IHS TECHNOLOGY

Large Area Display Cost Model

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2015

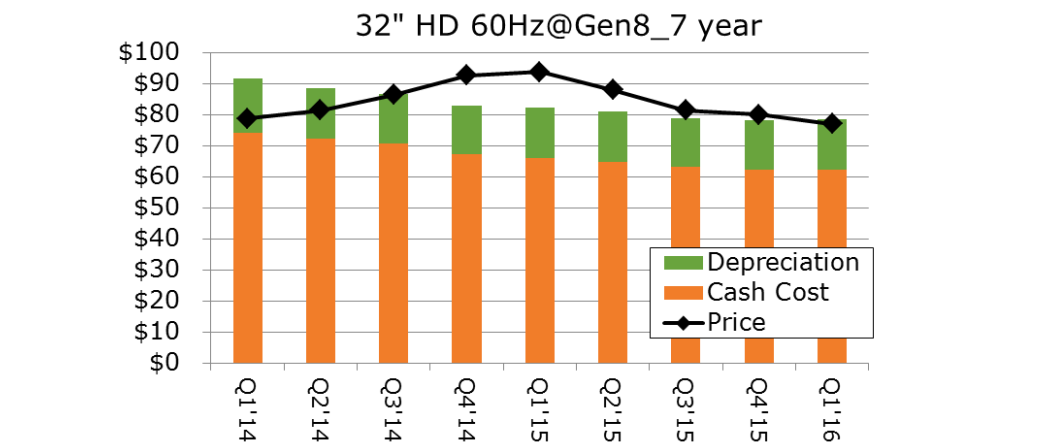
The Large Area Display Cost Model covers large-area (9"+) displays for major applications: the LCD TV, monitor, and notebook PC applications.

This model includes Excel data tables and PowerPoint. The cost model helps to understand the panel cost structure, forecast, and the profitability of each mainstream panels.

Users can generate forecasts based on their data and assumptions. At the same time, standard selections are already prepared in this model, showing many typical panels. The reader can also refer to it as a report on the cost structure of the mainstream panels.
The typical selection sheet is easy to work with, because users can change starting conditions affecting panel cost like equipment depreciation year and click on the "Process Start" button on the sheet.

Model users also can change the parameters like component costs, panel prices, panel yield, and fab utilization to reflect their real panel condition.

Cost model 32" HD 60 Hz open cell made Gen 8 with 7 years depreciation



Source: IHS

Key issues addressed

- Understand the latest LCD panel cost and the profit margin trend and forecast by size by fab generation
- Understand which fab generation is better to lower panel costs
- Know the estimated panel cost forecast for buyers
- Find typical first tier panel costs and component breakdowns
- Know which application and panel sizes are more profitable

Applicable to

- Brand manufacturers/OEMs/ODMs
  - FPD and the materials/components procurement division
- FPD panel suppliers
  - Materials/components procurement division
  - Panel development division
- Investment community
  - Fund managers / investors / analysts with interests in display companies

Actuals and forecast

Frequency, time period

- Quarterly update
- Q1'14 – Q4'19 (historical 1 year and rolling 5 years forecast)
- Typical cost for first tier ($US)

Data covered

- Notebook PC LCD module
- Monitor LCD module
- TV LCD module
- TV LCD open cell

Cost data structure

- Glass
- Target
- Chemical & indirect materials
  - Array material total
  - Yielded array material total
- Color filter
- Polarizer
- Liquid crystal
- Cell others
  - Cell material total
  - Yielded cell material total
- Driver IC
- Backlight
- PCBA, etc.
  - Module component total
  - Yielded module component total
- Material & component total
- Yielded material & component total
- Indirect expense
- Labor cost
- Equipment depreciation
- Facility depreciation
- Manufacturing total cost
- Cash cost
- SG & A
- Sales total cost
- Sales profit
- Module price
- Fab operation
- Yield by process

Lead Analyst

Yoshio Tamura – Senior Director

Yoshio Tamura is a Director of Analysis & Research within the IHS Technology group. He joined IHS in November 2014, when IHS acquired DisplaySearch, a leader in primary research and forecasting on the global display market. At DisplaySearch, he was a research fellow and senior vice president. An analyst known for his insight and for his relationships with panel and key component suppliers, he has spoken at display conferences in Japan, Korea, Taiwan and China. Mr. Tamura developed many of the DisplaySearch FPD market reports, improving and extending the company's analysis. He was appointed vice president and Japan office representative for DisplaySearch in 2000.

Mr. Tamura has more than 20 years of experience in FPD market research, including his former position with Techno Systems Research, a respected Tokyo-based market research firm. He has a bachelor's degree in International Economics from Chuo University, Japan.

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Panel sizes covered in Q1'15 report

(Panel sizes change in response to market trend)

1.0 Notebook PC LCD Panels

10.1"_1280X800
11.6"_1366X768
12.1"_1280X800
12.5"_1366X768
13.3"_1280X800
13.3"_1366X768
13.3"_1920X1080
13.3"_1920X1080 _IPS
14.0"_1366X768
15.6"_1366X768
15.6"_1920X1080
15.6"_1920X1080_IPS
15.6"_2560X1440_IPS
15.6"_3200X1800_IPS
15.6"_3840x2160_IPS
17.3"_1600X900
17.3"_1920X1080
17.3"_1920X1080_IPS
17.3"_2560X1440_IPS
17.3"_3200X1800_IPS
17.3"_3840x2160_IPS

2.0 LCD Monitor Panels

18.5"_1366X768
19.0"_1440x900
19.0"_1280x1024
19.5" 1600X900
20.0"_1600X900
21.5"_1920X1080
22.0"_1680x1050
23.0"_1920X1080
23.6"_1920X1080
24.0"_1920X1080
27.0"_1920X1080

3.0 LCD TV Panels

28"_1366X768
29"_1366X768
32"_1366X768
32"_1920X1080
39"_1920X1080
39"_3840x2160
40"_1920X1080
40"_3840x2160
42"_1920X1080
42"_3840x2160
43"_1920X1080
43"_3840x2160
48"_1920X1080
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