

The teardown analysis service from IHS iSuppli provides complete, detailed analyses of electronics from small devices such as wireless handsets and netbooks to larger equipment such as servers and base stations. IHS iSuppli delivers a complete assessment of all electronic, electro-mechanical, and mechanical components. This IHS iSuppli service is the ultimate competitive benchmarking tool -- providing the highest quality, most detailed view available of the design from both a cost and structural assessment perspective.

The teardown analysis is presented online to provide users maximum flexibility in reviewing and using the teardown information. This system, unlike a standard document, intuitively allows users to quickly drill down to the information they need, by sub-assembly. Summary level information is also always available at every level of system or sub-assembly. Whether you are interested in top-level numbers, or specific components and costs, it's all there.

Teardown information is both downloadable (in the form of Excel, JPG, and PDF files), and navigable in an interactive online format – point and click on sub-assemblies, photos and interactive cost tables to see details and summaries. License as many users as you wish at no additional cost.

## Teardown Analysis

### Download Files

- [PDF](#) [ABSTRACT - Teardown Analysis 2011](#) [1.9MB]
- [ZIP](#) [High Resolution Photographs - PCB's - Apple iPhone 4S \(16GB\)](#) [12.4MB]
- [PDF](#) [Apple iPhone 4S \(16GB\)](#) [4.0MB]
- [UNK](#) [Bill of Materials - Apple iPhone 4S \(16GB\)](#) [954KB]

## Executive Summary

## Overview / Main Features

The iPhone 4S disappointed a lot of fans at first. Many of them were disappointed that despite being a new phone, the iPhone was called the iPhone 4S, and not iPhone 5, suggesting that the public starts to get caught up in their own fantasies about Apple products, and that the public have over-accelerating expectations of Apple. The iPhone 4S is, as it implies, a souped-up iPhone 4 version, just as the 3GS was a souped-up version of the iPhone 3G. It stood to reason that Apple would not overreach. It stood to reason that Apple would remain conservative, and try and get as many cost reductions they could by leveraging similar, or in some cases, the same components used in the iPhone 4.

Furthermore, with the introduction of the 4S, Apple now has a portfolio of 3 iPhone 4Ss, two downgraded iPhone 4s (8GB configuration only), and a downgraded iPhone 3GS. Apple now has subsidized phones through carriers at the \$200 level, the \$100 level and the \$0 level. This approach has been a hallmark of other Apple designs, like the iPod line. Offer the public several price points, establish the brand with new consumers and young consumers, then those users will ultimately walk up the pricing staircase, bring increasing future revenues.

But with each new iPhone revision – increasing attention and steeply ramping sales volumes make each new release more interesting than the last. IHS iSuppli currently forecasts total unit sales of 85 million units for all iPhone models mixed in 2011 alone. The iPhone 4S is expected to represent 40 million units of that in 2011, doubling to 80 million or so in 2012.



## Online Teardown Navigation

- Overview
- Main PCB
- Display / Touchscreen
- Other - Enclosures / Final Assembly
- Camera Assembly
- Box Contents
- Battery
- Misc PCB Assemblies

## BOM Analysis

Click > above for more detail							Click > above for more detail							91.5%					
Index	Component Type	Qty	Manufacturer Name	Manufacturer Part Number	Component Description	Markings	Confidence	Per Component Cost \$USD	Total Component Cost \$USD	Insertion Method	Hand Inset (sec)	Insertion Cost (Hand/Auto)	Data Sheet Links						
12.0	Display	1			Display Module - 3.5" Diagonal, 16.7M Color, 960 x 640 Pixels	C113142041QJ04TAM0V0	High	\$23,000.00	\$23,000.00	Hand	20	\$0.0159							
13.0	Memory	1	Hynix	H1DTG0G161M1R	Flash - NAND, 16GB, 1.8V	16GB H1DTG0G161M1R, BGA	High	\$19,000.00	\$19,000.00	Hand	20	\$0.0159	<a href="http://www.hynix.com/eng/OverView.asp">http://www.hynix.com/eng/OverView.asp</a>						
14.0	Camera	1			Rear Camera Module - IMX 500 CMOS, 1/2.8" Format, Auto Focus	IMX500, 169890, T9890	High	\$16,400.00	\$16,400.00	Auto	20	\$0.0159							
15.0	Application Processor	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
20.0	Display	1	Samsung Semiconductor	APR2400	Display Module - 4.3" Diagonal, 16.7M Color, 800 x 480 Pixels	APR2400, 1373, On-Hooking AT	High	\$14,320.00	\$14,320.00	Hand	20	\$0.0159							
25.0	Flash	1			Flash - NAND, 16GB, 1.8V	16GB H1DTG0G161M1R, BGA	High	\$19,000.00	\$19,000.00	Hand	20	\$0.0159							
28.0	Application Processor	1	Samsung Semiconductor	KXPR4400J001	Application Processor - Dual Core, 4.0GHz, 1.2V	KXPR4400J001, 1373, On-Hooking AT	High	\$14,320.00	\$14,320.00	Hand	20	\$0.0159							
3.0	Logic	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
16.0	Memory	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
17.0	Memory	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
18.0	Memory	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
19.0	Memory	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
4.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
5.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
6.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
7.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
8.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
9.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
10.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
11.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
12.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
13.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
14.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
15.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
16.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
17.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
18.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
19.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
20.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
21.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
22.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
23.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
24.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
25.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
26.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
27.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
28.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
29.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
30.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
31.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
32.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
33.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
34.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
35.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
36.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
37.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
38.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
39.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
40.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
41.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
42.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
43.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
44.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
45.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
46.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
47.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
48.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
49.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
50.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
51.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
52.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
53.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
54.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
55.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
56.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
57.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
58.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
59.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
60.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
61.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
62.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
63.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
64.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
65.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
66.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
67.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
68.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
69.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
70.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
71.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
72.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
73.0	Camera	1	Qualcomm	QX240	Application Processor - Dual Core, 4.0GHz, 1.2V	QX240, 1373, On-Hooking AT	High	\$14,887.00	\$14,887.00	Auto	20	\$0.0159							
74.0	Camera	1</																	

For customer-driven projects, IHS iSuppli conducts a preliminary meeting with the client to assess goals; review standard project scope and deliverables; and establish costs and a timeline for delivery. IHS iSuppli can accommodate a wide variety of specific information requirements, which may be beyond the scope of our ‘standard’ offering, including such services as analysis of modules, elaborated silicon die analyses, etc. The service fee does not include the cost of the device being analyzed. Customers are responsible for providing the device for analysis.

## Key Issues Addressed

- How competitive are our designs from a technical perspective?
- Where does our competition stand in terms of design sophistication?
- Are our costs in line with those of our competitors?
- How much does it cost to add certain product features?
- What new or evolving solutions could we use in future designs that will increase performance and save money?
- How can we better position and differentiate our products?
- What components are contained in our product?

## Applicable To

- OEMs
  - Market Research Managers
  - Competitive Intelligence Managers
  - Strategic Product Marketing Managers
  - Strategic Design / Technical Managers
  - Strategic Purchasing Management
- Component Manufacturers
  - Strategic Product Marketing
  - Market Research
- Service Providers
  - Strategic Purchasing

## Deliverables

The teardown analysis is presented online to provide users maximum flexibility in reviewing and using the teardown information.

There are two primary means of accessing this information:

- Downloadable Files Including:
  - Detailed Bill of Materials (BOM) Analysis (Excel file) with interactive cost summary tables
  - High resolution PCB photo packet
  - PDF report version
- Online Interactive Presentation - Quickly drill down to what you need without flipping through lengthy documents. This includes:
  - Photo analysis of disassembly
  - Executive Summary with key facts and figures
  - Online interactive cost tables

## Executive Summary

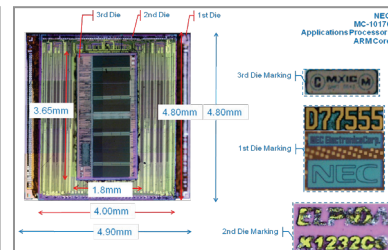
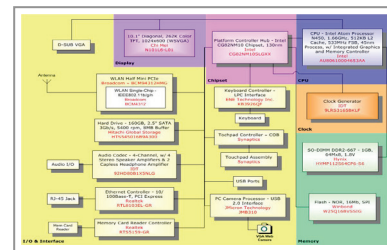
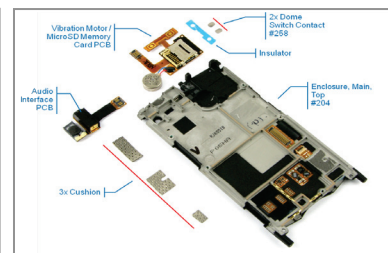
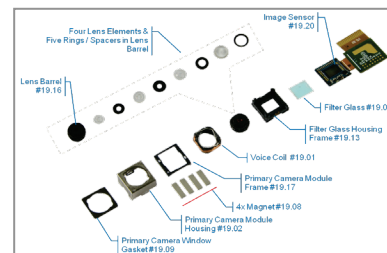
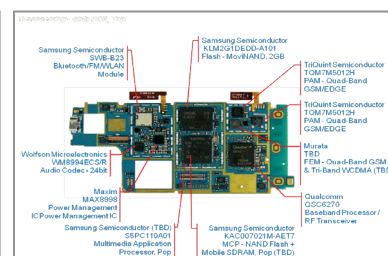
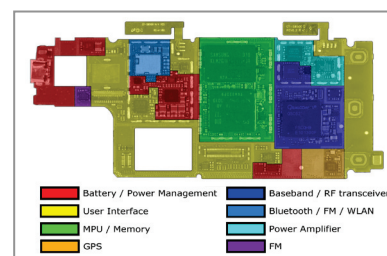
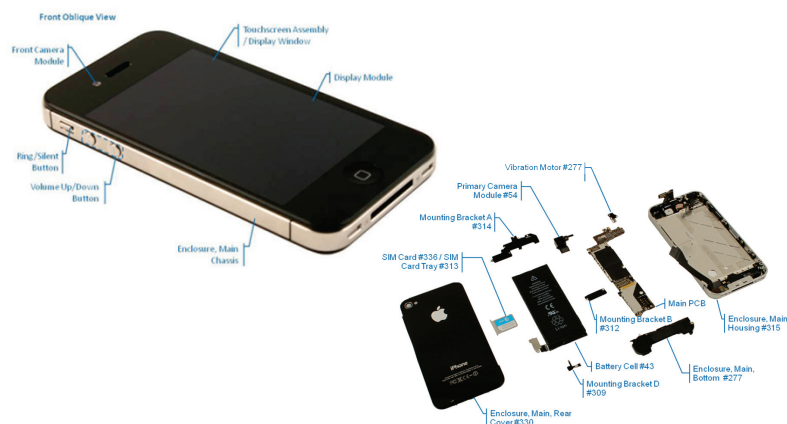
- Key facts and figures on the device, cost assessment, major components used, etc.
- Key takeaways – everything you need to know at a high level about the device and teardown

## BOM Analysis

- Complete list of all electronic, electro-mechanical, and mechanical components. Most line items include pin count, package measurements, manufacturer names, part numbers, and all include component and insertion costs.
- Complimentary Summary Cost Analysis is included to enable views of cost summaries by Assembly, Function, Component Family, Component Type, Top Cost Drivers, and Major Integrated Circuits (ICs).
- Labor rates, country of origin, pricing methodology, device specific conversion costs are provided enabling transparency and understanding of the analysis presented.
- Complimentary Overall Cost Assumptions tab is included to enable the customer to include Pre Production Costs (NRE, IP, Software royalty/licensing fees), and Post Production Costs (manufacturing overhead, margin, transportation, logistics, sales/marketing costs) that a customer may want to see included in a per unit BOM cost.

## Photo Analysis

- Annotated and non annotated photos (thumbnail or full size view) of all device parts (sub-assemblies, printed circuit boards, and mechanical assemblies and parts).
- Annotated photos with index numbers that correlate to line items in the BOM.
- Major Component identification - manufacturers' names, and part numbers.
- Color coded Functional areas (provided when applicable).
- Block diagrams providing a functional analysis of the device analyzed (provided when applicable and agreed upon with customer at Project Kick Off).
- Microscopic Dies shots and marking photos



## Pivot Table Summaries

Click  to show/hide Pivot Table Summary "How to Use"

Function	(Alt)		
Component Family	(Alt)		
Component Type	(Alt)		
Model # <input type="text" value="Data"/>			
Amazon Kindle Fire D01400			
Assembly	% of Total Component Cost	Sum of Total Component Cost	Sum of Qty
	\$USU	\$USU	
Display / Touchscreen Module	49.03%	\$85.00	
Main PCB	30.81%	\$53.41	48
Battery	9.52%	\$16.50	
Other - Enclosures / Final Assembly	8.34%	\$14.46	5
Box Contents	1.85%	\$3.20	
Misc PCB Assemblies	0.46%	\$0.79	
Grand Total	100.00%	\$173.36	55



	(Per unit)	(Totals)	(% of Total)
Total PreProduction Costs	\$3.55		1.6%
<b>Total Cost (Direct Materials and Manufacturing)</b>	<b>\$195.77</b>		<b>85.6%</b>
Total Manufacturing Overhead + Margin	\$29.37		12.8%
<b>Total Per Unit cost (Including MFG Margin   FOB Factory)</b>	<b>\$228.68</b>		<b>100.0%</b>
Total PostProduction Costs	\$0.00		
Retailer / Distributor Overhead + Margin	15% \$ 34.30		
Total Retailer / Distributor Overhead + Margin	\$34.30		
<b>Total Per Unit cost (Including Retail/Disti Overhead + Margin)</b>	<b>\$262.98</b>		