



openmoko



GOLDEN DELICIOUS
mobile office solutions

Freerunner – Present and Future

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FOSDEM, Brussels, February 4th, 2012

Agenda

First some history



Present

Golden Delicious GTA02v7++

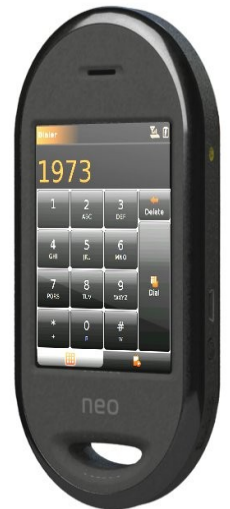
Distributions

The future... has arrived

Q&A

First some history – Past iterations

- FIC GTA01 – Neo 1973
 - Roughly 3.000 units sold
 - Production discontinued
- Openmoko GTA02 – Neo Freerunner
 - Roughly 15.000 units sold
 - Hardware revision v7
 - Production discontinued



First some history – FR Features

Feature	Neo Freerunner
Display	Resistive 2.8" VGA
CPU	400 Mhz, ARMv4T
GPU	Smedia Glamo
RAM	256 MB
Flash	256 MB
External Storage	uSD
GSM	Tri-band
Data	GPRS class 12
GPS	16 Channel
LAN	802.11 b/g + USB
USB	V1.1 (Charge, client, semi-host)
Senors	2 Accelerometers
Audio	Stereo jack

Very good feature set (anno 2008)



Agenda

First some history

Present



Golden Delicious GTA02v7++
Distributions

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Q&A

Present – Golden Delicious GTA04v7++

- FIC and Openmoko got out
- Strong community continues development
- Golden Delicious taking the lead
 - Excellent support for existing devices
 - Shipping spare parts and add-ons
 - Tuned GTA02v7++
 - Deep sleep fix (aka bug #1024) -> Improved standby time
 - Bass rework -> Improved sound quality

Agenda

First some history

Present

Golden Delicious GTA02v7++

Distributions

The future... has arrived

Q&A

- Continuing the Qtopia/QtExtended project
- Written in Qt
- Stable and usable as daily phone
- Consistent GUI in all screens
- All HW features are working (GSM, Wi-Fi, Bluetooth, GPRS, GPS, USB, Headphone, Accelerometers)
- Open to patches, ideas, new applications and contributions

- Project home
<http://qtmoko.org>
- Mailinglist
community@lists.openmoko.org
- Source code
<http://github.com/radekp/qtmoko>

- Freedom of choice:
 - _ EFL, Qt, GTK (focus on Enlightenment)
 - _ Possible to run Xorg applications
- Stable and usable as daily phone
- All HW features are working (GSM, Wi-Fi, Bluetooth, GPRS, GPS, USB, Headphone)
- Also ported to Nexus S, Palm Pre and Nokia N900
- Open to patches, ideas, new applications and contributions



- Project home
<http://www.shr-project.org>
- Mailinglist
shr-user@lists.shr-project.org
shr-devel@lists.shr-project.org
- Source Code
<http://build.shr-project.org>
- IRC
<irc://irc.freenode.net/openmoko-cdevel>

Distros - Android



- Codename Android-on-Freerunner (AoF)
- Based on the vanilla Google AOSP code
- Installation available on NAND and uSD-card
- Focus on 2 releases

- Cupcake
 - Stable code base
 - Usable as daily phone

- Froyo
 - More experimental
 - Low performance (CPU and graphics related)

Distros - Android



- Project home
<http://code.google.com/p/android-on-freerunner/>
- Mailinglist
<http://groups.google.com/group/android-on-freerunner>
- Source code
<http://gitorious.org/android-on-freerunner>
- IRC
<irc://irc.freenode.net/android-on-freerunner>

Distros - Debian



- Uses the readily available armel ARMv4 Debian port
- Benefits the work done in the Linux ARM world
- NAND installations with script
- FreeRunner kernels (2.6.34 default, 2.6.39 available)
- FSO2 packaging also supports Nokia N900, Palm Pre etc., but installation not productized

Distros - Debian



- Project home
<http://wiki.debian.org/DebianOnFreeRunner>
- Mailinglist
<http://lists.alioth.debian.org/mailman/listinfo/pkg-fso-maint>
- Source code
<http://anonscm.debian.org/gitweb/?s=pkg-fso>
- IRC
<irc://irc.freenode.net/openmoko-debian>

Distros - Other

- H:1
- Gamerunner
- OM2009
- OM2008
- Slackware
- OpenWRT
- ...

See them all at wiki.openmoko.org

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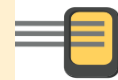
First some history

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Distributions

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Q&A

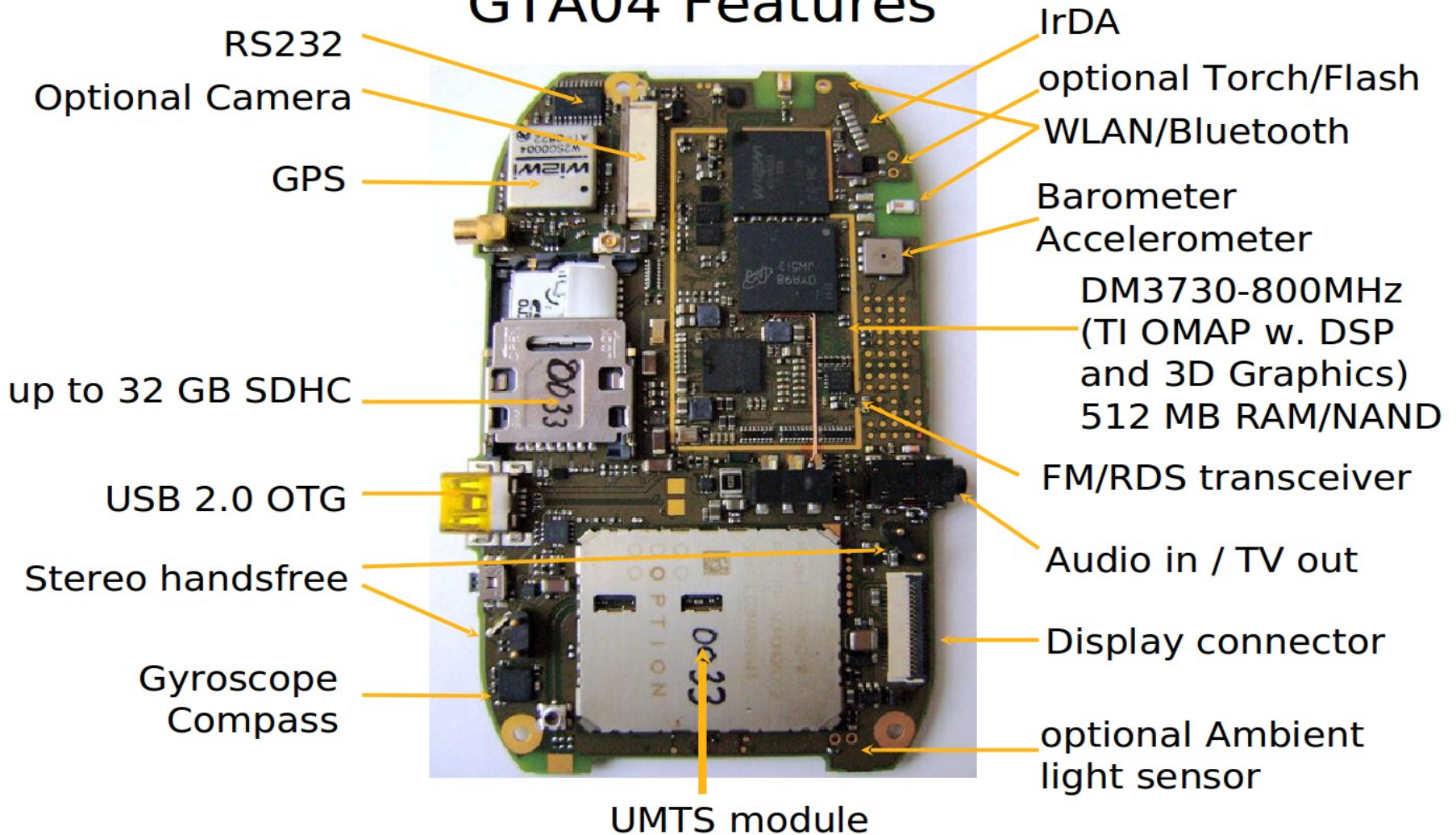
The future... has arrived

- Golden Delicious GTA04 - Phoenix
 - PCB and ICs fit into 1973 / Neo casing
 - In production and available for ordering
 - Check the stand in building AW@FOSDEM



The future... has arrived

GTA04 Features



The future... has arrived

Feature comparison

Feature	Neo Freerunner	Phoenix
Display	Resistive 2.8" VGA	Resistive 2.8" VGA
CPU	400 Mhz, ARMv4T	800Mhz, ARMv7, Integrated DSP
GPU	Smedia Glamo	OpenGL 2D/3D accel.
RAM	256 MB	512 MB
Flash	256 MB	512 MB
External Storage	uSD	uSD
GSM	Tri-band	Quad-band
Data	GPRS class 12	GPRS, EDGE, UMTS, HSDPA, HSUPA
GPS	16 Channel	20 Channel
LAN	802.11 b/g + USB + Bluetooth	802.11 b/g + USB + Bluetooth

The future... has arrived

Feature comparison

Feature	Neo Freerunner	Phoenix
Camera	-	1.3 Mp (Optional)
FM Radio	-	FM receiver (+ optional transmitter)
Sensors	2 Accelerometers	2-axis accelerometers (optional) 3-axis compass (optional) 3-axis gyroscope (optional) barometer/thermometer (optional) Ambient light detector (optional)
USB	V1.1 (Charge, client, semi-host)	V2.0 (Charge, client and host)
Audio	Stereo jack	Composite Audio/Video jack

The future... has arrived

- Phoenix home

<http://www.gta04.org>

- Mailinglist

gta04-owner@goldelico.com

- Software

<http://projects.goldelico.com/p/gta04-main/page/Software/>

- Distros already ported to GTA04
 1. SHR
 2. QtMoko
 3. Debian

The future... has arrived

Become part of it and subscribe to the group tour

<http://www.handheld-linux.com/wiki.php?page=GTA04%20Group%20Tour>

we can reduce component and production cost ...
... only if we get enough preorders



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Q&A

Meet us

AW building at FOSDEM

Visit us

wiki.openmoko.org

www.gta04.org

Free you phone!