges .

- 3.1 3D consumer on the resting-place
- 3.2 Challenges for the growth of 3Dconsumer market [Market Growth]
- 3.3 Challenges of Contents / Delivery [Contents／Delivery]
  - 3.3.1 Actual status of contents delivery
  - 3.3.2 Expansion of screen size
  - 3.3.3 Challenges of 3D broadcasting format
- 3.4 Challenges of technology [Techonology] .
  - 3.4.1 Challenges of 3Ddisplay technology
  - 3.4.2 Status of picture quality by 3D display technology .
  - 3.4.3 Positioning of 3D picture quality for consumers

4 Dirction of the solution for the challenges of 3D contents

- 4.1 Rapid changes in content viewing environment
- 4.2 Way of the future 3D contents
  - 4.2.1 Challenges of the 3D contents
  - 4.2.2 Relations between 3D display characteristic and 3D contents
  - 4.2.3 3D contents delivered on internet
  - 4.2.4 Web sites for 3Dcontents posting .

5 Trend of 3D technology and Analysis of future 3D consumer market .

- 5.1 Trend of 3D technology
  - 5.1.1 Trend of technology of 3D Displaywith glasses
  - 5.1.2 Trend of technology of 3D display without glasses
- 5.2 Market trend of 3Ddisplay
- 5.3 DSC for Consumer
- 5.4 Video Camera for Consumer
- 5.5 Smartphone / Tablet PC
- 5.6 Mobile Game Console

6 Growth scenario of 3Dconsumer market

- 6.1 Essentials for 3D consumer market growth .
- 6.2 Goals ahead of the growth

7 Long-term strategy supposed by 3Dpatent
7.1 Patent trend
7.2 Trend of R&D
8 Postures of each 3D related companies
8.1 3D showcase in IFA2011
8.1.1 SONY
8.1.2 PANASONIC
8.1.3 TOSHIBA
8.1.4 SAMSUNG
8.1.5 LG
8.1.6 Philips
8.2 IBC2011 summary report
8.2.1 IBC2011overview
8.2.2 3D showcase
8.2.3 SES Astra“The Future of 3D TV”
8.3 Hollywood 3D experience
8.3.1 MasterImage 3D
8.3.2 James Cameron

Figures

Fig 1 3D Symbolic Trend
Fig 2 Number of 3D Screen (global)
Fig 3 3D Movie Opening Box Office Weekend in 2011
Fig 4 Digital 3D screen Trend
Fig 5 3D Important Elements
Fig 6 3D Consumer market on the resting-place .
Fig 7 Units Trend of TVs and 3DTVs
Fig 8 3D Broadcasting in the world
Fig 9 Contents Delivery Trend
Fig 10 ITU-R 3D Classification
Fig 11 Broadcasting method and Band width
Fig 12 3D Broadcasting Standardization by DVB（IBC 2011）
Fig 13 3D display technology position
Fig 14 3D video : sense of quality
Fig 15 Multi-screen, Mobility, Personalization, Socialization and SNS
Fig 16 3D Contents examples for 3D Mobile .
Fig 17 Samsung Explore 3D
Fig 18 Sony 3DExperience
Fig 19 YouTube 3D gallery
Fig 20 Access to the YouTube3D from Smartphone

Fig 21 YouTube connection from Bloggie
Fig 22 "Toukou 3D sandei"
Fig 23 3DTVtechnology for consumer
Fig 24 3DTV with passive glasses (FPR)
Fig 25 Optical aligment equipment of Ushio electronics
Fig 26 FPR production
Fig 27 FPR Supply chain
Fig 28 Passive 3DTV technical issues
Fig 29 Active Retarder (RDZ)
Fig 30 Summary of FPR 3D Advantages
Fig 31 Flicker Free
Fig 32 High Refresh Rate
Fig 33 No Crosstalk
Fig 34 High Brightness
Fig 35 Simple & Easy Handling
Fig 36 Extracxt from the fact sheet from LG
Fig 37 Fact Sheet
Fig 38 Autostereoscopic Growth by Compromise and Acceptance
Fig 39 Optimum view area of autostereoscoic
Fig 40 3D LCD resolution
Fig 41 Threshold of compromise and Acceptance for Living 3DTV
Fig 42 Toshiba Integral 3DTV technologies
Fig 43 Integral 3DTV Technology-1
Fig 44 Integral 3DTV Technology-2
Fig 45 NHK MT contents on Integral 3DTV 20GL1 at FPD International 2011
Fig 46 LG D2000N
Fig 47 Fructional 15-view glasses free 3DTV
Fig 48 Chimei glasses free 3DTV
Fig 49 Area Share of whole TVs
Fig 50 Exhibiting Canton Fair
Fig 51 3DTV exibition in Canton Fair
Fig 52 3DTV exibition in Canton fair and GOME electronics
Fig 53 Units Trend of TVs and 3DTV (%)
Fig 54 Yearly and Accumulation units trend of 3DTV
Fig 55 Column-Interleaved
Fig 56 PANASONIC 3D DSC
Fig 57 3D Digital Still Camera
Fig 58 DSC Units Trend
Fig 59 3D Video Camera

Fig 60 Camcoder Units Trend
Fig 61 3D Smartphone and 3D tablet
Fig 62 Smartphone Trend
Fig 63 Global Tablet Trend
Fig 64 Tablet Trend and 3D (%)
Fig 65 Unit Trend of Portable Game Console
Fig 66 3D Mobile Consumer Products
Fig 67 3D Viewer and the Contents generation
Fig 68 Total Mobile Consumer Products and 3D (%)
Fig 69 Applicants by patent nationality - Trends
Fig 70 Applications by patent nationality - Trends
Fig 71 Application - Patent nationality - Trends＜1st place～6th place＞
Fig 72 Application - Patent nationality - Trends＜13rd place～18th place＞
Fig 73 By display method－Patent Trend（with glasses, without glasses）
Fig 74 By display method－Patent Trend（without glasses）
Fig 75 By detailed display method－Patent Trend（without glasses）
Fig 76 IBC2011 Showcase
Fig 77 IBC2011 Panasonic
Fig 78 IBC Showcase (3)
Fig 79 8 channels in 3D on SES Astra
Fig 80 SES Astra co-operation
Table 1 2D/3D Conversion Companies
Table 2 Mobile products and the panel technologies
Table 3 3D panels showcase at FPD International 2011
Table 4 3DTV Units Trend
Table 5 3DTVs (USA)
Table 6 3D Projector (Full-HD in 2011)
Table 7 3D Monitor
Table 8 Major Function lists of Japanese DSC makers
Table 9 DSC Units Trend
Table 10 3D Camera
Table 11 3D video camera spec
Table 12 Camcoder Units Trend
Table 13 Panel Trend of Smartphone
Table 14 3D Mobile phone list
Table 15 Tablet Units Trend
Table 16 Panel Technical Trend of Tablet
Table 17 3D Chips
Table 18 Unit Trend of Portable Game Console (M units）
Table 19 3D Mobile Units Trends