

### MoveaTV™: Unlocking Interactive TV Applications with Gesture Control

#### **GENERAL DESCRIPTION**

Our MoveaTV<sup>™</sup> platform enables Pay TV ecosystem partners to easily create a complete motion-enabled entertainment experience for consumers. For the first time, service providers, game and application developers, remote control and set-top box (STB) manufacturers, Digital TV (DTV) OEMs and system integrators, can all leverage a unifying platform and easily incorporate motion control into their products using InvenSense's SmartMotion™ technologies. Why is this important for the ecosystem? Recent studies show that Pay TV subscribers using motion-enabled remotes with point-andclick navigation, combined with gesture recognition, purchased more Video-On-Demand (VOD) and more games, leading to a 27% increase in revenue per user compared to traditional remotes. MoveaTV is the first complete solution for the Interactive TV ecosystem which supports the delivery and monetization of motion services for all ecosystem partners.

#### **BENEFITS**

#### TV OEMS AND SERVICE PROVIDERS

- Increase ARPU with Compelling Motion-Driven Games and New Revenue Generating Services
- Improved Offerings Increase Subscriber Retention and Attract New Customers

#### **APPLICATION DEVELOPERS**

- Satisfy Growing Consumer Demand for Motion-Enabled Games Through a New Channel: Direct to Consumer via the TV
- Grow the Market for Health and Fitness Games
  Without Requiring End-User Purchase of Expensive
  Game Consoles

#### **END USERS**

- Vastly Improves Entertainment Experience with Motion-Controlled Widgets, Apps, and DTV/STB User Interfaces
- Immersive Gaming Experience
- Easy-to-Use Mechanisms for Parental Control of TV Content, As Well as Personalized Access to Favorites and Preferences

#### **ADVANCED INTERACTION FEATURES**

- Natural, Motion-Enabled Point-and-Click Navigation
- Complete Motion-Based Navigation
- High Accuracy, Low Latency Cursor Movement
- Flexible, Modular Architecture for Phased Deployments
- Database of Predefined and Tested Gestures for STB/DTV Control
- Smartphone and Tablet Apps

#### **ADVANCED MOTION FEATURES**

- Acceleration, Magnetic Field and Angular Velocity
- Absolute/ Relative Pointing
- Tremor Cancellation
- Driftless 3D Orientation
- Advanced Gesture Recognition
- Custom User Sign-On Gestures
- Gesture Database Creation and Management
- Dynamic Rotations: Yaw, Pitch, Roll
- User Intent Anticipation
- Magnetometer Perturbation Correction
- Power Management

#### **ADDITIONAL FEATURES**

- All Standard 8051, Cortex M0/3/4 Microcontrollers Supported
- Embedded and Hosted Solutions Available
- Optimized for InvenSense Sensors
- Wireless Protocol Agnostic (RF4CE, Bluetooth 4+)
- Other Sensor Configurations Available: 6- and 9-Axis Solutions

# SPECIFICATIONS SUPPORTED OPERATING SYSTEMS

- Embedded Linux
- Windows XP, 7, 8
- Android

#### SUPPORTED DEVICES

• 6-, and 9-Axis Remote Controls and Mobile Devices

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# MOVEATV SOLUTIONS FOR THE ENTIRE ECOSYSTEM

- AirMotionLib Firmware: Embeddable firmware for remote control with in-air, point-and-click navigation and gesture control
- SmartMotion Server (SMS): InvenSense's motion processing engine for STB and DTV, enabling in-air pointing, advanced gesture recognition, user authentication, dynamic rotations and 3D orientation
- SmartMotion Developer Kit: Service level application programming interface allowing programmers to easily integrate motion sensing features into their application

#### **MOVEATV OFFERING**

InvenSense has collaborated with industry leading partners to deliver complete sensor-agnostic off-the-shelf reference designs, making it easier for remote and set-top-box OEMs, digital TV OEMS, service providers and application developers to integrate InvenSense's SmartMotion technology into their products.



### **OUR REFERENCE DESIGNS INCLUDE:**













MOVEATV COMPONENTS			
	FIRMWARE	SMARTMOTION SERVER	SMARTMOTION DEVKIT
Service Provider			•
STB MFG, DTV OEM	•	•	•
Remote MFG	•		
Middleware Provider		•	•
Chip/Sensor MFG		•	
Game/App Developer		•	•