

CONVERGENCE	
ENHANCED MULTIMEDIA	
MULTIMEDIA	
VALUE	

# Convergence Platform

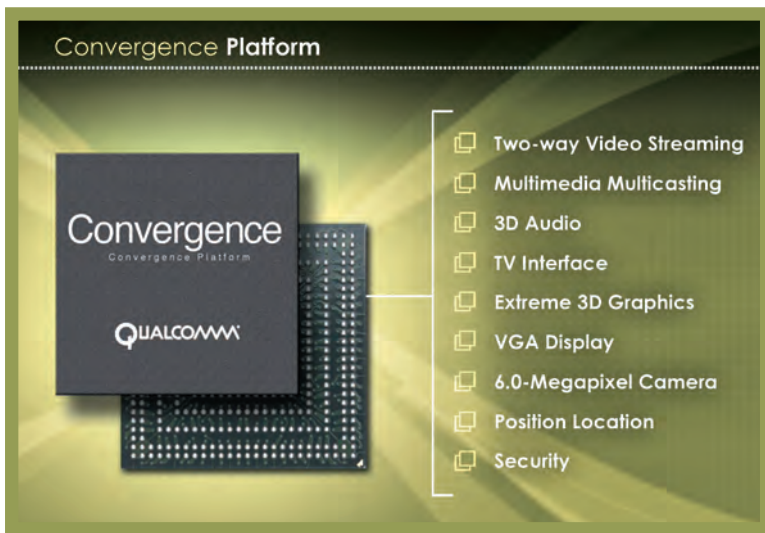
Wireless now has the speed and power to converge seamlessly with other consumer and business electronics



- VIDEO CONFERENCING
- SOPHISTICATED 3D GAMING AND HIGH-RESOLUTION GRAPHICS
- CD-QUALITY PROFESSIONAL SOUND
- DVD-QUALITY VIDEO RECORDING AND PLAYBACK
- POWERFUL BUSINESS APPLICATIONS
- HIGH-RESOLUTION DIGITAL PHOTOS

# Convergence Platform:

Wireless now has the speed and power to converge seamlessly with other consumer and business electronics



THE QUALCOMM  
 CONVERGENCE PLATFORM  
 MAKES IT POSSIBLE  
 TO INCORPORATE THE FASTEST,  
 MOST IN-DEMAND CONSUMER-  
 ELECTRONIC FEATURES INTO  
 NEW WIRELESS DEVICES.

With dual processors passing the 1 GHz benchmark on a single chipset, the Convergence Platform is a breakthrough that not only promises major expansion for traditional wireless companies, but also opens the door for the entire wireless industry to create a new generation of hardware, software and services.

Powered by the Convergence Platform chipsets, wireless devices — from business tools to games, from top music picks to video that's created on the go — now have the processing power to deliver the data-intensive multimedia consumers use every day. Products enabled by the Convergence Platform chipsets combine the power of personal electronics with the convenience of wireless to deliver portable business and infotainment devices that are always right at hand. New categories of wireless devices including entertainment, business, communication and portable file storage are a reality.

Now it's possible to deliver practically any personal electronics device to the wireless handset, with no loss of quality and functionality. Life without wires has truly arrived.



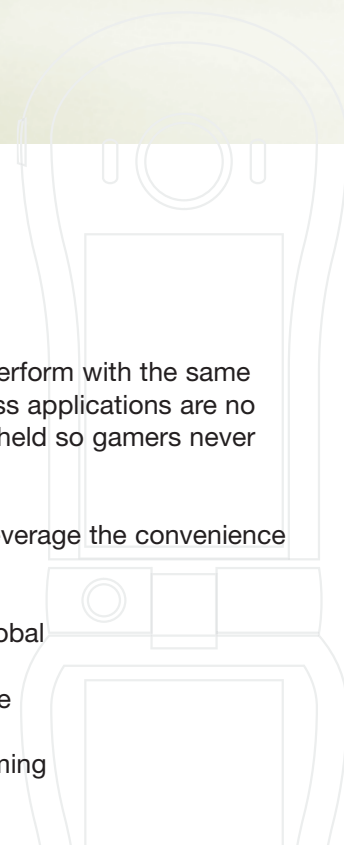
# For Manufacturers:

## Dual-processor chipsets open new markets for integrated devices

The Convergence Platform opens a new era of wireless devices that perform with the same functionality and ubiquity as their wired counterparts. Powerful business applications are no longer limited to networked PCs. Games can go from console to handheld so gamers never need to miss a play.

Wireless devices enabled by the Convergence Platform chipsets will leverage the convenience of consumer electronics to support:

- Point-to-point video telephony for on-the-go conferencing
- Interactive gaming that brings wireless gamers together on a global playing field
- Downloadable feature-length movies for extended viewing of the latest releases
- Multimedia consumers use every day — including music, streaming video, photos and more



### WIRELESS STANDARDS SUPPORTED BY THE CONVERGENCE PLATFORM



Air interface(s)	MSM7200™	MSM7500™	MSM7600™
CDMA2000® 1X		■	■
CDMA2000 1xEV-DO Rev 0 & Rev A		■	■
WCDMA (UMTS)/HSDPA	■		■
GSM/GPRS		■	
GSM/GPRS/EDGE	■		■

With the Convergence Platform, camera phones can rival the resolution of all but a few high-end digital still cameras and be able to store and manipulate images in the handset, then transmit them with cable-modem speed.

Key to the appeal of Convergence Platform-enabled devices is their ability to seamlessly connect to all the indispensable electronics people use every day. Integrated Bluetooth, USB, MDDI and a standard TV-interface can drive computers, printers, video projectors, televisions and other external devices.

Power and speed come with no sacrifice in efficiency and size. Like all other QUALCOMM platforms, the dual-processor Convergence Platform chipsets are still true single-chip solutions. QUALCOMM's integrated chipset solutions cut bill-of-material costs and power consumption, enabling manufacturers to build attractive and sleek form factors that mirror the incredible performance of the Convergence Platform chipset inside.

The Convergence Platform builds on QUALCOMM's years of systems expertise and field experience with CDMA technology. QUALCOMM works with its partners to develop products that meet the exact needs of the growing wireless market, providing its customers with complete, verifiable solutions, including fully segmented product families, systems software, testing and support.



# Convergence Platform:

The QUALCOMM Convergence Platform comprises a series of chipsets to suit a wide range of manufacturer requirements

## STREAM VIDEO



Uncompromising video quality never seen before in a wireless device:

- Qtv™ video playback at up to 30 fps VGA for crisp, on-demand streaming of the most popular worldwide multimedia formats, including MPEG-4, H.263, H.264, and support for Microsoft® Windows Media® and RealNetworks®
- Qcamcorder™ high-resolution video captured at 30 fps VGA allows high-quality mini movies
- Qvideophone™ for smooth, high-resolution video telephony at 30 fps QCIF

## LISTEN TO MUSIC



Outstanding 3D surround-sound audio performance:

- Qtunes™ digital audio supports MP3, AAC/aacPlus™, Enhanced aacPlus, Windows Media and RealNetworks audio formats to deliver exceptional CD-quality music for music playback or ringtone downloads
- QConcert™ surround sound audio delivers a robust, dynamic audio experience for music, ringtones and audio
- Compact Media Extensions™ (CMX™) software to simultaneously project voice, music, text, graphics and animation for personalized, customized content

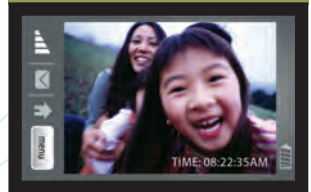
## PLAY 3D GAMES



Blazing fast processors for lifelike, super-smooth 3D graphics:

- Up to 4 million triangles per second and 7 million depth-tested, textured 3D pixels per second fill rates for game-console quality graphics
- Enables realistic game characters and smooth scaling backgrounds
- Q3Dimension™ delivers OpenGL® ES-compliant 3D graphics
- QAudioFX™ delivers positional audio for a 3D sound experience during game play

## TAKE A PICTURE



High-megapixel camera resolution for high-quality imaging:

- Qcamera™ support for digital camera image sensors up to 6.0 megapixels, delivering high-end, digital still camera-quality images
- Full image processing capabilities, including color correction, crop, resize, rotation, image blurring and sharpening, image overlay, picture frame support and visual noise reduction

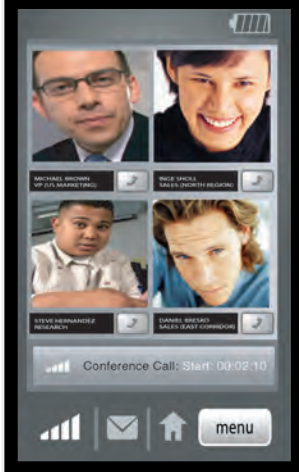
## FIND A LOCATION



Highly accurate positioning for location-based services:

- gpsOne® position-location technology is a high accuracy solution that leads the world in deployments and available consumer applications
- Combining gpsOne with Q3Dimension high-resolution maps and graphics delivers indispensable business and consumer services
- High-availability, all-terrain solution

## CONNECT



Seamless connection with indispensable electronics:

- Integrated MDDI and standard TV interfaces can drive computers, printers, CD and video projectors and other external devices
- Integrated USB and integrated Bluetooth® for instant bug-free wireless connection to peripherals ensures that the handset is an integral part of a consumer's digital lifestyle

## DISPLAY



Improving the world's most popular form factor:

- Video Graphics Array (VGA) screen interface delivers sophisticated video and gaming graphics on smaller form factors
- QUALCOMM's high-speed serial interconnection technology, Mobile Digital Display Interface (MDDI), increases reliability in clamshell phones

## COLLABORATE



DRM and operating system friendly:

- Supports major third-party operating systems
- Integrated SecureMSM™ v3.0: includes support for Open Mobile Alliance™ (OMA) Digital Rights Management (DRM) secure boot, secure storage, secure software and device-identifier integrity (IMEI and ESN)
- Dual-processor architecture provides additional security layer

Convergence

QUALCOMM

# For Operators:

## New revenue streams and increased network usage

QUALCOMM'S CONVERGENCE PLATFORM OFFERS TWO EXCITING GROWTH OPPORTUNITIES FOR OPERATORS.

First, the platform broadens the number of devices that will require a network. This opens up completely new revenue streams that have never been viable before. For example, a video-game company may wish to add streaming handheld game play to its system, requiring constant network connection.

The second opportunity is in the new data-rich services that the chipsets enable. Lightning-fast, they drive the demand for incremental airtime and additional fixed billable costs. Business users will want to transfer large files such as spreadsheets and presentations. Images can be sent to home networks for saving, and e-mail featuring video and pictures will become an everyday part of wireless life.

QUALCOMM's commitment to providing chipset solutions for wireless standards throughout the world, and our support for legacy technology, means that Convergence Platform chipsets are compatible with 2G and 3G standards. Chipsets in the Convergence Platform support all major air interfaces, including:

- CDMA2000 1X
- CDMA2000 1xEV-DO Rev 0 and Rev A
- IS-95 A/B
- WCDMA (UMTS)/HSDPA
- GSM/GPRS/EDGE



## THE LAUNCHPAD SUITE

The Launchpad Suite of applications technologies offers wireless operators and manufacturers a cost-effective, scalable and timely solution for providing advanced wireless data services. This seamlessly integrated solution enables advanced next-generation applications and services that incorporate multimedia, position-location, connectivity, customized user interface and storage capabilities. Launchpad allows manufacturers to select from a menu of enabling technologies to create customizable devices for each market segment. Getting all the enabling technologies from one supplier ensures compatibility and makes it cheaper and easier to incorporate the features customers are demanding, at a price they are willing to pay.

Launchpad features drive airtime usage and allow operators to offer handsets from different manufacturers that run common feature sets, increasing efficiency and reliability. Launchpad features are available for each QUALCOMM chipset, closely matching the specific functionality and cost-target objectives agreed upon in joint product planning with manufacturers and wireless service operators worldwide.

THE CONVERGENCE PLATFORM OPENS A NEW ERA OF WIRELESS DEVICES THAT PERFORM WITH THE SAME FUNCTIONALITY AND UBIQUITY AS THEIR WIRED COUNTERPARTS.



## THE BREW SOLUTION

The Enhanced Multimedia Platform of chipsets also supports QUALCOMM's BREW® system, which enables the development and monetization of advanced applications and content, allowing operators and OEMs to differentiate their products and services and increase revenues. QUALCOMM's chipsets are also compatible with the Java® runtime environment; J2ME™ can be built entirely on the chipset as an extension to the BREW solution.



# Convergence Platform

## ABOUT QUALCOMM

QUALCOMM CDMA Technologies is shaping and creating new ways to communicate. Working with manufacturers and operator partners worldwide, we develop systems that provide the foundation for tomorrow's wireless services while delivering what the market needs today. Our industry-leading CDMA engineers create detailed reference designs to accelerate testing and deployment for our partners.

Our chipsets and systems bring advanced features and functionality to legacy and next-generation networks and devices. With QUALCOMM CDMA Technologies, manufacturers and wireless operators can deliver the products and services the world wants now and be first to market with future developments.

Go Online

CHIPSET COMPARISON ONLINE TOOL

Please visit [www.cdmatech.com/convergenceplatform](http://www.cdmatech.com/convergenceplatform) to view the chipset comparison tool that details specific chipset features.

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