

TV2Mobile '07

::Bringing together all the elements of the mobile TV ecosystem

Conference and Exhibition | Rome-Italy

> May 22 - 23, 2007 / Aldrovandi Palace / Rome Italy



TV2Mobile '07 – Rome Conference Program

Conference:

Tuesday May 22- Wednesday May 23, 2007

Exhibits:

Tuesday May 22 - Wednesday May 23, 2007
1:30 PM - 3:00 PM

Tuesday, May 22

7:30 AM-8:30 AM Lobby
Registration Open

Semiconductor Track

8:30 AM-9:00 AM

Vibrant Media: NXP's contribution to the Mobile TV market

Kees Joosse

NXP Semiconductor

Senior Director and General Manager Business Development

The emerging mobile TV market comes with challenges that require a systems approach. In the presentation, we will address the following topics and possible answers to the challenges:

- Enjoying a good viewing experience on the relatively small display and what this means for the signal processing
- Enhancing the channel bandwidth of the entire broadcasting system by boosting the picture at the receiver-display
- Preventing too excessive battery drain by a systems approach of the entire receiver
- A flexible multi-standard receiver by means of a programmable (but efficient!) channel decoder
- Embedding the TV front end into NXP's System Solution for Mobile Phones

9:00 AM-9:30 AM

Mobile TV Front-end solution: Past, Present and Future

Dr. Brian Ko

Analog Devices, Inc.

President & Founder of Integrant an Analog Devices Company

Mobile TV service is now in the market. S-DMB and T-DMB in Korea and ISDB-T 1 segment in

Japan and DVB-H in Italy are being serviced even if the growth is in infant stage. For the last 3 years, there has been fast and dramatic change of Mobile TV front-end solutions starting with "pure components" then SiP and now SOC solutions hence making it possible to be used in handsets applications by meeting the demand for smaller size and lower cost. This presentation will give you the history and the future of Mobile TV front-end solutions to give you the insight on what will happen in Mobile TV market in 2010.

9:30 AM – 10:00 AM

Enabling the significant benefits of multi-standard mobile TV reception

Mr. Simon Hambly

Imagination Technologies

Business Development Manager

With a fragmented mobile TV market, currently being led by ISDB-T One Seg and T-DMB deployments, rather than DVB-H as initially anticipated, a multi-standard demodulator solution can maximize returns for semiconductor manufacturers. Here Imagination Technologies' describe the advanced features and market-leading performance, as well as the substantial benefits, of its truly multi-standard mobile TV solution, which is available as licensable IP.

10:00 AM – 10:05 AM

Coffee Break

10:05 AM – 10:35 AM

Ultra-low power is the key for a good mobile TV user experience

Mr. Tomi Jalonen

Hantro Products Oy

Director of Sales & Business Development

Enabling video in a battery powered handheld devices is an incredibly challenging task. Consumers demand better image quality, increased resolutions and frame rates. Emerging cases use like mobile TV increase the requirement for ultra low power consumption as people want to watch even a complete football game or a movie without sacrificing the talk and stand-by times. There are different alternatives like general purpose CPU, DSP or hardware logic to implement video decoding for mobile TV. This presentation discusses pros and cons of those alternatives keeping in mind price, performance and power consumption and explains why a HW accelerator is the most suitable solution for mobile TV.

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10:35 AM – 11:05 AM

DiBcom in mobile TV

Mr. Marco Landi

DiBcom

Chairman

Handheld Technology Track

11:05 AM – 11:35 AM

Toward a fully standardized SIM-based smart card profile security solution

Mr. Mika Kavanti

Nokia

Head of System Marketing

Especially in Europe, the OMA based Smart Card Profile (SCP) has been gaining momentum among the mobile operators as the mainstream DVB-H Service Purchase Protection System, with commercial deployments beginning in 2008. This reduces significantly the risk of market fragmentation and fastens the Mobile TV market ramp up. Before that time frame, there have been intermediate implementations in use and those have various paths towards the Smart Card Profile, having naturally impacts to the Mobile TV market development.

Special Applications Track

11:35 AM – 12:05 PM

MPEG-Surround: Enabling mobile TV with Surround Sound

Dr. Nikolaus Farber

Fraunhofer IIS

Group Manager Multimedia Transport

Especially in Europe, the OMA based Smart Card MPEG Surround is a surround sound extension for existing audio codecs and allows compression of multi-channel audio at bit rates as low as 48 kbit/s. It features a binaural mode for playback of surround sound over headphones and is fully compatible with existing stereo devices. The low bit rates, possibility of playback over headphones, and the backwards compatibility makes MPEG Surround an ideal technology for enhancing the mobile TV experience.

The presentation will first explain the concept of Spatial Audio Coding (SAC) which forms the basis for MPEG Surround. The features, performance and status of standardization is addressed. As a second technology component binaural rendering is explained, i.e. how to playback surround sound on stereo headphones.

Finally, the implementation using a standard DVB-H transmitter and a portable ARM-powered PDA for playback is addressed. The receiver is based on the DVB-H player software by Fraunhofer IIS which supports MPEG-4 Advanced Video Coding (AVC/H.264) and MPEG Surround with MPEG-4 High Efficiency AAC (HE-AAC) as the core codec. The MPEG Surround binaural rendering is achieved in real-time as the broadcast signal is received.

12:05 PM – 12:35 PM

Strategies for Video Guidance

Gordon Matthey

TV Guide Mobile Entertainment

Head of Sales and Business Dev.

The launch of Mobile TV gives the viewer new forms of content, expanding entertainment choice and greater viewing platform options.

The Mobile TV Operator must navigate a complex set of technology, regulation, content and revenue model issues to deliver services to Viewers.

Existing Mobile deployments have shown Video Guidance is a low priority and focus for the Operators. Current approaches deliver a poor Viewer experience and limit the opportunities for the Operator to add value and drive revenue. For Multi-Platform TV Operators, the Video Guidance experience is more complicated

There are varied approaches to help Viewers navigate and explore available video content effectively. The right approach will lead to increased revenues and personal engagement with the Viewer.

The presentation explores three fundamental strategies to aid Operators in delivering a compelling Video Guidance experience to Viewers by;

- 1) Informing
- 2) Simplifying
- 3) Aiding Discovery

12:35 PM – 1:45 PM

Lunch Break

Keynote: Mobile TV: Evolution and innovation to drive the value creation

Dr. Luigi Licciardi

Telecom Italia

Sr. VP Head of Mobile Industry Relations

Telecom Italia presents the experience in launching Mobile Tv services based on DVB-H technology in Italy, the European pioneer country for this technology. After the

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presentation of the platform and the offer, Dr. Licciardi will focus the talk in analyzing aspects related to the business proposition and how the offer can be enhanced to acquire new customers.

Interactivity and advertising management are presented as well. Innovative handsets are considered a key issues in order to create value to the customers and can open new business opportunities in mobile entertainment while in seamless mobility. A complete ecosystem is going to be prepared, triggered and refined after the first commercial launch, in order to create a real business opportunity and extend the service diffusion. Transforming a good technology in a business opportunity is now the real challenge and all the industry is pushed to collaborate in order to achieve reasonable cost, easy access to valuable contents and guarantee the necessary interoperability.

1: 45 PM – 3:00 PM **Table Top Exhibits**

Content Owners Track

3:00 PM – 3:30 PM

A global mobile video strategy

Martin Kay

CNBC

Director of Business Development

CNBC leads business news television by operating globally, through its network of English-language TV services, and at a country level with key partners in local language, including Class-CNBC broadcasting in Italian from Milan. CNBC will discuss its approach so far in reaching this highly valuable, tech-savvy audience in the emerging area of mobile video, at both a global and local level. It will also look ahead to future developments and content propositions for its influential audience.

Operators/Carriers Track

3:30 PM – 4:00 PM

TIM's way to Mobile Broadcasting

Alberto Ciarniello

Telecom Italia

VP for IPR & Standard Management

In his talk Mr. Ciarniello will present the business model followed by Telecom Italia in addressing the mobile TV opportunity. Telecom Italia has already accumulated experience in

providing these services and this experience will be shared with the attendees.

Content Owners Track

4:00 PM – 4:30 PM

Content for Mobile TV

Stefania Cinque

RAI – Radiotelevisione Italiana S.p.A.

Direction of Commercial content

RAI is the major state-run content providers for the TV Industry in Italy. It also provides a large amount of content for the mobile TV. Ms. Cinque will talk about RAI's products and strategy for this market.

4:30 PM – 5:00 PM

Among the Audience in the age of participation media

Alessandro Capuzzello

Mediaset

Research Director, Mediaset Group

Mediaset was the first broadcaster to launch Mobile Tv services, based on DVB-H standard technology, in cooperation with Mobile Network operator as TIM and Vodafone. This can be truly considered the first experience of real convergence of different business models and different visions of the service relationship with the final customer; but Mobile TV is still in phase of development and to become a successful service has to modify the business proposition. According to the speaker the typical "television behaviour" of the viewer has not been considered properly. For this new service it is still necessary to ask (and to answer) the right questions:

- Which is the audience of the mobile TV ?
- How should we propose the mobile TV service in the age of the participation media?

Operators/Carriers Track

5:00 PM – 5:30 PM

Channel and Franchise Programming, how new consumer trends are shaping Vodafone's mobile video offer

Vittorio Veltroni

Vodafone

Head of Content

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Vodafone presentation

Executive Panel

5:30 PM – 6:30 PM

What will drive the mass markets?

Moderator: Simon Morris – BDC Venture
Participants: Manlio Cruciatti – Mediaset
Luigi Licciardi – Telecom Italia
Martin Kay – CNBC
Alessandro Floris – 3Italia
Stefania Cinque - RAI

Wednesday, May 23

Semiconductor Track

8:30 AM-9:00 AM

ST Introduces the Nomadik Mobile TV development kit

Mr. Andrea Gallo
ST Microelectronics
Application Lab. Manager

At the last CES in Las Vegas and 3GSM in Barcelona, ST has unveiled and demonstrated the Nomadik Mobile TV development kit. Based on the STn8810 Application processor, the NMTV-10 is a complete hw and sw platform running a full portable media player reference design on top of both WinCE 5.0 and Linux 2.4. The hardware platform itself features Nomadik STn8810S12 application processor with integrated NAND and DDRAM, STA529 and STA539 audio codec with Class D amplifier, STn4810 Touareg chip for power management, socket for ST camera chips, WQVGA 24bpp CLCD panel and RCA TV Out i/f, ST Bluetooth chipset and SD/MMC and USB OTG connections for mass storage. Expansion connectors host DVB-H/T-DMB tuners from any 3rd party, CE-ATA hard drives and GPS receivers over UART.

9:00 AM-9:30 AM

TV to Mobile requires a flexible video subsystem

Mr. Dan Davis
ARC International
Sr. Director for consumer business

About half a century ago, the television brought moving pictures to the home, and a trillion dollar

industry took off. In the coming decade, pocket-sized players and media-enabled cell phones will bring personalized video to portable, permanently connected systems, enabling an instant and always-on experience that people will carry with them wherever they go.

The design of such a portable device requires the integration of many hardware and software components into a single integrated circuit: a system on a chip (SOC). ARC International's ARC Video Subsystem is a flexible, low-cost, low-power subsystem that can decode any audio and video bitstream presented to the device. This presentation will give an overview of the mobile TV market, its direction and required semiconductor components and follows to describe how ARC's media products fulfill the requirements.

9:30 AM-10:00 AM

Hardware platforms for mobile broadcast

Mr. Ralph Weir
Mirics Semiconductor
VP of Marketing

Mobile Broadcast offers vendors some significant challenges. How do you deliver a volume product in a fragmented market? How do you deliver class-leading performance and power - in a tiny form factor? And, for the silicon supplier - how do you deliver Moore's Law cost benefits, when Moore's Law hasn't applied to RF since the end of the last century?

The answers do not lie in evolution, but in innovation. Weir will outline FlexiMode - Mirics' breakthrough RF architecture - and show how it delivers the smallest form factor, the lowest cost, and the highest performance, for all global standards available today. Welcome to the era of the "global platform product" for mobile broadcast.

10:00 AM – 10:15 AM **Coffee Break**

10:15 AM-10:45 AM

Enabling the mobile TV opportunity

Mr. Fabio Iaione
Qualcomm
Country Manager - Italy

MediaFLO™ technology is a global mobile entertainment platform, enabling broadcasting of high-quality video, audio, Clipcasting™ media and IP datacasting streams to mobile handsets. MediaFLO Technologies is redefining the global mobile media landscape, enabling the entire mobile TV ecosystem with an end-to-end mobile



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broadcast technology solution that cost-effectively delivers high-quality streaming television, video and integrated information services to handsets.

The MediaFLO System, comprised of the MediaFLO Media Distribution System and FLO™ Technology, is a comprehensive, end-to-end solution designed specifically to address the inherent challenges of distributing large volumes of high-quality mobile multimedia content to wireless subscribers. Designed from the ground up with mobility in mind, MediaFLO efficiently and cost-effectively addresses the usability, network capacity, and device constraints typical of video delivery to mobile handsets.

Software Track

10:45 AM-11:15 AM

Mobile TV and multimedia content: People ready opportunities

Mr. Fabio Falzea

Microsoft

Mobile Communications Business Director

Mobile technologies rapid evolution is putting an incredible power in the consumer hands. However consumers need to access these different opportunities through the lens of her/his own experience embracing professional and personal life. Mobile TV represents a strong opportunity for technology and media companies that can offer this experience in sync with the broader range of experiences and activities that the consumer is accessing in her/his daily life. This continuum of experiences offers new ways to increase the deepness of the consumer experience while it is creating the need for media companies to approach their contents from an end-to-end perspective that includes shopping, online and offline fruition, media DRM-controlled sharing and community building.

11:15 AM-11:45 AM

Maximizing mobile TV revenues

Mr. Nicolas Chevalier

Nagravision

Head of Product Marketing for mobile TV

Nagravision, a Kudelski Group Company, has successfully launched commercially the three world's first DVB-H Mobile TV services with 3 Italia, TIM and Vodafone Italy !

Nagravision, is the world's leading independent supplier of open conditional access systems, DRM and integrated on-demand solutions for content providers and digital TV operators over broadcast, broadband and mobile platforms. Its technologies are currently being used by more than 100 leading Pay-TV operators worldwide securing content delivered to over 66 million active smart cards and devices.

This presentation "**Maximizing Mobile TV revenues**" will mainly focus on the following subjects :

- Broadcast Mobile TV, a booming market
- Main benefits for the whole eco-system
- Case studies based on worldwide Mobile TV deployments: the most promising business models

11:45 AM-12:15 PM

Case studies on worldwide mobile TV deployments: A security focus

Mr. Rory O'Connor

Irdeto

Director of Mobile Products

Points covered will include: Protecting rights & securing revenues, the case for using high grade security for Mobile TV. The presentation will also cover some notable failures and the consequences. The security solutions available using Conditional Access and DRM will be explained. New proposed standards from the OMA will be covered and the steps required to get them to market. Most importantly the talk will focus on how the different standards are faring in the real world, with case studies from Korea, South Africa and Germany.

12:15 PM – 1:30 PM

Lunch Break

Keynote: Key handset parameters for successful mobile TV

Mr. Ronen Jashek

Siano Mobile Silicon Ltd.

Sr. Director of Marketing

What features and technologies are required on the handset side to secure successful mobile TV services.

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In today's emerging mobile TV markets the devices which are launched must be appealing to the users, rich with features and at the same time reasonable in terms of cost and re-usability from the operators' objectives.

From the user perspective, the devices must offer excellent video performance, interactivity, a plethora of features (such as high-resolution cameras) and ease of use.

From the operators' perspective, devices must be multi-mode with respect to mobile TV, efficient with power consumption and size, enabled with conditional access and bundled with appealing software applications.

The challenge is satisfying these ever-demanding market needs using state-of-the-art silicon and other technologies.

1:30 PM – 3:00 PM **Table Top Exhibits**

3:00 PM-3:30 PM

Powering the Mobile TV as an interactive media

Ms. Nina Snow

Streamezzo

General Manager, EMEA Region

A few short years ago, mobile devices and applications were limited to voice services, simple games and SMS messaging. Today, your cell phone is your chat room, your internet browser, your portable computer, your digital music player and your television. Hear from leaders in mobile technology from around the world discuss what advances have been made in their countries and how the next generation of mobile platforms can catapult televised programming into larger audiences and new revenue streams.

Operators/Carriers Track

3:30 PM – 4:00 PM

3Italia Digital Mobile TV: A World's first

Mr. Alessandro Floris

3 Italia

Director, Mobile TV

3 Italia has been the first in the world to launch the DVB-H Digital Mobile TV service with a wide coverage and offers now 12 digital mobile channels. Following the success experienced in Italy, 3 Italia is sharing by 3 Power its

experience with companies launching or planning to launch DVB-H commercial services worldwide.

Thanks to the hierarchical mode, 3 Italia could now add on its DVB-H network up to 4 digital terrestrial television channels (DVB-T). Figures and future rollout of 3 Italia's Digital Mobile TV.

Broadcast Equipment

4:00 PM – 4:30 PM

IP TV and Mobile TV

Mr. Filip Gluszek

UDCast

VP of Marketing

IPTV has become a reality worldwide. The technology works and subscribers from all over the world suggest that consumers are ready to use it. The business models of ISPs, telecoms, mobile operators and broadcasters are converging, and as a result the advanced IPTV system will allow reception of TV and multimedia content on multiple screens (home, car, mobile, PC). Mobile IPTV will play an important role in the rollout of new TV services, being not only a portable screen extension, but also a major driving force in development of innovative TV services with support of powerful cellular operators, broadcasters and telecom vendors world-wide. There are currently more than 50 trials and commercial deployments of Mobile TV world-wide, with more countries planning to deploy soon. According to research firm iSuppli Corp, global IPTV subscribers will grow to 44 Million in 2009, this number must be compared to the forecasted 2.6 Billion mobile phone services subscribers the same year and the estimated 20 percent Mobile TV subscribers (520 Million).

There are a number of technologies enabling IPTV on mobile, ranging from the simple 3G IP unicast, through broadcasting (DVB-H, T-DMB, FLO, MBMS) to the hybrid terrestrial-satellite broadcasting solutions (DVB-SH, S-DMB), however all of them represent the similar challenges in terms of content management as the residential IP TV. In addition to the technical network issues, there is also the question of commercial viability. The two main sources of revenues from IPTV services are subscription fees and advertising revenues. The recent advances in the internet online marketing are changing the shape of advertising market, by introducing the Addressable Advertising concept, with higher and higher resolution of addressability of the audience, and future IPTV

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and Mobile IP TV networks will be required to cope with the new advertising standards.to transmit a main DTV service stream for existing DTV and HDTV services as well as an MPH stream for mobile reception with special MPH receivers.

Handheld Technology Track

4:30 PM – 5:00 PM

Mobile TV handset technology: A place for venture investment

Simon Morris

BDC Ventures

Director Venture Capital – Advanced Technology

Young and innovated companies have emerged over the last few years bringing new technology and solutions to accelerate the introduction of mobile TV. This technology innovation is often seen in the semiconductor industry with companies like Dibcom, Frontier Silicon and Integrand (now acquired by ADI) as well as newer entrants like Siano and Newport Media. There are however a range of other mobile TV related opportunities where innovation in services and solutions are being introduced to drive mass adoption of mobile TV handsets. This presentation will review some of the identified venture opportunities, but will also propose new ones where opportunity still exists for innovation, risk and venture investment.

Technology Panel

5:00 PM – 6:00 PM

Technologies and Standards

Moderator: Dr. Claus Sattler – BMCo

Participants: Fabio Iaione – Qualcomm

Mika Kavanti – Nokia

Simon Hambly – Imag. Tech.

Bosco Fernandes - UMTS

Tim Hyland - Roundbox