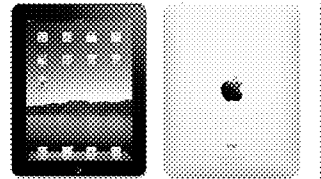


KANG DECLARATION EXHIBIT 8

Exhibit O
(Submitted Under Seal)

APPLE IPAD 분석 보고서



2010. 4. 30
개발실 개발관리팀

CONTENTS

- I Specification
- II Cost Analysis
- III Features
- IV Comparison To P1
- V 별첨

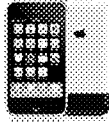
Apple i-Series Line-up



iPod
2001. 11



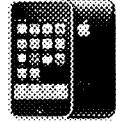
iPod nano
2005. 09



iPhone
2007. 06



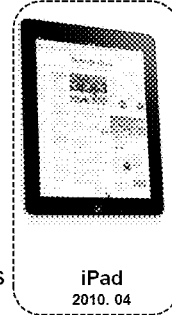
iPod Touch
2008. 02



iPhone 3G
2008. 07



iPhone 3GS
2009. 06



iPad
2010. 04

Next ?

iTV ?
2011.

1. Specification

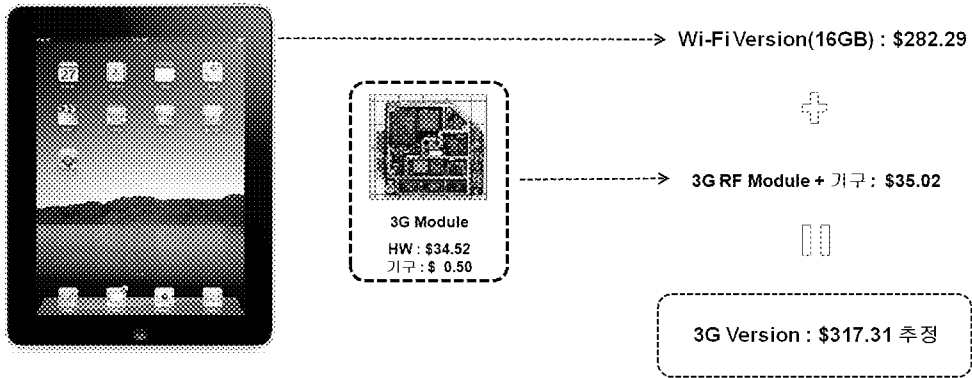


• iPhone과 마찬가지로, Multi-tasking, 외부 메모리의 지원이 안되고, Camera가 없어서, 증강현실 등의 부가 기능을 구현하지 못함

- Processor : 1GHz Apple A4 Custom-designed
- Weight : 0.68 Kg
- Battery : 약 6,600 mAh (3.75V, 25Whr)
- Sensor : Accelerometer, Ambient light sensor

무선 개발실 개발관리팀

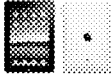
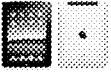
2. Cost Analysis - 1



- 재료비 산출 결과, Wi-Fi 16GB Ver.은 \$282.29 / 3G Ver.은 \$317.31 로 추정됨
- 3G RF Module 가격은, 약 \$35.02로 추정됨

2. Cost Analysis - 2

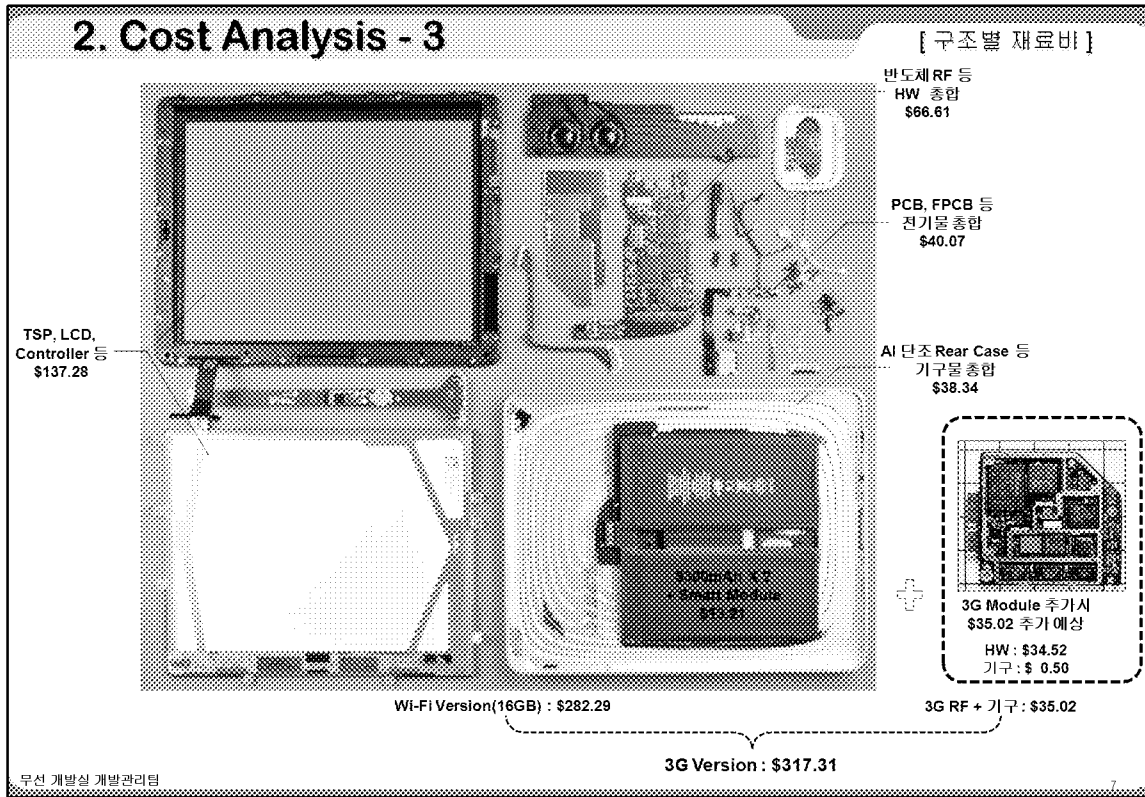
[재료비 상세내역]

| 모델명 | Apple iPad (WiFi) - 16GB | | Apple iPad (3G,WiFi) - 16GB | |
|------------|---|---|--|---|
| | 구매팀 검토 | Isuppli 검토 | | |
| 사진 |  | - 242.8×189.7×13.4mm, 680g - 16GB, Wi-Fi, BT |  | - 242.8×189.7×13.4mm, 730g - 16GB, 3G, Wi-Fi, BT, GPS |
| 출시월 | '10.04 | | '10.05 | |
| 판가(IP) | \$499 | | \$629 | |
| 재료비(3Q 예상) | \$282.29 (56.58%) | \$250.6 (50.22%) | \$317.31 (50.45%) | |
| 반도체 RF | AP | A4,1GHz (\$15 / Apple) | \$19.5 | A4,1GHz (\$15 / Apple) |
| | MCP | 2Gb (\$6.7 / SEC) NOR Flash 8Mb (\$0.8 / ATMEL) 16GB MOVINAND, 32n (\$25.5 / SEC) | \$7.3 -\$29.5 | 2Gb (\$6.7 / SEC) NOR Flash 8Mb (\$0.8 / ATMEL) 16GB MOVINAND, 32n (\$25.5 / SEC) 128M+128M,NOR+DDR (\$2.76 / SEC) |
| | B/B | - | - | X-Gold, HSDPA (\$16.58 / Infineon) |
| | BT/WiFi | BCM4329,Discrete (\$3.85 / Broadcom) | - | BCM4329, Discrete (\$3.85 / Broadcom) |
| | GPS | - | - | PMB2525 추정 (\$1.28 / Infineon) |
| | 기타 | \$14.76 | - | \$26.34 |
| 소계 | \$66.61 | - | \$98.80 | |
| Display | LCD | TFT 9.7", XGA (\$75.05/LCD총괄) | \$65 | TFT 9.7", XGA(\$75.05 / LCD총괄) |
| | TSP | 9.7" C-TSP, ITO Glass (\$57 / Wintek) | \$30 | 9.7" C-TSP, ITO Glass (\$57 / Wintek) |
| | Cont roller | BCM5973,BCM5974 (\$ 4.28 / Bradcom) | \$3.7 | BCM5973,BCM5974 (\$ 4.28 / Bradcom) |
| | Camera | CD3240A (\$0.95 / TI) | \$1.8 | CD3240A (\$0.95 / TI) |
| | 소계 | \$137.28 | \$100.5 | \$137.28 |
| 전기물 | Battery | 3900mAh 2EA + Smart Module (\$13.21) | \$21 | 3900mAh 2EA + Smart Module (\$13.21) |
| | TA,Cable | 5V,2A, 30Pin (\$5.225), 30Pin cable (\$1.5) | - | 5V, 2A, (\$5.225), 30Pin cable (\$1.5) |
| | PCB | 10층, 111.3×81 (\$4.28 / Compeq) 5층, 30×185 FPCB (\$5.32) | - | 10층, 111.3×81(\$4.28 / Compeq) 5층, 30×185 FPCB (\$5.32) 3G Module PCB (\$1.33) |
| | 기타 | \$10.53 | - | \$11.52 |
| 소계 | \$40.07 | - | \$42.39 | |
| 기구물 | Spec | - Front : 이중사출,무도장 - Bracket : 無 - Rear : AI 단조, 아노다이징, CNC, 용접 | Rear case \$10.5 | - Front : 이중사출,무도장 - Bracket : 無 - Rear (AI단조, 아노다이징, CNC, 용접) + Deco Rear(사출, 도장) |
| | 소계 | \$38.34 | - | \$38.84 |

무선 개발실 개발관리팀

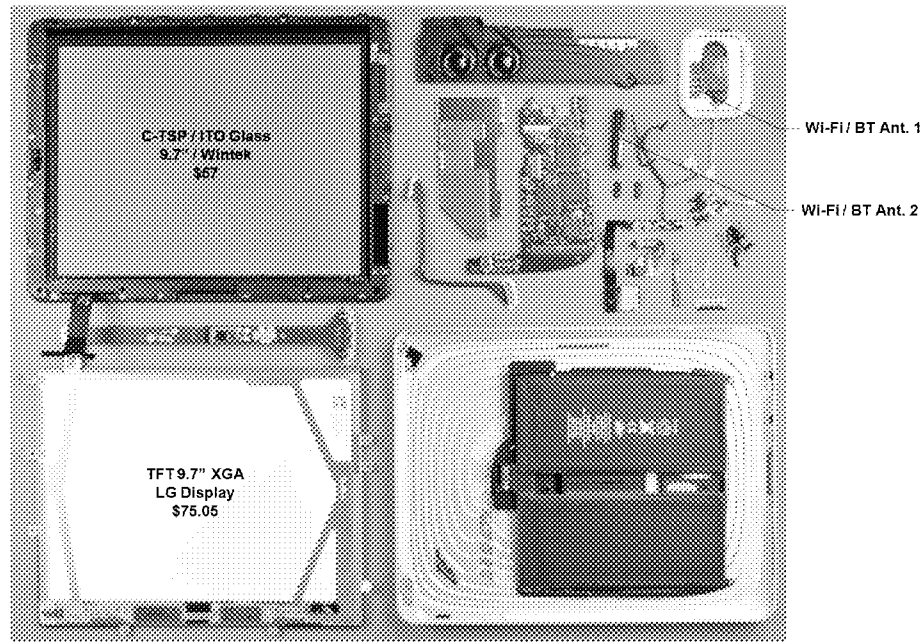
6

2. Cost Analysis - 3



3. Features - 1

[부품 구성도]

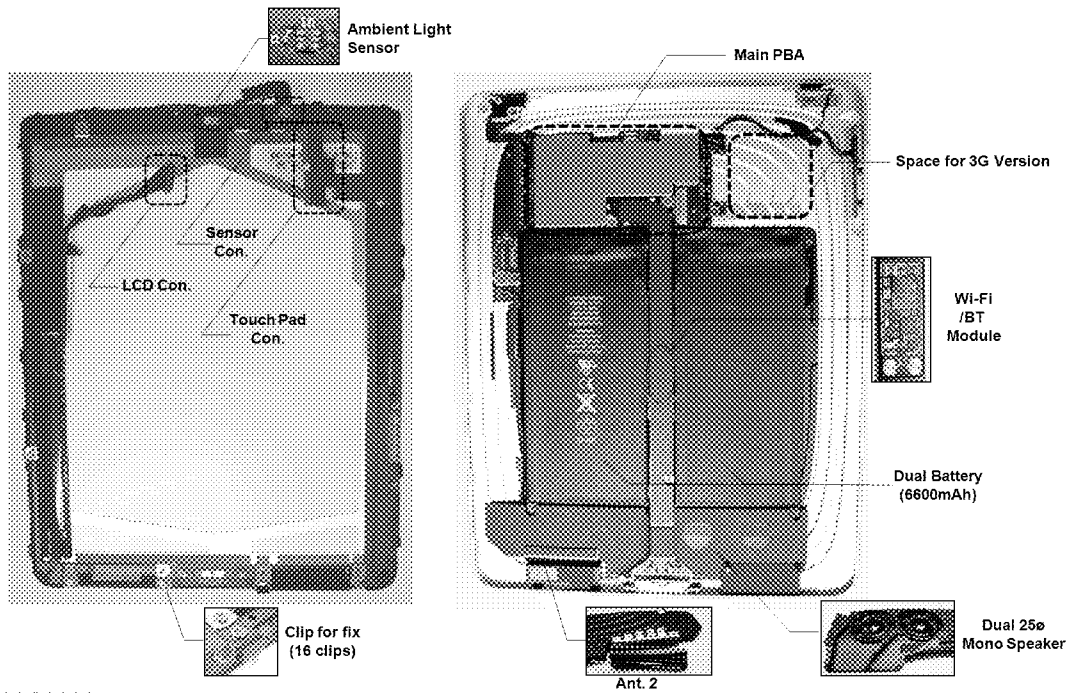


무선 개발실 개발관리팀

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3. Features - 2

[주요 부품 배치도]

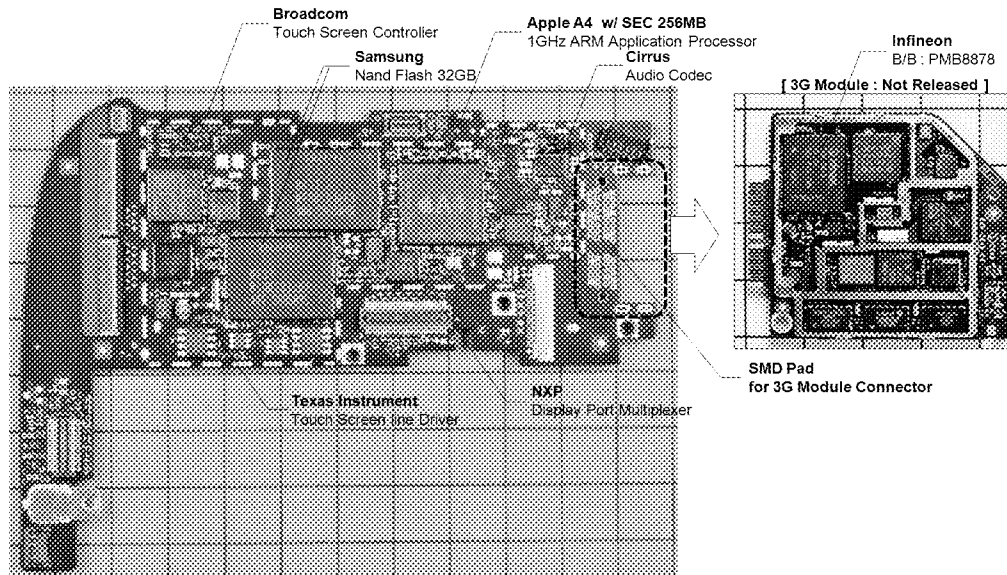


무선 개발실 개발관리팀

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3. Features - 3

[Main Chips - Front]



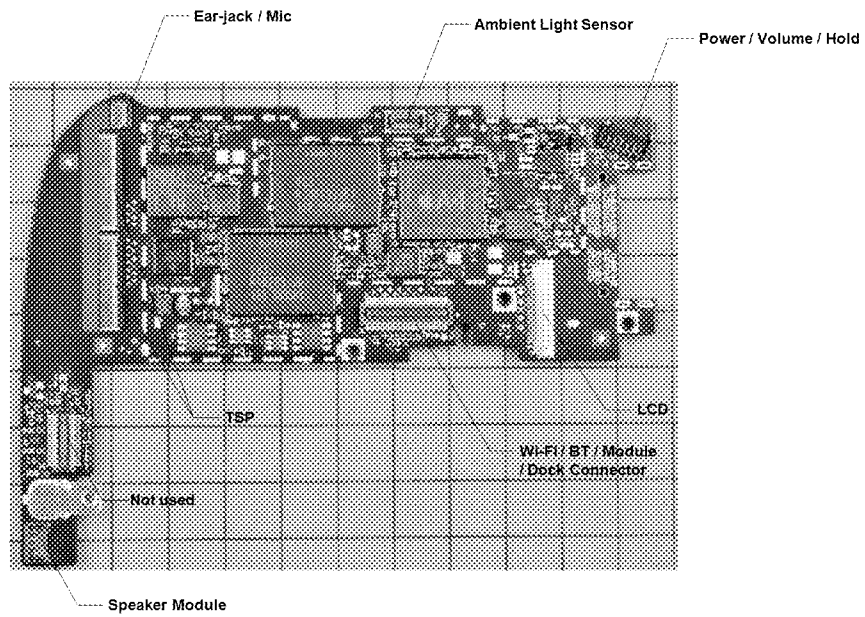
- Wi-Fi version 과 3G version의 PCB를 별도로 구성하지 않고, Wi-Fi version의 PCB에 Connector로 연결하는 구조를 채용하여 PCB의 재사용성을 높임

무선 개발실 개발관리팀

※ Reference the end of page for 3G Module Analysis

3. Features - 4

[Connectors - Front]

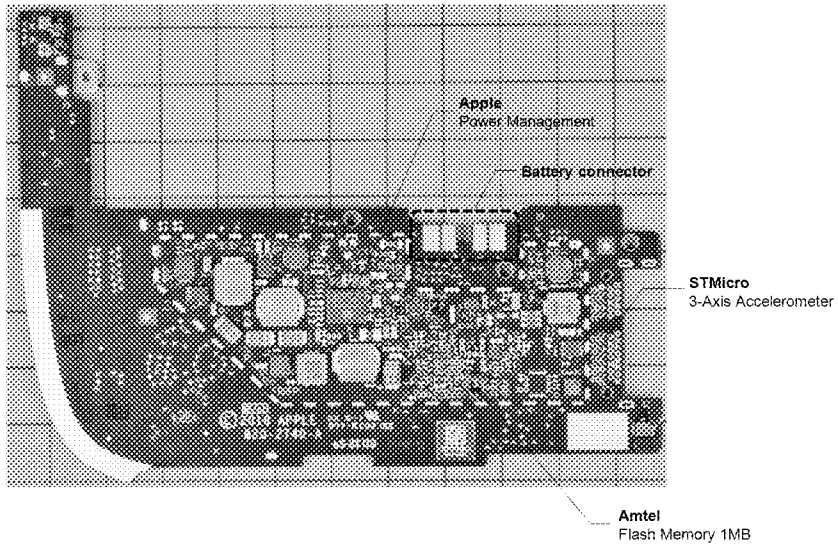


무선 개발실 개발관리팀

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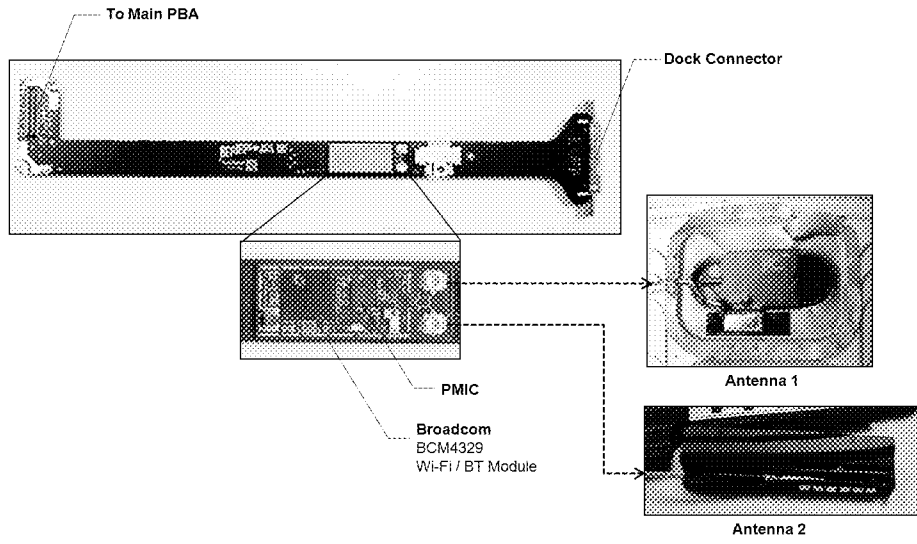
3. Features - 5

[Main Chips - Rear]



3. Features - 6

[Wi-Fi, BT Module]



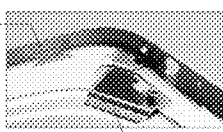
무선 개발실 개발관리팀

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3. Features - 7

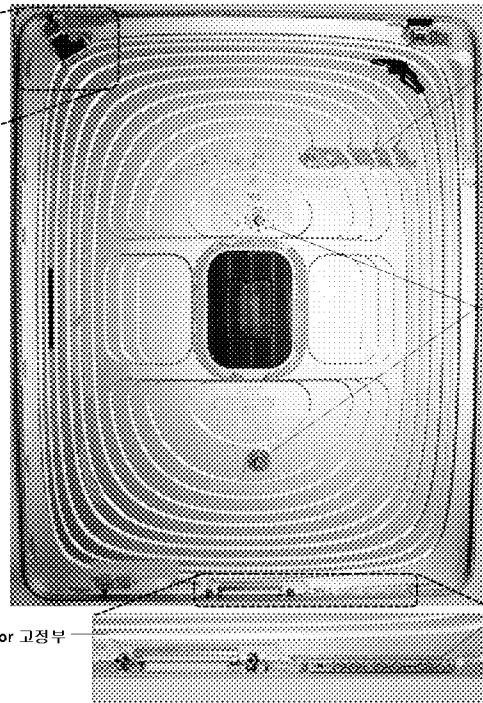
[AI Rear Case]

Clip 고정부
NC 가공



Ear-jack 고정부
전기용접

- Rear Case는 AI를 단조, 아노다이징, NC 가공, 용접 등의 작업을 진행하여 재료비가 매우 높음 (Rear AI만, 구매 추정 \$27.5)
- Rear부 용접 및 본딩 부품까지 포함하면 약 \$29.8 추정됨



3G Module 고정부
전기용접

Battery 고정부
전기용접

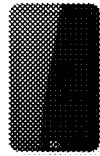
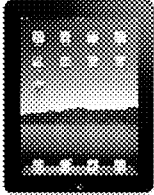
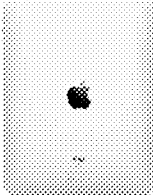
Dock Connector 고정부
본딩

SPK Hole
전기용접

무선 개발실 개발권리킴

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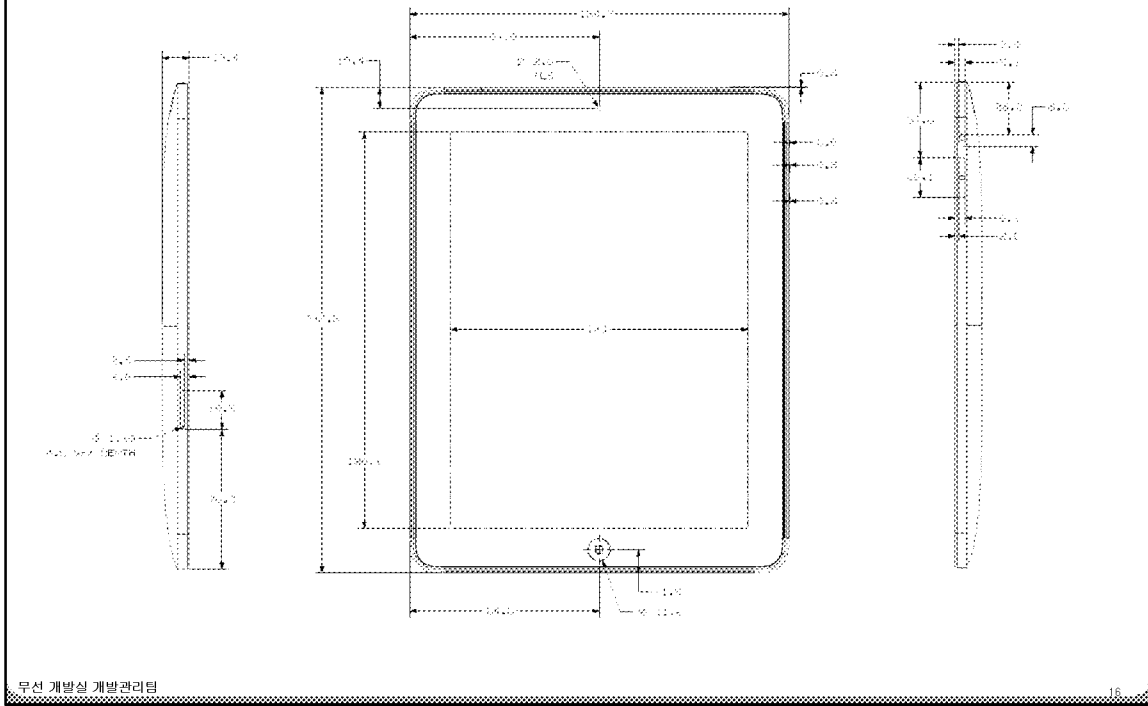
4. Spec. Compare To P1

| 모델명 | Samsung GT-P1000 | Apple iPad |
|--------------|---|--|
| 사진 |  |   |
| 출시일 | 2010.09 | 2010.04 |
| 통신 방식 / Band | EDGE 850MHz / 900MHz / 1800MHz / 1900MHz 3G 900MHz / 1900MHz / 2100MHz | Wi-fi |
| Dimension | 189.9 x 121.9 x 11.45 / 390g | 189.7 x 242.8 x 13.4 / 0.68kg (0.73kg WiFi+3G) |
| B/B | PMB9901 | PMB 8878 (3G Version only) |
| A/P | SC3C110X | Apple A4 1GHz |
| LCD Main | 7.0", 1024x600 TFT | 9.7", 1024x768 TFT, IPS패널 |
| Camera | 3M AF / 1.3M | - |
| Battery | 4,000mAh | 6600mAh |
| WiFi | 802.11 b/g/n | 802.11 b/g/n |
| 기타 특징 | Android 2.1, HSDPA 7.2Mbps / HSUPA 5.76Mbps BT 3.0, 조도 / 가속 | HSDPA (3G Version only) BT 2.1, 조도 / 가속 |
| 재료비 | | Wi-Fi \$282.29 / 3G \$317.31 |

무선 개발실 개발관리팀

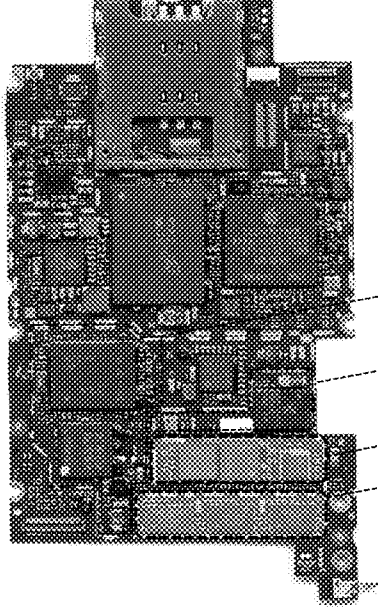
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[참고] Dimension



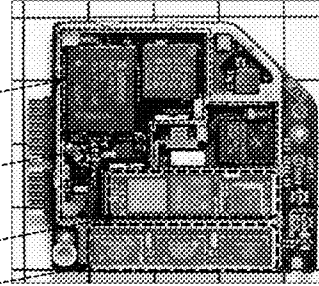
[참고] iPhone 3GS vs iPad 3G

[iPhone 3GS]



[iPad 3G Module]

- iPad 3G Module은,
iPhone 3GS의 부품을 그대로 사용하고
배치만 다소 변경



[참고] iPad 3G Module

[3G Module : Not Released]

