

Pierce Declaration

EXHIBIT 29

**DEFENDANT'S EXHIBIT
NO. 712.001**

United States District Court
Northern District of California
No. 11-CV-01846-LHK (PSG)
Apple v. Samsung

Date Admitted: _____ By: _____

Subject: Competitive Phone Tracker 02/25

Date: Fri, 25 Feb 2011 22:54:28 +0000

From: "Jason Lor" <jlor@apple.com>

To: "NewTech XFunc" <new_tech_xfunc@group.apple.com>

CC: "New Tech Core Team Core Team" <new_tech_core_team@group.apple.com>

Message-ID: <0A10C40F-F4AF-4778-B07A-36BD32450B49@apple.com>

Hi all,

We've compiled a comprehensive list for all current and future flagship phones. We'll be adding new cellular competitors in an ongoing basis and will be extending this to other products in the future.

Jason Lor

iPod/iPhone New Tech
c: 408.862.2680



----- end message -----



State of Mobile 2011

iPod/iPhone New Tech

Apple Need-To-Know Confidential

Current Flagship Phones

Apple Need-To-Know Confidential

HTC

Apple Need-To-Know Confidential

HTC

EVO 4G

June 2010

Price & Carriers	\$199 w/ 2-year contract on Sprint
Operating System	Android 2.2
SoC & Memory	Qualcomm QSD 8650 (1.0GHz) 512MB RAM, 1GB NAND plus microSD slot
Network	CDMA 800/1900 MHz EVDO Rev. A WiMAX 2.5 to 2.7GHz; 802.16e
Battery & Charging	1500mAh microUSB
Display	4.3-inch LCD (480x800 pixel resolution) 217ppi
Camera	5MP auto-focus camera with LED flash, front VGA 720p video recording
Sensors	Accelerometer, ambient light, proximity, compass
Connectivity	Wi-Fi (802.11 b/g), Bluetooth 2.1 + EDR w/ stereo A2DP GPS, A-GPS, micro-HDMI, Wi-Fi router for 8 devices, FM
Dimensions	Width: 66mm (2.6 inches) Height: 122mm (4.8 inches) Thickness: 12.7mm (0.5 inches)
Weight	170 grams (6 ounces)



Apple Need-To-Know Confidential

Price & Carriers	\$99 w/ 2-year contract on T-Mobile
Operating System	Android 2.2
SoC & Memory	Qualcomm MSM 7230 (800MHz); 512MB RAM, 4GB NAND plus microSD slot
Network	GSM: 850/900/1800/1900 MHz UMTS: Band IV (1700/2100)
Battery & Charging	1300mAh microUSB
Display	3.7-inch LCD (480x800 pixel resolution), 252ppi
Camera	5MP auto-focus camera with LED flash 720p video recording
Sensors	Accelerometer, ambient light, proximity, compass
Connectivity	Wi-Fi (802.11b/g/n), Bluetooth 2.1 + EDR w/ A2DP Stereo GPS, A-GPS
Dimensions	Width: 60mm (2.36 inches) Height: 119mm (4.69 inches) Thickness: 14.2mm (0.56 inches)
Weight	180 grams (6.3 ounces)



Apple Need-To-Know Confidential

myTouch 4G

November 2010

Price & Carriers	\$99 w/ 2-year contract on Sprint
Operating System	Android 2.2
SoC & Memory	Qualcomm MSM 8255 Snapdragon (1.0GHz); 768MB RAM, 4GB NAND plus microSD slot
Network	GSM: 850/900/800/1900MHz UMTS: Band IV (1700/2100)
Battery & Charging	1400mAh microUSB
Display	3.8-inch LCD (480x800 pixel resolution), 246ppi
Camera	5MP auto-focus camera with LED flash, front VGA 720p video recording
Sensors	Accelerometer, ambient light, proximity, compass
Connectivity	Wi-Fi (802.11b/g/n), Bluetooth 2.1 + EDR w/ A2DP Stereo GPS, A-GPS
Dimensions	Width: 62mm (2.44 inches) Height: 122mm (4.80 inches) Thickness: 10.9mm (0.43 inches)
Weight	153 grams (5.4 ounces)



Apple Need-To-Know Confidential

Price & Carriers	\$99 w/ 2-year contract on T-Mobile Windows Phone 7
Operating System	Qualcomm QSD 8250 (1.0GHz) 512MB RAM, 16GB internal microSD
SoC & Memory	GSM: 850/900/800/1900 MHz; UMTS: Band I (2100), Band IV (1700/2100)
Network	1230mAh microUSB
Battery & Charging	4.3-inch LCD (480x800 pixel resolution) 217ppi
Display	5MP auto-focus camera with LED flash 720p video recording
Camera	Accelerometer, ambient light, proximity, compass
Sensors	Wi-Fi (802.11b/g/l), Bluetooth 2.1 + EDR w/ stereo A2DP GPS, FM
Connectivity	Width: 68mm (2.67 inches) Height: 122mm (4.8 inches) Thickness: 11.2mm (0.44 inches)
Dimensions	Weight: 162 grams (5.7 ounces)
Weight	

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Motorola

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Motorola

Droid X

July 2010

Price & Carriers	\$150 w/ 2-year contract on Verizon
Operating System	Android 2.2
SoC & Memory	TI OMAP 3630 (1.0GHz) 512MB RAM, 8GB NAND plus microSD slot
Network	CDMA 800/1900, EVDO rev. A
Battery & Charging	1540mAh microUSB
Display	4.3-inch LCD (480x854 pixel resolution), 228ppi
Camera	8MP auto-focus camera with LED flash 720p video recording
Sensors	Accelerometer, ambient light, proximity, & compass
Connectivity	Wi-Fi (802.11b/g/n 5GHz), Bluetooth 2.1 + EDR w/ A2DP Stereo GPS, A-GPS, Wi-Fi router functionality, <u>micro-HDMI</u>
Dimensions	Width: 65.5mm (2.58 inches) Height: 128mm (5.02 inches) Thickness: 9.9mm (0.39 inches)
Weight	155 grams (5.5 ounces)



Apple Need-To-Know Confidential

Motorola

Droid 2 Global

November 2010

Price & Carriers	\$199 w/ 2-year contract on Verizon
Operating System	Android 2.2
SoC & Memory	TI OMAP 3640 (1.2GHz); 512MB RAM, 8GB NAND plus microSD slot
Network	GSM 850/900/1800/1900 UMTS: 850/1900/2100, CDMA 800/1900 HSDPA 10.2 Mbps, CDMA EV-DO Release A (World Phone)
Battery & Charging	1420mAh microUSB
Display	3.7-inch LCD (480x854 pixel resolution), 265ppi
Camera	5MP auto-focus camera with LED flash 480p video recording
Sensors	Accelerometer, ambient light, proximity, compass
Connectivity	Wi-Fi (802.11b/g/n), Bluetooth 2.1 + EDR w/ A2DP Stereo GPS, A-GPS
Dimensions	Width: 61mm (2.38 inches) Height: 116mm (4.58 inches) Thickness: 13.7mm (0.54 inches)
Weight	169 grams (6.0 ounces)



Apple Need-To-Know Confidential

Price & Carriers	\$99 w/ 2-year contract on T-Mobile
Operating System	Android 2.2
SoC & Memory	TI OMAP 3620 (1.0GHz) 512MB RAM, 1GB NAND plus microSD slot
Network	GSM 850/900/1800/1900 UMTS: 850/1700/2100 HSDPA 10.1 Mbps, HSUPA 5.76 Mbps
Battery & Charging	1420mAh microUSB
Display	3.7-inch LCD (480x854 pixel resolution), 265ppi
Camera	5MP auto-focus camera with LED flash
Sensors	Accelerometer, ambient light, proximity, compass
Connectivity	Wi-Fi (802.11b/g/n), Bluetooth 2.1 + EDR w/ A2DP Stereo GPS, A-GPS, FM
Dimensions	Width: 60mm (2.35 inches) Height: 116mm (4.57 inches) Thickness: 14.5mm (0.57 inches)
Weight	175 grams (6.3 ounces)



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Samsung

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Price & Carrier \$50-199 w/ 2-year contract on AT&T, Verizon, Sprint & T-Mobile

Operating System Android 2.1

SoC & Memory 1GHz Cortex A8 Hummingbird
512MB RAM, 16GB NAND plus microSD slot

Network GSM/EDGE/GPRS 850/ 900/1800/1900
HSPA 900/1900/2100

Battery & Charging 1500mAh
microUSB

Display 4.0-inch AMOLED (480x800 pixel resolution),
233ppi, 16-bit color

Camera 5MP auto-focus camera with LED flash, front VGA
720p video recording

Sensors Accelerometer, ambient light, proximity, compass

Connectivity Wi-Fi (802.11b/g/n), **Bluetooth 3.0** + EDR w/ A2DP Stereo

Dimensions
Width: 64.2mm (2.53 inches)
Height: 122.4mm (4.82 inches)
Thickness: 9.9mm (0.39 inches)

Weight 118 grams (4.16 ounces)



Apple Need-To-Know Confidential

Price & Carrier	\$99 on Verizon w/ 2-year contract on Verizon
Operating System	Android 2.1
SoC & Memory	1GHz Cortex A8 Hummingbird 384MB RAM, 2GB NAND plus microSD slot
Network	CDMA 800/1900
Battery & Charging	1500mAh microUSB
Display	3.4-inch LCD (480x800 pixel resolution) 1.8-inch ticker (480x96 pixel resolution) 233ppi
Camera	5MP auto-focus camera with LED flash, front VGA
Sensors	Accelerometer, ambient light, proximity
Connectivity	Wi-Fi (802.11b/g/n), Bluetooth 3.0 + EDR w/ A2DP Stereo
Dimensions	Width: 58mm (2.30 inches) Height: 125mm (4.94 inches) Thickness: 12mm (0.48 inches)
Weight	125 grams (4.41 ounces)



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Price & Carrier	\$99 w/ 2-year contract on AT&T
Operating System	Windows Phone 7
SoC & Memory	Qualcomm Snapdragon MSM 8255 (1GHz) 512MB RAM, 8GB NAND with microSD slot
Network	GSM/GPRS/EDGE 850/900/1800/1900MHz UMTS: 850/1900/2100MHz
Battery & Charging	1500mAh microUSB
Display	4.0-inch AMOLED (480x800 pixel resolution), 233ppi
Camera	5MP autofocus camera with LED flash 720p video recording
Sensors	Accelerometer, Compass, Proximity & Light Sensor
Connectivity	Wi-Fi (802.11b/g/n), Bluetooth 2.1, GPS, A-GPS, FM Radio
Dimensions	Width: 65mm (2.56 inches) Height: 123.0mm (4.84 inches) Thickness: 10.0mm (0.39 inches)
Weight	115 grams (4.07 ounces)



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Nexus S

December 2010

Price & Carrier \$529 unlocked or \$199 w/ 2-year contract on T-Mobile

Operating System Android 2.3

SoC & Memory 1GHz Cortex A8 Hummingbird
512MB RAM, 16GB NAND

Network GSM: 850/900/1800/1900, HSPA 900/2100/1900

Battery & Charging 1500mAh
microUSB

Display 4.0-inch AMOLED (480x800 pixel resolution),
233ppi

Camera 5MP auto-focus camera with LED flash, front VGA
720p video recording

Sensors Accelerometer, ambient light, proximity, & compass

Connectivity Wi-Fi (802.11b/g/n), Bluetooth 2.1 + EDR w/ A2DP Stereo, NFC

Dimensions Width: 63mm (2.52 inches)
Height: 124mm (4.37 inches)
Thickness: 10.92mm (0.43 inches)

Weight 129 grams (5.5 ounces)



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LG

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LG

Optimus series

November 2010

Price & Carriers	Free to \$149 on Sprint, T-Mobile, metroPCS, Virgin Mobile, US Cellular
Operating System	Android 2.2
SoC & Memory (Sprint version)	Qualcomm MSM7627 (600 MHz); 512MB RAM, microSD slot
Network	CDMA: 1.9 GHz PCS, 800 MHz GSM: 850/900/1800/1900 MHz, 1700/2100 MHz
Battery & Charging	1500mAh microUSB
Display	3.2-inch LCD (320x480 pixel resolution), 180ppi
Camera	3.2MP auto-focus camera VGA video recording
Sensors	Accelerometer, ambient light, proximity, & compass
Connectivity	Wi-Fi (802.11b/g), Bluetooth 2.1 + EDR w/ A2DP Stereo GPS, A-GPS, Wi-Fi router functionality (up to 5 devices)
Dimensions (Sprint version)	Width: 58mm (2.28 inches) Height: 107mm (4.23 inches) Thickness: 11.9mm (0.47 inches)
Weight	115 grams (4.1 ounces)



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Nokia

Apple Need-To-Know Confidential

Price & Carrier	\$399 unlocked
Operating System	Symbian ³
SoC & Memory	OMAP 2420 680MHz, 256MB RAM 16GB NAND with microSD slot
Network	GSM/EDGE 850/900/1800/1900 WCDMA 850/900/1700/1900/2100
Battery & Charging	1200mAh microUSB
Display	3.5" OLED display (640x360 pixel resolution) 209ppi
Camera	12MP auto-focus camera w/ Xenon flash, front-facing VGA 720p video recording
Sensors	Accelerometer, Compass, Proximity & Ambient light sensors
Connectivity	Wi-Fi (802.11b/g/n), Bluetooth 3.0, HDMI, FM Radio, GPS, A-GPS
Dimensions	Width: 59mm (2.32 inches) Height: 114mm (4.49 inches) Thickness: 12.9mm (0.51 inches)
Weight	135 grams (4.76 ounces)



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Research in Motion

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BlackBerry Storm 2 9550

November 2009

Price & Carrier	\$99.99 on Verizon
Operating System	BlackBerry OS 5.0
SoC & Memory	processor unknown, 256MB RAM 2GB eMMC plus microSD slot
Network	GSM/GPRS/EDGE 850/900/1800/1900MHz UMTS/HSPA 2100MHz CDMA: 800/1900MHz/EV-DO rev A
Battery & Charging	1400mAh
Display	3.25-inch LCD (480x360 pixel resolution) 184ppi
Camera	3.2MP auto-focus camera with LED flash
Sensors	Accelerometer, ambient light & proximity
Connectivity	Wi-Fi (802.11 b/g), Bluetooth 2.0, GPS
Dimensions	Width: 62mm (2.45 inches) Height: 113mm (4.43 inches) Thickness: 13.0mm (0.55 inches)
Weight	160 grams (5.64 ounces)



Apple Need-To-Know Confidential

RIM

BlackBerry Torch

August 2010

Price & Carrier	\$499.99 USD on AT&T
Operating System	BlackBerry OS 6.0
SoC & Memory	624MHz processor, 512MB RAM 4GB eMMC plus microSD slot
Network	GSM/GPRS/EDGE 850/900/1800/1900 UMTS 2100/1900/850/800
Battery & Charging	1300mAh
Display	3.2-inch LCD (480x360 pixel resolution), 188ppi
Camera	5MP auto-focus camera w/ LED flash, front VGA 720p video recording
Sensors	Accelerometer, ambient light, proximity, & compass
Connectivity	Wi-Fi (802.11b/g/n), Bluetooth 2.1 + EDR w/ A2DP Stereo GPS, A-GPS
Dimensions	Width: 62mm (2.44 inches) Height: 111mm (4.37 inches) Thickness: 14.6mm (0.57 inches)
Weight	161 grams (5.7 ounces)



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Feature Highlights

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HTC
Surround

Feature Phone slides partially to reveal speaker grill

Engadget "We don't think any amount of audio postprocessing can make tiny phone speakers sound good... On a more positive note, the speakers do get nicely **loud without distortion**"

cnet "...the only thing its built-in speakers really add to the phone is weight."

Slashgear "It's certainly loud, but it lacks clarity and sharpness; the surround sound mode, meanwhile, is audibly different from the default setting, but we wouldn't say it was theater-like either."



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Feature Water-resistant and dustproof

Engadget

"Physically, the Defy is unusual in that it looks so... well, usual. Typically, ruggedized phones are overbuilt, over-engineered behemoths that are obviously designed to look tough, and that's just not the case with this one."

cnet

"The Motorola Defy is tough enough to withstand everyday hazards with its tough Gorilla glass and rugged exterior... its rough-and-tumble aesthetic isn't for everyone."

PC Magazine

"I dunked the Defy in a foot of water with the MP3 player going, and it continued playing without a problem. I couldn't stop the playback though, because capacitive touch screens don't work when they're wet."



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Future Flagship Phones

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HTC

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HTC

Incredible S

Q2 2011

Price & Carrier	Unannounced
Operating System	Android 2.3
SoC & Memory	Qualcomm Snapdragon MSM8255 (1GHz), 768MB RAM 1.1GB internal storage with microSD expansion
Network	GSM/GPRS/EDGE 850/900/1800/1900MHz HSPA/WCDMA: 900/AWS/2100MHz
Battery & Charging	1450mAh microUSB
Display	4.0-inch LCD (480x800 pixel resolution), 233ppi
Camera	8MP autofocus camera w/ dual LED flash, 1.3MP front-facing 720p video recording
Sensors	Accelerometer, Digital Compass, Proximity & Light Sensor
Connectivity	Wi-Fi 802.11b/g/n, Bluetooth 2.1 with FTP/OPP & A2DP GPS, A-GPS
Dimensions	Width: 64mm (2.52 inches) Height: 120.0mm (4.72 inches) Thickness: 11.7mm (0.46 inches)
Weight	135.5grams (4.78 ounces)



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HTC

Desire S

Q2 2011

Price & Carrier Unannounced

Operating System Android 2.3

SoC & Memory Qualcomm Snapdragon MSM8255 (1GHz), 768MB RAM
1.1GB internal storage w/ microSD expansion

Network GSM/GPRS/EDGE 850/900/1800/1900MHz
HSPA/WCDMA: 900/2100MHz

Battery & Charging 1450mAh
microUSB

Display 3.7-inch LCD (480x800 pixel resolution),
252ppi

Camera 5MP autofocus camera w/ LED flash, front-facing VGA
720p video recording

Sensors Accelerometer, Digital Compass, Proximity & Light Sensor

Connectivity Wi-Fi (802.11b/g/n), Bluetooth 2.1 with FTP/OPP & A2DP
GPS, A-GPS

Dimensions Width: 59.8mm (2.35 inches)
Height: 115.0mm (4.53 inches)
Thickness: 11.63mm (0.46 inches)

Weight 130.0grams (4.59 ounces)



Apple Need-To-Know Confidential

Price & Carrier	Unannounced
Operating System	Android 2.3
SoC & Memory	Qualcomm Snapdragon MSM 8255 (600MHz), 512MB RAM 512MB ROM & microSD memory expansion
Network	GSM/GPRS/EDGE 850/900/1800/1900MHz HSPA/WCDMA 900/2100MHz
Battery & Charging	1230mAh microUSB
Display	3.2-inch LCD (320x480 pixel resolution), 180ppi
Camera	5MP autofocus camera w/ LED flash video recording
Sensors	Accelerometer, Digital Compass, Proximity & Light Sensor
Connectivity	Wi-Fi (802.11b/g/n), Bluetooth 3.0 with FTP/OPP & A2DP GPS, A-GPS
Dimensions	Width: 59.4mm (2.34 inches) Height: 101.3mm (3.99 inches) Thickness: 12.4mm (0.49 inches)
Weight	105grams (3.7 ounces)



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Motorola

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Motorola

Motorola Atrix

February 2011



Price & Carriers	\$199 w/ 2-year contract on AT&T
Operating System	Android 2.2
SoC & Memory	NVIDIA Tegra 2 dual-core (1.0GHz) 1GB RAM, 16GB NAND plus microSD slot
Network	GSM: 850/900/1800/1900 UMTS: 850/1900/2100 HSDPA+ 14Mbps
Battery & Charging	1930mAh microUSB
Display	4.0-inch LCD (540x960 pixel resolution), 275ppi
Camera	5MP auto-focus camera with LED flash, front VGA 720p video recording
Sensors	Accelerometer, ambient light, proximity & compass
Connectivity	Wi-Fi (802.11b/g/n), Bluetooth 2.1 + EDR w/ A2DP Stereo GPS, A-GPS, micro-HDMI, HDMI & laptop docks (right image)
Dimensions	Width: 64mm (2.50 inches) Height: 118mm (4.64 inches) Thickness: 11.0mm (0.43 inches)
Weight	135 grams (4.8 ounces)

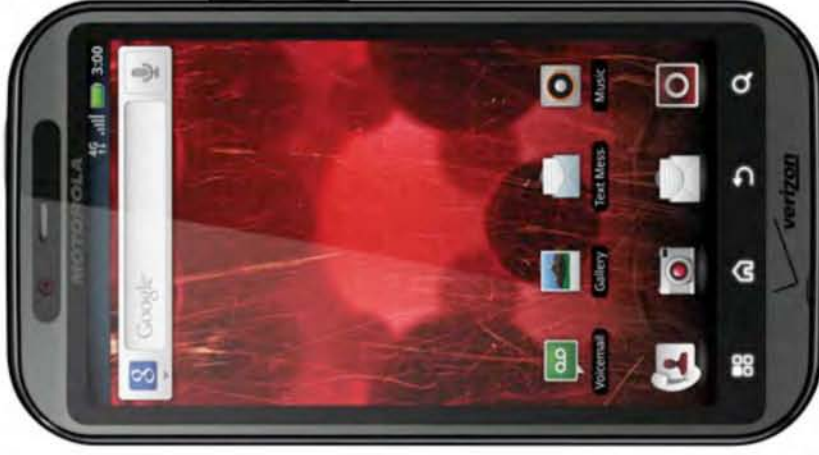
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Motorola

Droid Bionic LTE 4G

Q2 2011

Price & Carrier	599 USD on Verizon Wireless
Operating System	Android 2.2
SoC & Memory	NVIDIA Tegra 2 (dual-core) 1.0GHz, 512MB RAM 2GB ROM w/ microSD expansion
Network	CDMA 800/1900, LTE 700 CDMA2000 1xEV-DO / LTE
Battery & Charging	1930mAh microUSB
Display	4.3-inch LCD (540x960 pixel resolution) 256ppi, 16-bit color
Camera	8MP camera w/ dual LED flash, 0.3MP front-facing 720p video recording
Sensors	Accelerometer, Digital Compass, Proximity & Light Sensor
Connectivity	Wi-Fi 802.11b/g/n, Bluetooth 2.1 w/ EDR & A2DP, GPS, A-GPS
Dimensions	Width: 66.9mm (2.63 inches) Height: 125.9mm (4.96 inches) Thickness: 13.3mm (0.52 inches)
Weight	158grams (5.57 ounces)



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Samsung

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Samsung

Galaxy S II

Q1 2011

Price & Carrier	599 EUR (\$814 USD) & unannounced
Operating System	Android 2.3
SoC & Memory	1.0GHz dual-core, 1024MB RAM 16GB internal storage w/ microSD slot
Network	GSM 800/900/1800/1900, UMTS 850/1900/2100, EDGE, UMTS/HSPA 800/850/1900/2100
Battery & Charging	1600mAh microUSB
Display	4.3-inch LCD (480x800 pixel resolution), 218ppi, 16-bit color
Camera	8MP auto-focus camera w/ LED flash, 2MP front-facing 720p video recording w/ video light
Sensors	Accelerometer, ambient light, gyroscope, proximity, & compass
Connectivity	Wi-Fi 802.11b/g/n, Bluetooth 3.0 w/ EDR & A2DP, GPS, A-GPS, FM Radio, NFC
Dimensions	Width: 66.1mm (2.6 inches) Height: 125.3mm (4.93 inches) Thickness: 8.49mm (0.33 inches)
Weight	116 grams (4.09 ounces)



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Infuse 4G

Q1 2011

Price & Carrier	599 EUR (\$814 USD) & unannounced
Operating System	Android 2.3
SoC & Memory	1.2GHz Humming Bird, 1024MB RAM 16GB internal storage w/ microSD slot
Network	GSM 800/900/1800/1900, UMTS 850/1900/2100, EDGE, UMTS/HSPA 800/850/1900/2100
Battery & Charging	1750mAh microUSB
Display	4.5-inch LCD (480x800 pixel resolution), 207ppi, 16-bit color
Camera	8MP auto-focus camera w/ LED flash, 1.3MP front-facing 1080p video recording
Sensors	Accelerometer, ambient light, gyroscope, proximity, & compass
Connectivity	Wi-Fi, Bluetooth, GPS, A-GPS
Dimensions	
Weight	



Apple Need-To-Know Confidential

LG

Apple Need-To-Know Confidential

LG

Optimus 2X

April 2011



Price & Carrier	499 EUR & unannounced
Operating System	Android 2.2
SoC & Memory	NVIDIA Tegra 2 (dual-core) 1.0GHz 512MB RAM
Network	GSM 800/900/1800/1900, EDGE, UMTS/HSPA 900/2100
Battery & Charging	1500mAh microUSB
Display	4-inch LCD (480x800 pixel resolution), 233ppi, 16-bit color
Camera	8MP camera w/ LED flash, 1.3MP front-facing 1080p video recording
Sensors	Accelerometer, ambient light, gyroscope, proximity, & compass
Connectivity	Wi-Fi, Bluetooth, GPS, A-GPS
Dimensions	Width: 63.2mm (2.49 inches) Height: 123.9mm (4.88 inches) Thickness: 10.9mm (0.43 inches)
Weight	139 grams (4.90 ounces)

Apple Need-To-Know Confidential

LG

Optimus Black

April 2011



Price & Carrier	499 EUR & unannounced
Operating System	Android 2.2
SoC & Memory	Texas Instruments OMAP 3630 (1GHz) 512MB RAM
Network	GSM 800/900/1800/1900, EDGE, UMTS/HSPA 900/2100
Battery & Charging	1500mAh microUSB
Display	4-inch LCD (480x800 pixel resolution), 700cd/m ² brightness 233ppi
Camera	5MP camera w/ LED flash, 2MP front-facing 720p video recording
Sensors	Accelerometer, ambient light, proximity, & compass
Connectivity	Wi-Fi, Bluetooth, GPS, A-GPS
Dimensions	Width: 64.0mm (2.52 inches) Height: 122.0mm (4.80 inches) Thickness: 9.2mm (0.36 inches)
Weight	109 grams (3.84 ounces)

Apple Need-To-Know Confidential

LG
Optimus 3D

April 2011

Price & Carrier	499 EUR & unannounced
Operating System	Android 2.2
SoC & Memory	Texas Instruments OMAP4 ARM Cortex-A9 dual-core (1GHz) 512MB RAM
Network	GSM 800/900/1800/1900, EDGE, UMTS/HSPA 900/2100
Battery & Charging	1500mAh microUSB
Display	4.3-inch autostereoscopic LCD (480x800 pixel resolution) 218ppi, 16-bit color
Camera	5MP camera w/ LED flash, 1.3MP front-facing 1080p 3D video recording
Sensors	Accelerometer, ambient light, gyroscope, proximity, & compass
Connectivity	Wi-Fi, Bluetooth, GPS, A-GPS
Dimensions	Width: 68.0mm (2.68 inches) Height: 128.8mm (5.07 inches) Thickness: 11.9mm (0.47 inches)
Weight	168 grams (4.90 ounces)



Apple Need-To-Know Confidential

Sony Ericsson

Apple Need-To-Know Confidential



Price & Carrier	599 EUR (\$814 USD) & unannounced
Operating System	Android 2.3
SoC & Memory	Qualcomm MSM8255 (1.0GHz); 512MB RAM
Network	GSM 800/900/1800/1900; UMTS 850/1900/2100, EDGE, UMTS/HSPA 800/850/1900/2100
Battery & Charging	1500mAh microUSB
Display	4.2-inch LCD (480x854 pixel resolution), 233ppi
Camera	8.1MP auto-focus camera w/ LED flash 720p video recording
Sensors	Accelerometer, ambient light, proximity, & compass
Connectivity	Wi-Fi, Bluetooth, GPS, A-GPS, FM Radio
Dimensions	Width: 63.0mm (2.5 inches) Height: 125.0mm (4.9 inches) Thickness: 8.7mm (0.3 inches) (at thinnest point)
Weight	117 grams (4.1 ounces)

Apple Need-To-Know Confidential

Xperia neo

March 2011

Price & Carrier	479 EUR (\$651 USD) & unannounced
Operating System	Android 2.3
SoC & Memory	Qualcomm MSM8255 (1.0GHz); 512MB RAM
Network	GSM 800/900/1800/1900; UMTS 850/1900/2100, EDGE, UMTS/HSPA 800/850/1900/2100
Battery & Charging	1500mAh microUSB
Display	3.7-inch LCD (480x854 pixel resolution), 265ppi, 16-bit color
Camera	8.1MP auto-focus camera w/ LED flash 720p video recording w/ video light
Sensors	Accelerometer, ambient light, proximity, & compass
Connectivity	Wi-Fi, Bluetooth, GPS, A-GPS, FM Radio
Dimensions	Width: 57.0mm (2.2 inches) Height: 116.0mm (4.6 inches) Thickness: 13.0mm (0.5 inches)
Weight	126 grams (4.4 ounces)



Apple Need-To-Know Conti

Xperia PLAY

April 2011

Price & Carrier	649 EUR (\$882 USD) & unannounced
Operating System	Android 2.3, plays PSP games
SoC & Memory	Qualcomm MSM8255 (1.0GHz); 512MB RAM
Network	GSM 800/900/1800/1900, UMTS 850/1900/2100, EDGE, UMTS/HSPA 800/850/1900/2100
Battery & Charging	1500mAh microUSB
Display	4.2-inch LCD (480x854 pixel resolution), 233ppi, 16-bit color
Camera	8.1MP auto-focus camera w/ LED flash 720p video recording
Sensors	Accelerometer, ambient light, proximity, & compass, dual-shock joysticks
Connectivity	Wi-Fi, Bluetooth, GPS, A-GPS
Dimensions	Width: 62.0mm (2.4 inches) Height: 119mm (4.7 inches) Thickness: 16.0mm (0.6 inches)
Weight	117 grams (4.1 ounces)



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Xperia Pro

April 2011

Price & Carrier	unannounced
Operating System	Android 2.3
SoC & Memory	Qualcomm MSM8255 (1.0GHz); 512MB RAM
Network	GSM 800/900/1800/1900; UMTS 850/1900/2100, EDGE, UMTS/HSPA 800/850/1900/2100
Battery & Charging	1500mAh microUSB
Display	3.7-inch LCD (480x854 pixel resolution), 265ppi
Camera	8.1MP auto-focus camera w/ LED flash, front VGA 720p video recording
Sensors	Accelerometer, ambient light, proximity, & compass
Connectivity	Wi-Fi, Bluetooth, GPS, A-GPS
Dimensions	Width: 57mm (2.24 inches) Height: 120mm (4.72 inches) Thickness: 13.7mm (0.53 inches)
Weight	140 grams (4.94 ounces)



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HP/Palm

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Price & Carrier	Unannounced
Operating System	webOS 3.0
SoC & Memory	Qualcomm MSM 8x55 single-core (1.4GHz); 512MB RAM
Network	n/a
Battery & Charging	1230mAh microUSB & Inductive (Touchstone)
Display	3.58-inch LCD (480x800 pixel resolution), 261 ppi
Camera	5MP auto-focus camera with LED flash, front VGA 720p video recording
Sensors	Accelerometer, ambient light, proximity, & compass
Connectivity	Wi-Fi (802.11 a/b/g/n 5GHz), Bluetooth 2.1 + EDR w/ A2DP Stereo GPS, A-GPS, Wi-Fi router functionality (up to 5 devices)
Dimensions	Width: 64.0mm (2.52 inches) Height: 111.0mm (4.37 inches) Thickness: 16.0mm (0.63 inches)
Weight	156 grams (5.5 ounces)



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Price & Carrier	Unannounced
Operating System	webOS 2.2
SoC & Memory	Qualcomm MSM7230 single-core SoC 800MHz 512MB RAM
Network	GSM/EDGE 850/900/1800/1900 HSDPA 7.2/HSUPA 5.76
Battery & Charging	910mAh Inductive (Touchstone)
Display	2.6-inch LCD (320x400 pixel resolution) 197ppi
Camera	5MP auto-focus camera video recording
Sensors	Accelerometer, ambient light, proximity, & compass
Connectivity	Wi-Fi (802.11a/b/g/n 5GHz), Bluetooth 2.1 + EDR w/ A2DP Stereo GPS, A-GPS, Wi-Fi router functionality (up to 5 devices), magnetic port for 3.5mm & microSD adapter
Dimensions	Width: 54.5mm (2.15 inches) Height: 84.0mm (3.31 inches) Thickness: 15.1mm (0.59 inches)
Weight	103 grams (3.63 ounces)

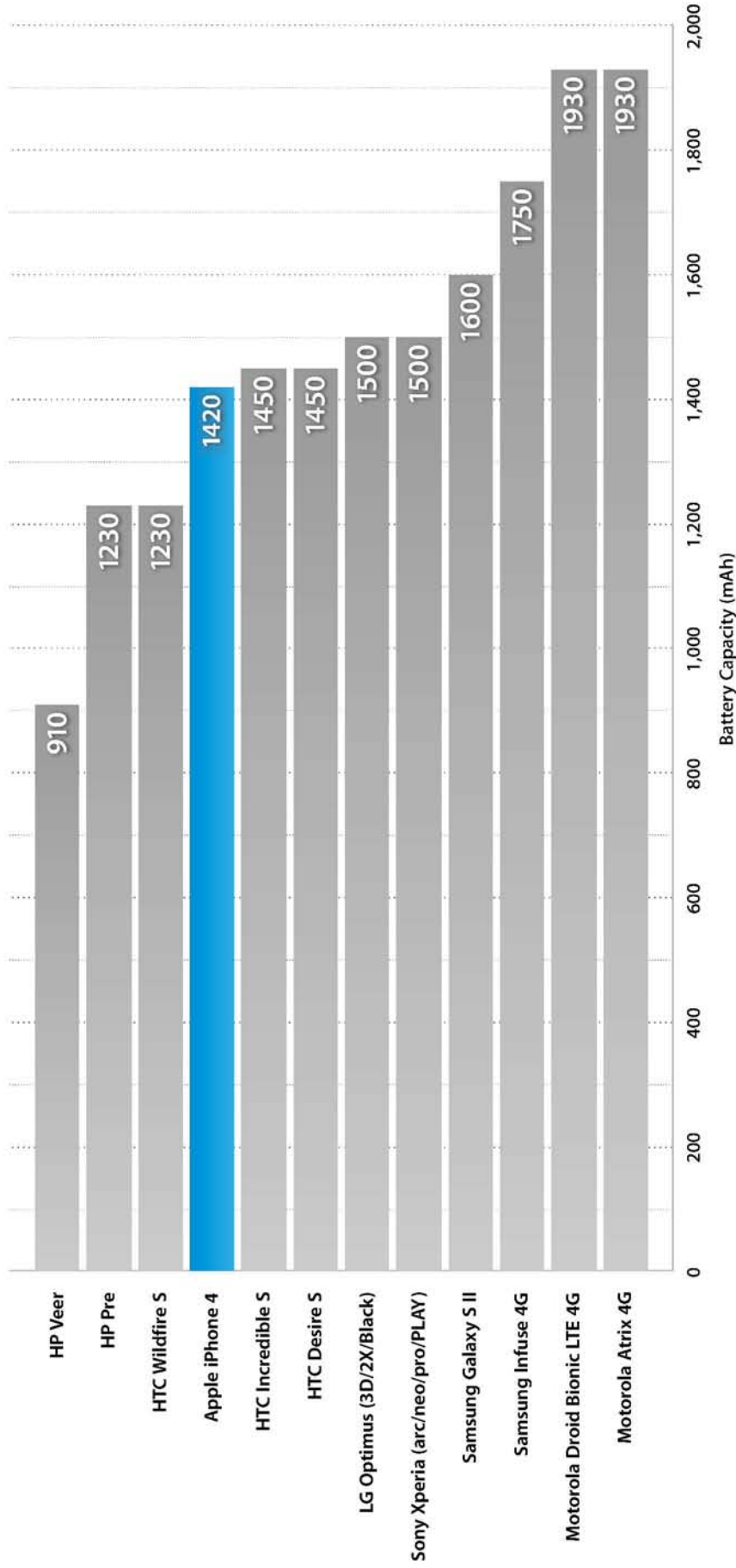


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Analysis of Future Flagship Devices

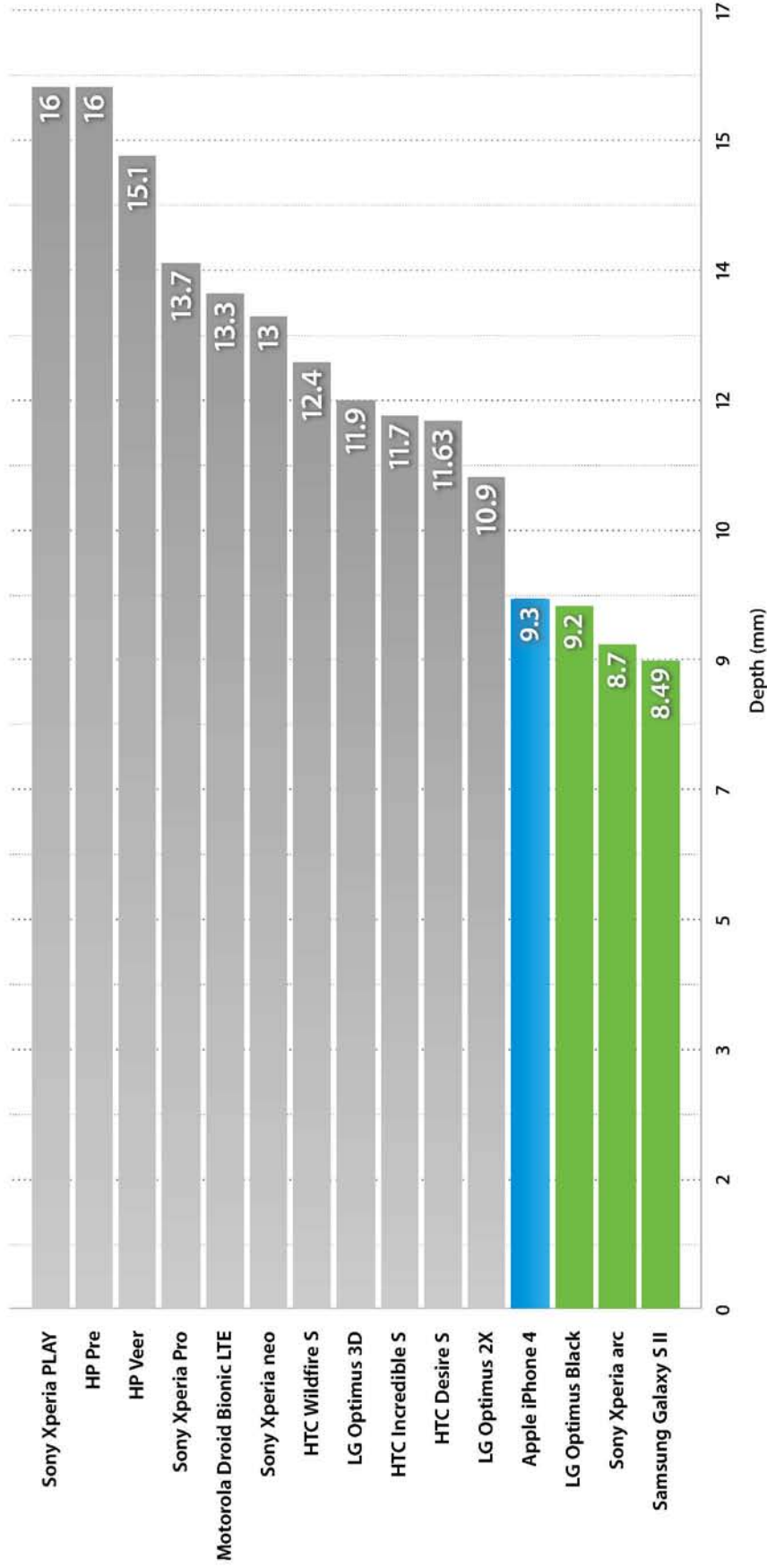
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Comparison of battery capacity (mAh)



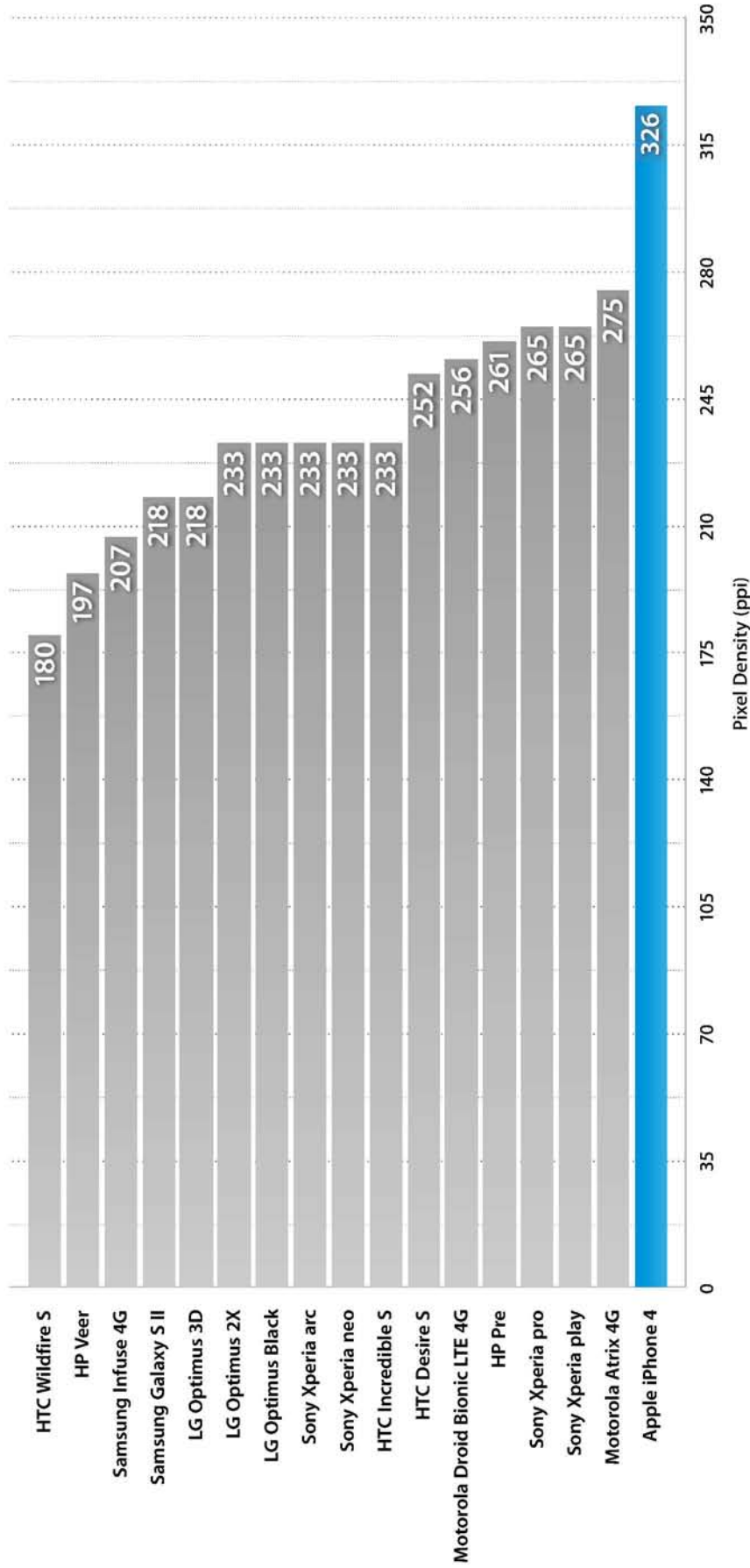
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Comparison of device depth (mm)



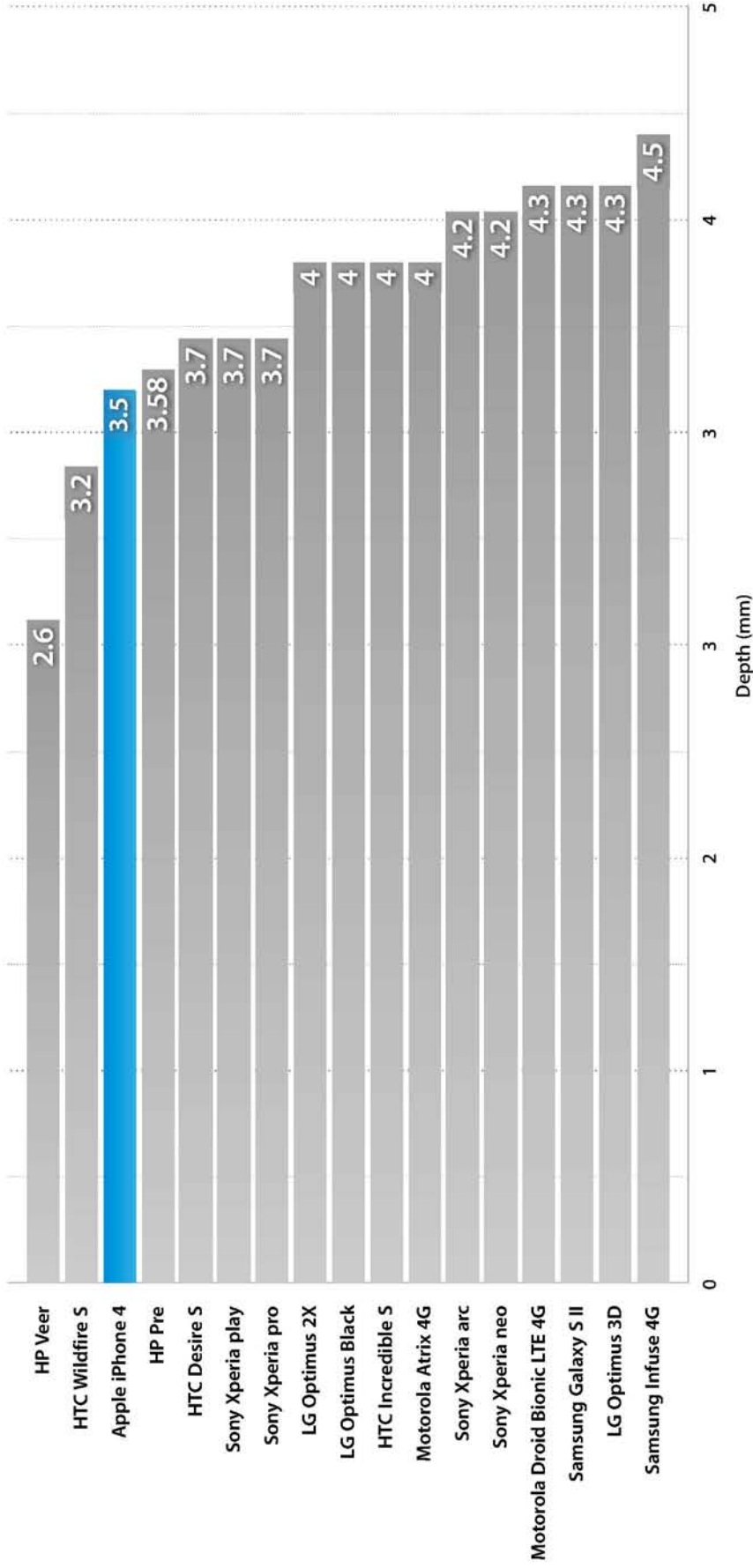
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Comparison of display pixel density



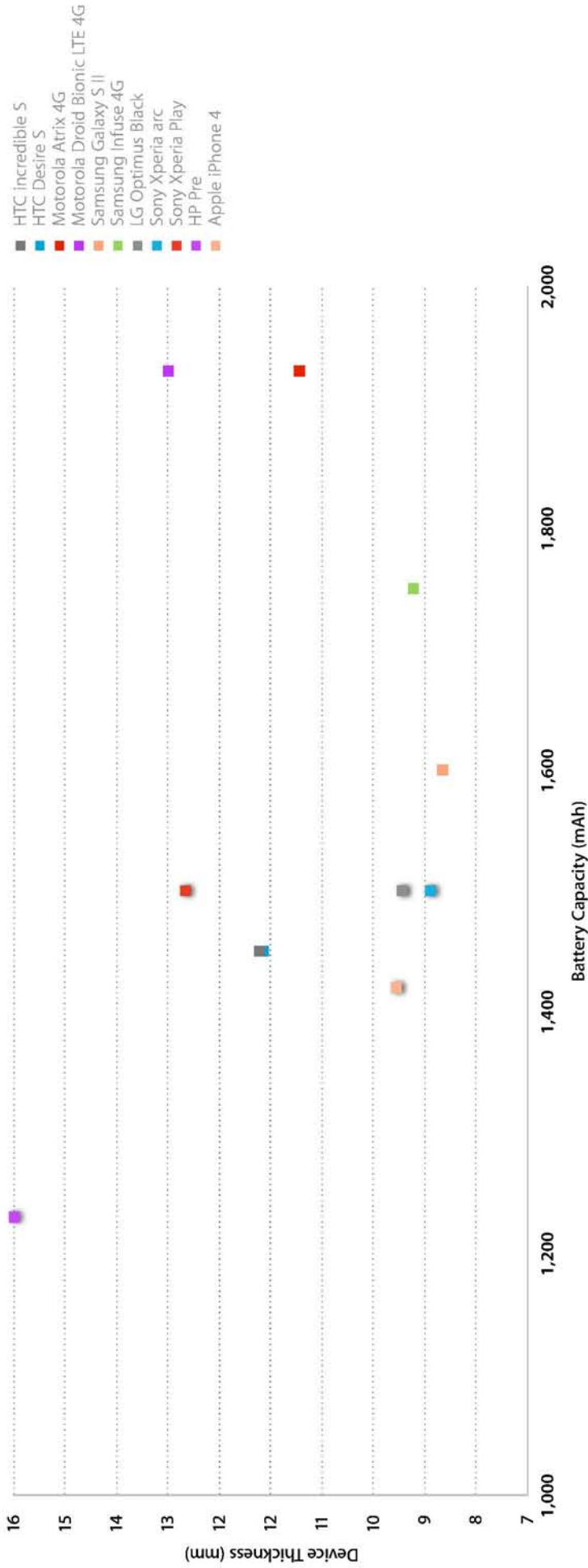
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Comparison of screen size



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Battery Capacity vs. Device Thickness



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