

## DATA SHEET

# Flash Lite™ 2 & Flash® Player SDK 7

## Delivering Exceptional Experiences Across 45 Million Devices

The Flash platform provides a rich experience across all devices with digital screens. Flash Lite and Flash Player SDK technologies are licensed to the world's largest handset manufacturers, consumer electronics companies and mobile operators, and integrated into numerous products, such as phones, televisions, cameras, digital set-top boxes, educational toys, media players, and more. With Flash, consumers experience engaging content, a complete browsing experience, and customized user interfaces.

Flash Lite and Flash Player SDK have seen explosive adoption worldwide. Licensees include iRiver®, KDDI, Kodak®, Nokia®, NTT DoCoMo™, Samsung®, Sony®, Sony Ericsson, Toshiba®, and more.

### Flash Delivers:

#### Enhanced Content and Browsing

Flash Lite and Flash Player SDK enable powerful digital experiences including enhanced content and browsing. By leveraging the Flash Platform ecosystem, which includes the Flash authoring tool, the rendering engine, and an established community of more than two million designers and developers, OEMs can now offer a rich content experience for applications, browsing, wallpaper, screensavers, animated ring tones and more, on nearly any device with a screen.

#### Customized User Interfaces

The Flash Platform enables the creation of customizable user interfaces, themes, and skins, while ensuring consistent experiences across a range of devices. By decoupling UI from hardware development, Flash Lite lowers development costs, provides tight integration into the device, and enables OEMs to meet stringent operator branding requirements.

Customers requiring enhanced content and browsing, as well as customized user interfaces, will benefit from Flash Lite. Customers seeking full web browsing compatibility will benefit from Flash Player SDK.



Nokia 6680



Kodak Easy Share-One



iRiver U10



Samsung SCH-S380

## Rich Consumer Experiences Drive Usage

“Macromedia Flash sets the standard for mobile rich interactive experiences.”

### Geehong Yoon

Executive Vice President of Design  
Samsung Electronics

**Increased Data Usage:** Offer rich services that keep users coming back for more. As reported by the Yankee Group, NTT DoCoMo saw a 26% boost in ARPU within the first year of launching Flash-enabled phones.\*

\* Yankee Group

**Broadband Experience Via a Narrowband Connection:** Improve customer experience and increase the amount of content viewed by users. Flash files are compact, scale to any screen resolution, and download quickly.

**Customer Satisfaction:** Differentiate your device with a more approachable, consumer-oriented, rich-client Flash interface. The higher the customer satisfaction, the more units sold.

## Proven Technology

Flash is currently installed in 98% of consumer desktop computers. That type of ubiquity is now spreading across a multitude of devices and platforms.

**Standard Graphics Format:** Leverage the standard for vector graphics on the desktop. The Flash engine powers over 45 million mobile and consumer electronics devices.

**Powerful Brands Use Flash:** Many of the world’s largest OEMs and operators are shipping Flash-enabled devices today, including iRiver, KDDI, Kodak, Nokia, NTT DoCoMo, Samsung, Sony Ericsson, and more.

**Scalable Engine:** Flash has a proven history of content compatibility and scalability. The unique runtime architecture allows content to operate in varied environments.

## Unified Experience Across Devices

Create engaging content and applications for multiple device platforms, such as mobile phones, PDAs, game consoles, IP televisions, set-top boxes, and more.

**Small Footprint:** Flash Lite and Flash Player SDK use less memory than most embedded browsers or browser plug-in engines, while the compact data files reduce runtime overhead.

**Easy to Port:** Accelerate porting of the Flash Player to multiple devices. Source code, documentation, and resources to quickly deliver integrated solutions are included.

**Design Easily, Deploy Anywhere:** Deliver a consistent experience on multiple devices, CPUs, operating systems, and browsers.

## Developer Community

“The Macromedia Flash Lite 2 team delivers the best mobile platform for developers and users alike.”

### Dave Yang

Flash Developer  
Quantumwave Interactive Inc.

**Global Community:** Leverage the Flash community, comprised of two million media and consumer brands, content and application developers, and aggregators worldwide.

**Mature Development Tools:** The Flash authoring tool, including a mobile emulator, reduces programming and development costs and speeds time to market.

**Better Design:** Provides greater expressiveness; design teams have the flexibility to create, test, and refine rich interfaces more quickly.

## Flash Lite 2 and Flash Player SDK 7 Key Features and Functionality

- Built on Flash Player 7
- ActionScript 2 support
- Full web browsing capabilities<sup>1</sup>
- Improved performance
- Tighter device integration
- Persistent data management
- Powerful embedded media support
- XML data handling
- Graceful failure for devices with low memory
- And more!

<sup>1</sup> Available in Flash Player SDK only

System Requirements	Flash Lite 2	Flash Player 7	Flash Player SDK 7
Player size	550-600K (Symbian™)	900K (Win)	1MB (Win/WinCE)
CPU characteristics	32-bit data bus, MIPS TBD <sup>1</sup>		32-bit data bus, > 200MIPS <sup>1</sup>
Minimum RAM requirements	128K		4.5MB
Recommended RAM	1.5MB		32MB
Content size-to-heap ratio	1:15 <sup>2</sup>		1:30
<b>Platform/Browser Support</b>			
Reference platforms	Symbian Windows® XP		Windows XP (Standalone, ActiveX®) Windows CE (ActiveX) Linux (Standalone, Netscape® plugin) Pocket PC (ActiveX)
Browsers supported		IE, Netscape®, Firefox®, Mozilla™, AOL®, Opera®	IE 6.x, FireFox 1.0, Windows CE IE, Pocket IE
Languages	All major languages		English, Japanese

### Footnotes:

<sup>1</sup> Device dependent (depending on screen size)

<sup>2</sup> Estimated memory consumption only: For example, for playback of a 100K SWF file, the recommended memory configuration is 1.5MB RAM