MSM6275™ Chipset Solution

Maximize market share with a power-efficient, single-chipset solution for high-intensity wireless multimedia

The QUALCOMM® Enhanced Multimedia Platform of chipsets takes the true multimedia handset from concept to reality. These chipsets make a leap in processing power to deliver the quality of video, graphics and audio that will amaze users today and define the multimedia experience for years to come. This enormous performance gain is backed by power efficiency and chip design that make the most sophisticated wireless multimedia both possible and profitable.

By deploying a single-chip design, this platform enables sleek, sophisticated media devices with large, high-resolution screens that deliver rich multimedia features such as 4.0 megapixel camera capability, video-on-demand, 3D gaming and video telephony. Picture quality is so crisp, games are so realistic and video streams are so fast that users are compelled to seek out more and more exciting content, driving demand for airtime and additional services.

The QUALCOMM Enhanced Multimedia Platform is the industry's best solution for extending the capabilities of true wireless multimedia in 3G. It has a chipset solution for all major air interfaces and the power, speed and efficiency to run high-end multimedia that will revolutionize what people can do on a handset.

THE QUALCOMM ENHANCED MULTIMEDIA PLATFORM OF CHIPSETS TAKES THE TRUE MULTIMEDIA HANDSET FROM CONCEPT TO REALITY.

PERFORMANCE

Integrated architecture ensures designs that minimize development time and expense and accelerate return on investment

- Air interfaces supported:
  - WCDMA (UMTS) R99
  - High-Speed Downlink Packet Access (HSDPA), up to 1.8 Mbps (Category 11/12)
  - GSM/GPRS Class B
  - EGPRS Multislot Class 10
  - GPS
- High-performance 225 MHz ARM926EJ-S™ microprocessor core with memory management unit (MMU)

- Two QDSP4000™ high-performance digital signal processors (DSP)
- QVM™ Java® environment platform with multitasking virtual machine (MVM) and ARM's Jazelle™ Java acceleration speeds execution of multiple, concurrent games and applets
- Enhanced memory support for NAND and SDRAM
- Advanced 409-pin 0.5 mm pitch CSP package (14 mm x 14 mm)
- Integrated secure boot, secure software and secure storage
- Open BREWapi™ software for developing handset UI and BREW® applications

QUALCOMM®
CDMA Technologies

MSM6275™ Chipset Solution

The Mobile Station Modem™ (MSM™) MSM6275™ solution for WCDMA (UMTS)/HSDPA and GSM/GPRS/EDGE (EGPRS) networks powers the blazing-fast speeds required to run the high-impact, multimedia applications that maximize profitability and drive revenue. Deliver sophisticated infotainment devices designed for demanding consumers with the MSM6275 chipset.

GRAPHICS

True 3D graphics for advanced wireless gaming and rich GUIs

- Advanced 2D/3D graphics support with up to 225,000 3D triangles per second, and 7 million 3D textured pixels per second fill rate
- Q3Dimension™ rendering engine with OpenGL® ES-compliant 3D graphics
- Dedicated hardware support for 3D rendering
- Supported by leading third-party game titles
- Up to Quarter Video Graphics Array (QVGA) resolution

VIDEO

Television-like clarity and camcorder-like recording

Qtv™ Decoder

- High-performance video player powers broadcast video, streaming video- and audio-on-demand plus video messaging at 30 fps QVGA
- Video Codecs: MPEG-4, H.263, H.264, Windows Media® and RealNetworks®
- Audio Codecs: AMR-NB, AAC, aacPlus™ and Enhanced aacPlus, Windows Media and RealNetworks

Qvideophone™ Video Conferencing Application

- Two-way mobile videoconferencing solution that delivers 15 fps quality
- 3GPP/2 standards compliant
- Video Codecs: MPEG-4 and H.263; Audio Codecs: AMR-NB

Qcamcorder™ Encoder

- A real-time wireless video recording solution that captures movies at 30 fps VGA
- 3GPP/2 standards compliant
- Video Codecs: MPEG-4 H.263 and H.264; Audio Codecs: AMR-NB, AAC

POSITION LOCATION

Highly accurate positioning for location-based services (LBS)

- Next-generation gpsOne® Assisted-GPS solution, with an enhanced GPS engine 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 to support commercially deployed location services
- Support for MS-Assisted and MS-Based modes, and Standalone GPS mode which enables off-network support
- Support for UMTS Control Plane, GSM Control Plane and OMA SUPL 1.0 User Plane Assisted-GPS protocols

CONNECTIVITY

Connection with indispensable consumer electronics

- Supports QUALCOMM's high-speed serial interconnection technology, Mobile Digital Display Interface (MDDI), for increased reliability in clamshell phones
- Integrated Bluetooth® baseband processor for wireless connectivity to peripherals
- Universal serial bus (USB) on-the-go (OTG) functionality
- SecureMSM™ security suite v2.0: includes support for Open Mobile Alliance™ (OMA) DRM v2.0, SIM-lock and IMEI integrity

IMAGING

Integrated digital-still camera interface

- Qcamera™ software with 30 fps QVGA viewfinder resolution
- Support for up to 4.0 megapixel camera sensors with a flexible, integrated interface to CCD and CMOS sensors
- Hardware-based Image Signal Processor and 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
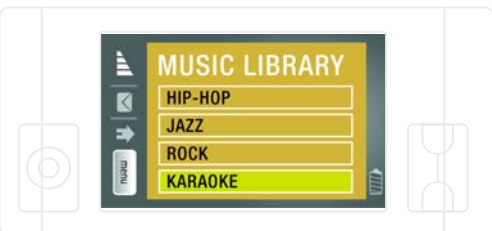
AUDIO

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 under noisy conditions
- Digital audio support for MP3, AAC, aacPlus, Enhanced 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 and QAudioFX™ enhanced gaming audio for positional sound
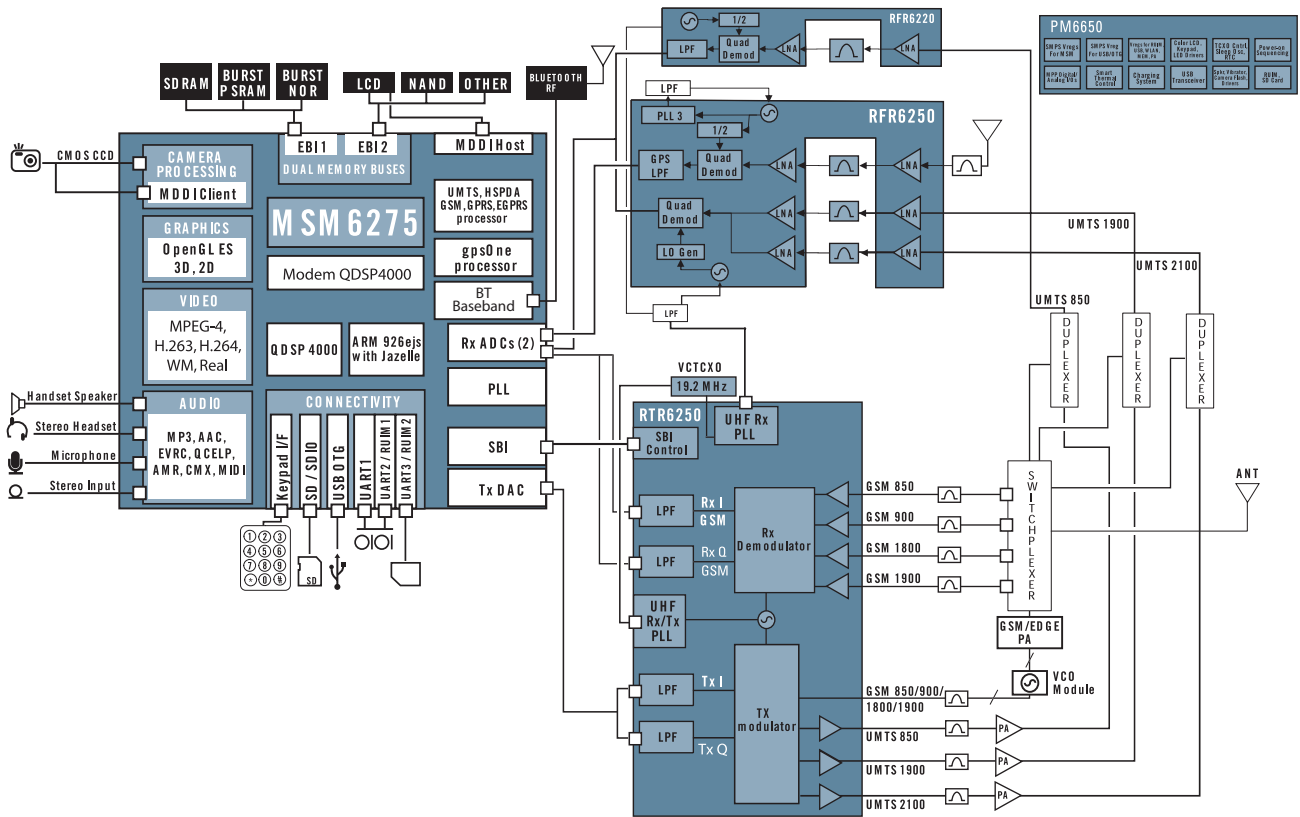- QUALCOMM Audio Post Processing Functionality

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.

MSM6275 | AVAILABLE RF & PM CHIPSET COMBINATIONS

RF Chipset Configurations		RFL6202™ RFR6202™ RTR6250™ RGR6200™	RFR6250™ RFR6220™ RTR6250™	
Power Management IC		PM6650™	PM6650™	
GSM/GPRS	850 / 900 / 1800 / 1900 MHz	■		
EDGE	850 / 900 / 1800 / 1900 MHz	■	■	
UMTS	2100 MHz	■	■	
	1900 + 850 MHz	■	■	
	2100 + 1900 + 800 MHz		■	
GPS		■	■	

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

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Information shown in this document is only exemplary of QUALCOMM products. QUALCOMM reserves the right to make changes, at any time and without notice, to its products that may cause its products to differ from the information shown in this document. NOTE: Alternative GPS antenna configurations are available.

Go Online   CHIPSET COMPARISON ONLINE TOOL

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