Smart TVs come to life with MotionEngine™ Smart TV. Motion control turns the TV into a multi-functional entertainment hub, with precise cursor control, compelling motion gaming, and advanced gesture recognition. An array of unique and essential Freespace® features mean MotionEngine™ Smart TV is the most intuitive and powerful motion control software available for Smart TVs, set top boxes, streaming media players, Blu-ray players and more.

MOTIONENGINE SMART TV BENEFITS

**Advanced Control That Works**

Patented Freespace® features ensure a true pick up and play experience.

**TV That’s More Than TV**

By bringing tablet-style interaction to the TV, a new world of web browsing, casual gaming and app interactions has arrived.

**Market Proven**

With ten years of development and millions of units shipped by three of the top five global TV OEMs.

KEY FEATURES

- Gesture Recognition Engine
- Virtual Controls
- Orientation Compensation
- Automatic Real-Time Calibration
- Intelligent Motion Stabilization
- Smallest ‘Dead Zone’
- Lowest Latency
- Relative Pointing
MotionEngine™ Smart TV

FREESPACE® PERFORMANCE
MotionEngine™ Smart TV’s unique and essential features ensure unparalleled performance. Features include:

- **High Performance Cursor** – Freespace® quality pointing is provided.

- **Orientation Compensation** – essential and patented feature which ensures ‘up’ is always ‘up’, allowing for relaxing and intuitive system control.

- **Automatic Real-Time Calibration** – Eliminates Gyro drift with no user calibration requirement.

- **Intelligent Motion Stabilization** – Stabilizes motion caused by hand tremor and in-air button clicks.

- **Smallest ‘Dead Zone’** – Highest precision cursor control vs. competitors makes it easier to select small targets.

- **Lowest Latency** – systems optimized for responsive feel.

- **Relative Pointing** – allows for small, easy motions to control the whole screen with no line of sight requirement for the remote control.

UNIQUE MOTIONENGINE™ SMART TV FEATURES

- **Gesture Recognition Engine** – high-accuracy capture of over 50 pre-programmed character gestures and unlimited user defined gestures.

- **Virtual Controls** – sub-degree accuracy on tilts, twists and rolls for fun casual gaming applications and UI control.

- **Full Motion Output** – provides full motion and angular position data for complete motion functionality.

MOTIONENGINE LITE VS. SMART TV
Primary applications for MotionEngine™ Smart TV include:

- Smart TV Remote Controls
- PC Air-Mouse Devices
- Wireless Presenters

MotionEngine™ Smart TV and MotionEngine™ Lite both serve this market, with different features and benefits:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Lite</th>
<th>Smart TV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Motion Gaming Control</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>Virtual Controls with Motion</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>9-Axis Fusion Supported</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>8-Bit MCU Compatible</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Pointing Performance</td>
<td>High</td>
<td>Best</td>
</tr>
</tbody>
</table>

SIMPLIFIED BLOCK DIAGRAM – SMART TV

REMOTE CONTROL

3-Axis Accelerometer
2 or 3-Axis Gyroscope
3-Axis Magnetometer

RF/MCU

HOST

Host receives raw data.

MotionEngine™ Smart TV calibrates, fuses, and processes the data on the host

FOR MORE INFORMATION