

MSM6500™ Chipset Solution

Mainstream wireless multimedia expands globally with industry's first single-chipset solution

The QUALCOMM® Multimedia Platform has been specifically designed to drive the rapid development and adoption of high-speed wireless data applications. It offers a system and software solution that enables video, audio, gaming and location-based products and services for today's handsets.

The industry's first-ever single-chip multimedia solution enables sleek, must-have devices that drive consumer desire through smart design, yet make no sacrifices when it comes to power and functionality. The Multimedia Platform contains chipset solutions optimized for 3G networks throughout the world — including solutions for global roaming across standards.

The Multimedia Platform is the industry's best solution for accelerating mainstream adoption of wireless multimedia in 3G. Manufacturers and operators can now deliver compelling wireless multimedia with up to 1.3 megapixel camera resolution for album-quality snapshots, easy-to-use portable MP3 tunes and more — solutions designed to increase revenue, drive airtime usage and capitalize on 3G investments.



THE QUALCOMM MULTIMEDIA PLATFORM HAS BEEN SPECIFICALLY DESIGNED TO DRIVE THE RAPID DEVELOPMENT AND ADOPTION OF HIGH-SPEED WIRELESS DATA APPLICATIONS.



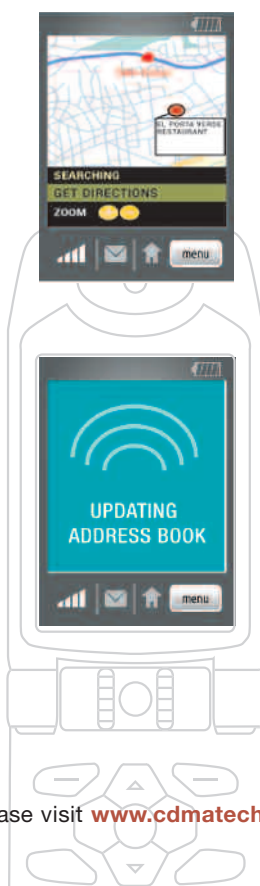
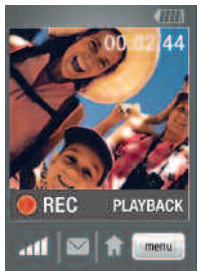
PERFORMANCE

Maximize design and development potential

- Air interfaces supported:
 - CDMA2000® 1X (Release 0 and Revision A)
 - CDMA2000 1xEV-DO (Rel. 0)
 - GSM release 99 phase 2 compliant
 - GPRS class B multislot class 10
 - GPS
- WorldMode™-capable for global roaming solution
- High-performance ARM926EJ-S™ microprocessor core
- Two QDSP4000™ high-performance digital signal processors (DSP)
- QVM™ Java® environment platform with multitasking virtual machine (MVM) and ARM's Jazelle™ Java acceleration
- Enhanced memory support for SRAM, PSRAM, LP-SDRAM, page-mode NAND flash, page- and burst-mode NOR flash
- Advanced 409-pin 0.5 mm pitch CSP packaging technology (14 mm x 14 mm)
- Open BREWapi™ software for developing handset UI and BREW® applications

MSM6500™ Chipset Solution

The Mobile Station Modem™ (MSM™) MSM6500™ solution for CDMA2000 1xEV-DO networks is a single-chip solution that will take wireless multimedia mainstream. Depend on the MSM6500 chipset to develop sleek, sophisticated 3G devices that boast incredibly high-quality multimedia features and can be produced at attractive price points to drive mass-market appeal.



GRAPHICS

True 3D graphics for advanced wireless gaming and rich GUIs

- Advanced 2D/3D graphics support with up to 50,000 3D triangles per second, and 400,000 3D textured pixels per second fill rate
- Q3Dimension™ rendering engine with OpenGL® ES- and JSR 184-compliant 3D graphics
- Supported by leading third-party game titles
- Up to 176 pixels x 220 pixels resolution

VIDEO

Wireless video solutions for fast-action infotainment

Qtv™ Decoder

- High-performance video player powers broadcast video, streaming video- and audio-on-demand plus video messaging at 15 fps QCIF
- Video Codecs: MPEG-4, H.263, H.264, Windows Media® and RealNetworks®
- Audio Codecs: QCELP®, EVRC, AMR-NB, AAC, aacPlus™, Windows Media and RealNetworks

Qcamcorder™ Encoder

- A real-time wireless video recording solution that captures movies at 15 fps QCIF
- 3GPP/2 standards compliant
- Video Codecs: MPEG-4 and H.263
- Audio Codecs: QCELP, EVRC and AMR-NB

POSITION LOCATION

Highly accurate positioning for location-based services (LBS)

- Next-generation gpsOne® Assisted-GPS solutions provide enhanced GPS engines for greater sensitivity and faster start times
- Enhanced filtering software optimizes GPS accuracy and availability for tracking and satellite navigation applications
- Full integration with JAVA and BREW-based development environments delivers support for commercially deployed location services
- Seamless operation in MS-Assisted, MS-Assisted Hybrid, MS-Based and Standalone GPS modes provides optimal performance both on and off-network
- Support for both User Plane and Control Plane protocols including IS-801 Control Plane and Trusted, V1 and V2 User Plane Assisted-GPS protocols
- Simultaneous operation capabilities with CDMA2000 1X

CONNECTIVITY

Connection with indispensable consumer electronics

- Integrated Bluetooth® baseband processor for wireless connectivity to peripheral
- Universal serial bus (USB) functionality
- MMC/SDIO removable storage support



IMAGING

Integrated digital-still camera interface

- Qcamera™ software with 15 fps QCIF viewfinder resolution
- Support for up to 1.3 megapixel camera sensors
- JPEG encoder
- Full image processing capabilities, including color correction, crop, resize, rotation, image blurring and sharpening, image overlay, picture frame support and visual noise reduction

AUDIO

Outstanding audio performance with support of industry-wide codecs

- Support for stereo output up to 48 KHz
- PureVoice® Audio AGC (automatic gain control) for better calls, especially under noisy conditions
- Digital audio support for MP3, AAC, aacPlus, Windows Media Audio and RealNetworks Audio
- CMX™ multimedia software for customized ringtones, screensavers and greeting cards:
 - MIDI-based voice (up to 72 polyphony)
 - Playback support for compact MIDI, General MIDI, SMAF™ (audio only), SP-MIDI, XMF/DLS and MFi
 - Scaleable Vector Graphics (SVG) Tiny
- QConcert™ surround-sound engine (optional)
- QUALCOMM Audio Post Processing Functionality
- Fourth-Generation Vocoder™ (4GV™) voice codec to provide network operators with the flexibility to prioritize voice quality and network capacity



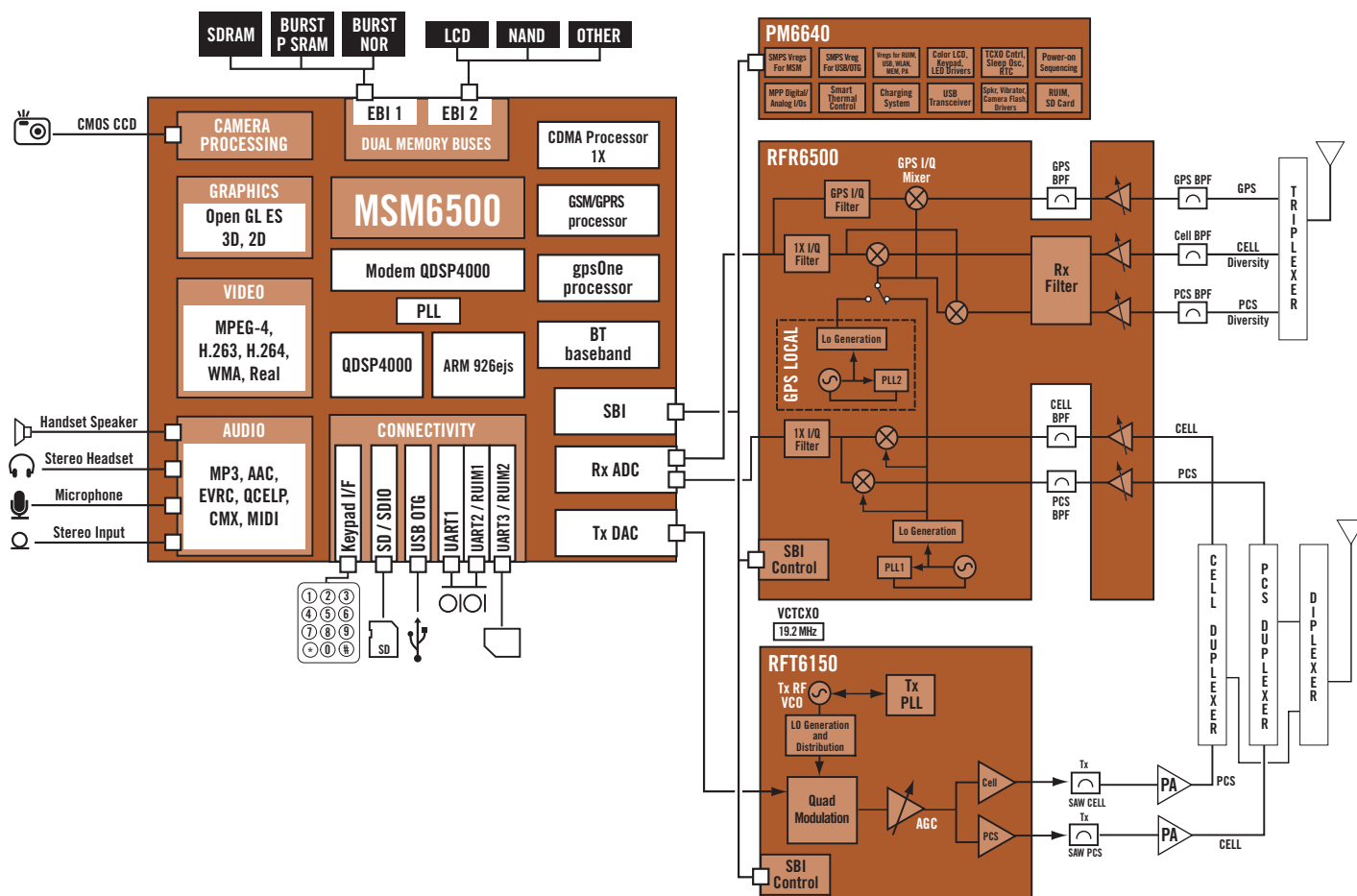
OPTIMIZED RF AND PMIC SOLUTIONS

QUALCOMM's radioOne® zero-IF radio frequency and powerOne™ power management solutions are optimized for our MSM chipsets for high-efficiency, price-competitive wireless devices. Expect a higher return on investment with our integrated solution — fewer discrete parts means lower development costs, lower BOM costs and ultimately lower handset costs. With our innovative RF CMOS processing technology on select chipsets and lead-free packaging solutions, handset manufacturers can be confident that wireless devices based on our complete solutions will be power efficient, dependable and cost competitive.

MSM6500 | AVAILABLE RF & PM CHIPSET COMBINATIONS

RF Chipset Configurations		RFL6000™ RFR6000™ RFT6100™	RFR6125™ RFT6120™	RFR6175™ RFT6170™	WORLD MODE RFL6000™ RFR6000™ RTR6300™	WORLD MODE RFR6500™ RTR6350™	RFR6185™ RFT6150™	RFR6500™ RFT6150™	RFR6525™ RFT6150™
Power Management IC		PM6630™ PM6640™ PM6650™	PM6630™ PM6640™ PM6650™	PM6630™ PM6640™ PM6650™	PM6640™ PM6650™	PM6640™ PM6650™	PM6630™ PM6640™ PM6650™	PM6630™ PM6640™ PM6650™	PM6630™ PM6640™ PM6650™
CDMA2000	450 MHz			■	■				
	CELL 850 MHz	■	■		■	■	■	■	■
	JCDMA 800 MHz	■	■			■	■	■	■
	KPCS 1700 MHz	■					■	■	
	PCS 1900 MHz	■			■	■	■	■	
	IMT 2100 MHz	■							■
GSM	850 / 900 / 1800 / 1900 MHz				■	■			
GPS	SH=Shared SI=Simultaneous	SH	SH	SH	SH	SI	SI	SI	SI
Receive Diversity						■		■	■

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NOTE: Alternative GPS antenna configurations are available.


Go Online

CHIPSET COMPARISON ONLINE TOOL

Please visit www.cdmatech.com/multimediaplatform to view the chipset comparison tool that details specific chipset features.

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