



The Mobile Experience Has Never Felt Better

TouchSense® Premium Haptic Enabling Kit

High-fidelity solution for premium handsets supporting standard/high -definition haptics, pressure haptics, and multi-actuator devices.

TOUCHSENSE PREMIUM IS AT THE HEART OF THE BEST HAPTIC EXPERIENCES.

Sometimes great haptic performance isn't good enough. That's why we created TouchSense Premium. Offering the highest fidelity haptics playback along with customization services, it delivers a high-end experience for flagship phones and other premium devices.

The standard version of TouchSense Premium supports standard definition (SD) effects and pressure haptics. Add-on modules allow you to add support for high-definition (HD) haptics as well as multi-actuator devices for the ultimate combination of hardware and software innovation.

Immersion offers comprehensive customization and integration services to help you get the most out of the TouchSense software. From hardware selection guides and tuning to effect creation tools and customization services, our experts work closely with you to create haptic experiences that will amaze users and delight your shareholders.



TouchSense Premium offers the highest fidelity haptic playback along with customization services that delivers a high-end experience for premium devices.

TOUCHSENSE HIGH VALUE USE CASE

Cameras, keyboards, ringtones, and so on—there are dozens of ways to enhance your UI/UX with tactile effects. TouchSense Premium includes multiple haptic effect banks that have been targeted by our experts for the most common hardware configurations. Simply select the effect bank(s) appropriate for your device from the options below or work with our UX team to customize the haptic effects for your devices.



CAMERA

- Focus
- Zoom
- Shutter
- Straight Shot
- Video Recorder
- Timed Shutter



KEYBOARD

- Lowercase key
- Uppercase key
- Shift key
- Spacebar key
- Delete key
- Delete repeat
- Long press



SYSTEM & UI

- Virtual Keys
- Soft Keys
- Recent Button
- Lock Screen
- Number Picker
- Home Screen



DIALER

- Key finger down
- Key finger up
- Call connect
- Call disconnect



NOTIFICATIONS

- Alerts
- Silent Notification
- Ringtone Effects



WEATHER

- Rain
- Thunderstorm
- Windy



TIMER

- Timer end
- Timer count



COMPASS

- Pointing north

STANDARD OPTIONS

- **TouchSense Premium® Haptic Enabling Kit:** Supports one ERM or LRA actuator for SD haptics.
- **Pressure Haptics Support:** Provides tactile-enhanced pressure interactions in pressure sensitive mobile touch interfaces.

ADD-ONS MODULES

- **High-Definition Support:** Enable haptics for devices with SRA or piezo actuators for HD haptics.
- **Multi-Actuator Support:** Enable haptics for devices with multiple ERM or LRA actuators.

COMPONENTS

- **TouchSense Premium software.** System-level haptic solution with control algorithms tuned to your specific hardware configuration renders haptic effects with the highest fidelity and consistency.
- **Advanced high-value use cases (HVUCs).** User-validated use cases with 100+ sample built-in haptic effect banks for the common actuator types in the market. TouchSense Premium lets you integrate haptics into features sitting at the deeper levels of the handset software stack to enable unique experiences such as haptics-enabled ringtones and notifications.
- **Haptic Studio.** A powerful suite of tools for designing, editing, and evaluating an unlimited range of creative expressions.
- **UX customization services.** Our experts can help select the best use cases and then customize tactile effects to create a tailored mobile experience like none other.
- **FAE services.** We'll work right alongside you at your site to help with HW/SW integration, testing and verification of your haptics implementation.
- **ME/EE design services.** We can help you every step of the way, from actuator selection to performance characterization and hardware certification and tuning.

“The TouchSense experience from Immersion provides our users with the opportunity to have an integrated and realistic complete touch-sight-sound experience in their personal device.”

– Li Xu, VP of Gionee Group

BENEFITS

- **Highest quality haptics:** High-fidelity, system-level solution for premium handsets supporting SD/HD effects, multiple actuators and pressure haptics.
- **Easy-to-use tools:** Flexible creation and integration tools to implement SD, HD and pressure haptics easily and efficiently.
- **Cross-SKU consistency:** Delivers consistent haptics experiences across handset models and hardware configurations.
- **Cloud-based license management:** Streamlines license management to facilitate evaluation, deployment, and updates.
- **Compatibility with TouchSense Lite:** Easily upgrade from TouchSense Lite to Premium with minimal app-level code revisions.

SPECIFICATIONS

- **OS compatibility:** Android 4.4 and above
- **Architecture:** ARM and x86 architecture
- **Actuator support:** LRA and ERM

TouchSense® Premium is available as a software license. Contact us at touch@immersion.com to learn more about integrating our world-class haptic technology into your mobile experience.

immersion.com | +1 408.467.1900 | 50 Rio Robles, San Jose, California 95134 | touch@immersion.com