

QSC6240™ Single-Chip Solution

3G UMTS wireless with enhanced features at entry-level price points

The QSC6240 solution delivers support for WCDMA (UMTS) and GSM/GPRS/EDGE networks in a single chip to bring 3G within reach for a much broader base of wireless users worldwide. Enabling in-demand data and multimedia capabilities at entry-level price points, the QSC6240 solution is the industry's first single-chip solution for WCDMA—enabling device manufacturers to meet the need for affordable yet attractive and feature-rich handsets that introduce new users to the richness of the 3G experience.

As part of the QUALCOMM Single-Chip (QSC) family, the QSC6240 solution integrates four functions that typically require separate ICs—baseband modem, RF transceiver, power management, and multimedia processor—into a single chip. This unsurpassed level of integration offers device manufacturers the benefits of lower bill-of-material (BOM) costs, significant board-area savings, and simplified design for shorter time-to-market. Manufacturers who use QSC solutions can offer devices with smaller, sleeker form-factors that offer a wide range of in-demand features at lower price points—all with significant power savings.

The QSC6240 single-chip solution is a reinforcement of the company's commitment to bringing sophisticated wireless connectivity to new markets.



3G DATA AND RICH MULTIMEDIA INCLUDING MULTI-MEGAPIXEL CAMERAS, MUSIC, RINGTONES AND MORE WITHIN REACH FOR NEW AND DEVELOPING MARKETS

PERFORMANCE

Maximize design and development potential

- Air interfaces supported:
 - WCDMA (UMTS) R99
 - GSM Release 4
 - GPRS/EGPRS Multislot Class 12, Release 4
 - DTM Multislot Class 11
 - GPS
- High-performance 184 MHz ARM926EJ-S™ microprocessor core with memory management unit (MMU)
- QVM™ Java® environment platform with multitasking virtual machine (MVM) and ARM's Jazelle™ Java acceleration speeds execution of multiple, concurrent games and applets
- QDSP4000™ high-performance digital signal processors (DSP)
- Enhanced memory support for NAND, SDRAM, and NOR/SDRAM
- Advanced 0.5 mm pitch packaging technology (12mm x 12mm)
- Open BREWapi™ software to run uiOne™ and BREW applications
- Integrated SAIC for improved call quality and network capacity



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The QSC6240 Single-Chip solution for WCDMA (UMTS) networks is an entry-level, integrated solution that makes wireless multimedia accessible. Depend on the QSC6240 solution to develop 3G wireless devices with multimedia features and attractive price points to drive mass-market appeal.



GRAPHICS

Advanced 2D graphics support for wireless gaming and GUIs

- 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 streaming video- and audio-on-demand plus video messaging at 15fps QCIF
- Video Codecs: MPEG-4, H.263, H.264, Windows Media® and RealNetworks®
- Audio Codecs: AMR-NB, AMR-WB/AMR-WB+, 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 15 fps QCIF
- 3GPP/2 standards compliant
- Video Codecs: MPEG-4 and H.263
- Audio Codecs: AMR-NB



CONNECTIVITY

Seamless operation in today's constantly connected world

- Universal serial bus (USB 2.0) on-the-go (OTG) functionality
- SecureMSM™ security suite v.2.0: includes support for Open Mobile Alliance™ (OMA) DRM 2.0, SIM-lock and IMEI integrity
- External Bluetooth 2.0 for wireless connectivity for peripherals
- WLAN through external SoC

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





IMAGING

Integrated digital-still camera interface

- Qcamera™ software with 30 fps QCIF viewfinder resolution
- Support for 2 megapixel camera 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, especially under noisy conditions
- Digital audio support for MP3, AAC, aacPlus and Enhanced aacPlus, Windows Media Audio and RealNetworks Audio
- CMX™ multimedia software for customized ringtones, screensavers and greeting cards:
 - MIDI-based voice (up to 128 polyphony)
 - Playback support for compact MIDI, General MIDI, SMAF™ (audio only), SP-MIDI, XMF/DLS and MFi
 - Scalable Vector Graphics (SVG) Tiny 1.2
- QConcert™ surround-sound engine
- QAudioFX™ enhanced gaming audio for positional sound
- QUALCOMM Audio Post Processing Functionality
- Enhanced Echo Cancellation for Full-Duplex Calls

OPTIMIZED RF AND PMIC SOLUTIONS

The QSC family of chips includes QUALCOMM's radioOne® zero-IF radio frequency and powerOne™ power management solutions, which are optimized for high-efficiency, price-competitive wireless devices. The complete power management functionality includes better management, voltage regulation, general housekeeping and user-interface components. This level of integration sets a new standard in enabling handset manufacturers to realize significant Printed Circuit Board (PCB) area reduction to enable lower cost and smaller handset form factors. With our innovative RF CMOS processing technology 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.

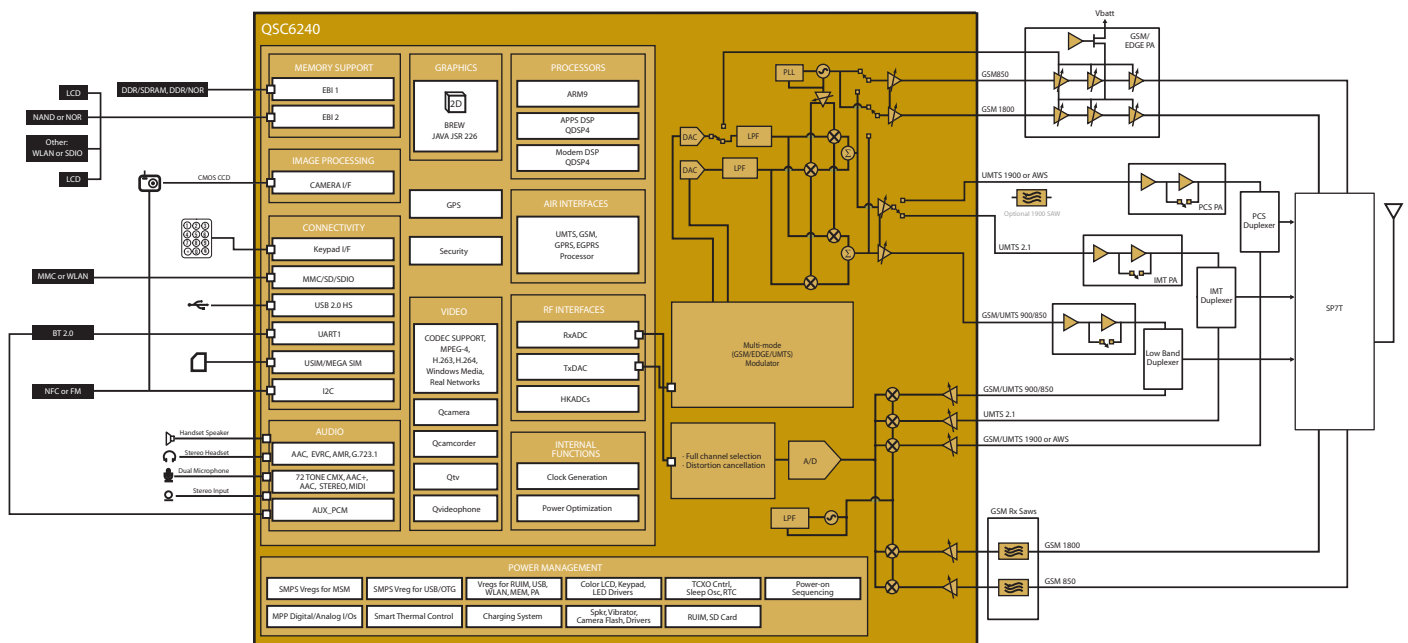
Expect a higher return on investment with our integrated solution—fewer discrete parts means lower development costs, lower BOM costs and ultimately lower handset costs.



QSC6240 | AVAILABLE RF BANDS

WCDMA (UMTS)	TRI-BAND SUPPORT	
	One band	800/850/900 MHz
	Two band	1700/1800/1900/2100 MHz
GSM/GPRS/EDGE	QUAD-BAND SUPPORT	
	All bands	850/900/1800/1900 MHz

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Go Online

CHIPSET COMPARISON **ONLINE** TOOL

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

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