MOTOROLA



You sexy thing! November 29, 2005

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Overview

- Motorola is a *Fortune* 100 global communications leader that provides Seamless Mobility products and solutions across broadband, embedded systems and wireless networks.
- Motorola had sales of US \$31.3 billion in 2004.
- Motorola is comprised of four businesses: Connected Home Solutions, Government & Enterprise Mobility Solutions, Mobile Devices and Networks.
- Sales by region: U.S. 47%, Europe 19% China 9%, Latin America 9%, Asia-Pacific 7%, Other markets 6%, Japan 3%
- Successful restructuring in 2001, results in 2004-2005, still more room to grow

Thesis Points

- **Reinventing the mobile device experience**; Superior mobile devices product portfolio and product launch capabilities. There is so much room to grow.
- Sustainable competitive advantage; Motorola is the only one in the market with Integrated end-to-end solutions for mobile carriers and providers
- **Relatively cheap within the industry on valuation;** Motorola is still trading at a discount to the industry when it should be trading at a premium.
- They've achieved success without increasing expenses or capacity; R&D expenses, SGA expenses as a percentage of sales have decreased. No additional capacity increase

Reinventing the mobile experience

- The most exciting consumer technology market to be in.
 >700 million handsets in 2005 compared

 (189 million PCs, 22 million gameboys, and 12 million PDAs in 2004)
 (4 billion people have yet to make a wireless or landline telephone call)
- When sexy design meets technology...
 - 1. Razr (clamshell phone)
 - 2. PEBL (clamshell phone)
 - 3. SLVR (candybar phone)
 - 4. Q (qwerty phone)
- ... they create brand loyalty in a market lacking brand loyalty

The Razr

- Only the beginning
- The best selling clamshell phone in the world (12 million units in 2 quarters)
- What's next??
 - Razr Magenta
 - Razr EV-DO
 - Razr V3x
- Competitors are frantically playing catch-up, but failing
- Sales of the Razr will peak in 2007
- Motorola is already developing the replacement of Razr
- Motorola regained brand leadership around the world



The PEBL

- Shipping to customers right now
- Flying off the shelves as soon as it hits the shelves
- Will launch at the beginning of 2006



fashion fuses with function quad-band connectivity automatic opener VGA camera and so much more!



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The SLVR

- Now shipping to customers (SLVR L6), L7 will be shipped in the first half of 2006
- The global market for the candybar phone is twice the size of the clamshell market
- SLVR sales in Q1 2006 is expected to equal sales of the Razr
- Best designed candybar in the market



ultra-slim and wickedly cool

- tri-band connectivity
- 10MB embedded memory
- VGA camera
- et cetera, et cetera, et ceteral





world's thinnest design
quad-band connectivity
push to talk over cellular

bluetooth

VGA camera and much more!



The Q

- The Blackberry killer
- Shipping to customers in the 4th quarter and will launch in Q1 of 2006
- This smart phone has the competitive coststructure, technology and design in the market
- Blackberry's patent troubles have not been settled



Reinventing the mobile experience

Results:

- 19% global market share (up 5bpps from 1 year ago)
- #1 in North and Latin America
- #2 in Europe and growing rapidly
- #3 in North Asia and high-growth markets (Africa, middle east, India, Pakistan, South-east Asia, Australia)

Potential:

- In high growth markets (low penetration), the market leader has close to 70% market share
- In a normal market, leader usually has 35% market share
- These markets will continue to readjust in 2006
- Already #1 GSM and #2 CDMA in China

Sustainable Competitive Advantage

- Motorola's Networks
 Business (highest number of contracts in the industry at 38 & holds most patents)
- Motorola can offer customers end-to-end solutions, optimization solutions, handsets, network infrastructure, so they can go up to a new consumer base and offer value-added services.
- Competitors cannot compete with Motorola at this level

From

Cellular	Wi ^{4,} Softswitch
Mobile Packet Data	Mesh, IMS, Mobile IP
Bluetooth	X-Internet
Data over Cable	FTTX/PON
Set top box	Media Management
Push to Talk	Push to Everything
Conditional Access	Digital Rights Mgmt.
Video Coding – MPEG2	High Efficiency MPEG4

To

Market Leadership

- #1 in mission critical wireless communications systems
- #1 in two-way radio systems
- #1 in embedded telematics systems
- #1 in digital set-top shipments
- #1 in cable modem shipments
- #1 in digital headends
- #1 in PoC subscribers worldwide
- #1 in embedded computer systems for communications applications
- #1 in CDMA infrastructure sales (excluding U.S.)
- #2 in world-wide wireless handsets

Sustainable Competitive Advantage

- Supporting the convergence in network platforms
- Paving the way for the future standard of wireless devices
 - Providing the infrastructure and services for 3.5G and 4G (Leveraging Mobile Devices with Networks Business will grow Networks business to \$3 billion because of attractive end-to-end solutions)
 - Supporting the convergence to an IP-based network
- Leading the next wave of technologies
 - Providing mobile devices for 3.5G 4G (Motorola invented the mobile protocol for 3.5G)
 - Early Leader in Wireless Soft Switching in China
 - Industry #1 in IP Multimedia Subsystem (IMS) Push-to-talk over Cellular (PoC/PTX)
 - Integrated Networks business: Cellular, Wireline, Mobile Broadband, Services and Platforms

Valuation

	Motorola	Nokia	Qualcomm	Industry
P/E (trailing)	14.91	17.87	36.39	26.69
P/Sales	1.7	1.99	13.34	5.85
P/Cashflow	13.02	17.40	33.29	23.74
ROE	27.48	27.06	20.62	19.39
Revenue	\$23.4 B	\$24 B	\$5.6 B	
Operating Margin	12-15%	11-12%	34.84%	20.85%