Feature Comparison
Adobe Flash® Lite™, Flash® Player and Flash® SDK at a Glance

	Flash Lite 1.1	Flash Lite 2.1	Flash SDK 7	Flash Lite 3.0	Flash Player 8	Flash Player 9
Sound Support						
MIDI	Device dependent	Device dependent		Device dependent		
PCM and ADPCM	✔	✔	✔	✔	✔	✔
MP3	✔	✔	✔	✔	✔	✔
8 Channel					✔	✔
32 Channel					✔	✔
Image & Video Support						
PNG	During authoring	During authoring or device dependent [1]	During authoring	During authoring or device dependent [1]	✔	✔
JPEG	✔	✔	✔	✔	✔ (progressive JPEG)	✔ (progressive JPEG)
GIF	During authoring	During authoring or device dependent	During authoring	During authoring or device dependent	✔	✔
Animated GIF	During authoring	During authoring	During authoring	During authoring	During authoring	During authoring
MPEG-4 and other video formats		Device dependent	During authoring	Device dependent	During authoring	During authoring
Flash Video (FLV)			✔ (On2 codec, in addition to Sorensen)	✔ (On2 codec, in addition to Sorensen)	✔ (On2 codec, in addition to Sorensen)	✔ (On2 codec, in addition to Sorensen)

8 bit alpha channel video					✓	✓
Import/Encode video			✓		✓	✓
Multimedia Support						
Dynamic loading of multimedia files		✓ (2)	JPEG / MP3 only	✓ (2)	JPEG / MP3 / GIF / PNG / Progressive JPEG	JPEG / MP3 / GIF / PNG / Progressive JPEG
Text Support						
Character set	Latin-1 and Shift-JIS	UTF-8	UTF-8	UTF-8	UTF-8	UTF-8
Complex languages (Thai, Arabic, Hebrew, etc.)		✓		✓		
Dynamic text	✓	✓	✓	✓	✓	✓
Device-specific vector fonts		✓	✓	✓	✓	✓
Improved small text readability		✓	✓	✓	✓	✓
Text measurement		✓	✓	✓	✓	✓
Text wrap		✓	✓	✓	✓	✓
Inline Text Input		✓		✓	✓	
Predictive Text Support		✓		✓		
Rich text styles			✓		✓	✓
FlashType					✓	✓
Improved text layout					✓ (full justified, kerning, character spacing)	✓ (full justified, kerning, character spacing)

Emoticons	✓	✓		✓		
Emoticons in predefined color				✓		
Interactivity						
Keyboard events	Device dependent	Device dependent	✓	Device dependent	✓	✓
Key-based navigation	✓	✓	✓	✓	✓	✓
Mouse/Stylus events	Device dependent	Device dependent	✓	Device dependent	✓	✓
Mouse wheel support			✓		✓	✓
Programming Features						
Flash version supported	Flash 4 or earlier	Flash 7 or earlier	Flash 7 or earlier	Flash 8 or earlier	Flash 8 or earlier	Flash 9 or earlier
ActionScript Version	FlashScript (Flash 4 or earlier)	ActionScript 1.0, 2.0 (Flash 7 or earlier)	ActionScript 1.0,2.0 (Flash 7 or earlier)	ActionScript 1.0, 2.0 (Flash 8 or earlier)	ActionScript 1.0,2.0 (Flash 8 or earlier)	ActionScript 1.0, 2.0, 3.0 (Flash 9 or earlier)
Dynamic loading of SWF data	✓	✓	✓	✓	✓	✓
XML parsing		✓	✓	✓	✓	✓
String/Array/XML-to-native-objects conversion		✓	✓	✓	✓	✓
ActionScript strict mode		✓	✓	✓	✓	✓
Set/Clear interval		✓	✓	✓	✓	✓
Shape-drawing API		✓	✓	✓	✓	✓
Ability to store data		✓	✓	✓	✓	✓
Bitmap effects & filters					✓	✓

Feature						
Bitmap caching					✓	✓
BitmapData API					✓	✓
Blend modes					✓	✓
9-Slice scaling					✓	✓
Stroke enhancements (endcaps & joins)					✓	✓
Linear & radial gradiant enhancements					✓	✓
External API for browser scripting				✓	✓	✓
File Upload/Download					✓	✓
IME API enhancements					✓	✓
Other Features						
Generic browser interface	✓	✓	ActiveX or Netscape	✓	ActiveX or Netscape	ActiveX or Netscape
Dynamic memory handling	✓	✓	✓	✓	✓	✓
Device-specific capabilities	✓	✓		✓		
Meta data support				✓		
Background Transparency		✓ (set in host application)		✓ (set in host application)	✓	✓
Forward lock				✓ (set in host application)		
Printing			✓		✓	✓

Feature						
Object model (for components)		✓	✓	✓	✓	✓
Improved event model		✓	✓	✓	✓	✓
XMLSockets		✓		✓	✓	
Flash Media Server connectivity (RTMP Streaming)			✓	✓	✓	✓
Flash Media Server connectivity (Remote Shared Object)			✓		✓	✓
Scriptable masks			✓	✓	✓	✓
SWF file compression		✓	✓	✓	✓	✓
Accessibility			✓		✓	✓
Dynamic discovery of device features		✓	✓	✓	✓	✓
ActionScript exception handling		✓	✓	✓	✓	✓
Improved ActionScript performance				+15-20% over FL 2.1	✓	✓
Improved rendering performance				+20-30% over FL 2.1	✓	✓
Web services and SOAP API		✓	✓	✓	✓	✓
New preloader API		✓	✓	✓	✓	✓
Progressive download			✓	✓	✓	✓
Basic version check and update mechanism					✓	✓
Express install					✓	✓
Enhanced local file security				✓	✓	✓

SVG-T 1.1	✓	✓				
Flash Lite Features						
Access to device-specific features (volume, backlight, vibrate, and so on)		✓		✓		
Launch native applications	✓	✓		✓		
Reduced runtime memory consumption	✓	✓		✓		
Graceful handling of out-of-memory condition.	✓	✓	✓	✓		
Interruptible/Re-entrant player	✓	✓		✓		
Runaway script limit	✓	✓	✓	✓	✓	✓
ActionScript slicing	✓	✓		✓		
System Requirements						
Player size (core player DLL)	275K	450K	1.0MB (Win/WinCE)	374K	1.4MB (Win)	~2.0 MB (Win)
CPU characteristics	32-bit data bus, 200Mhz ARM9	32-Bit data bus, 200Mhz ARM9	32-bit data bus, 300Mhz ARM9	32-Bit data bus, 200Mhz ARM9	Desktop Hardware	Desktop Hardware
Minimum RAM requirements	64K	128K	4.5MB	128K	Desktop Hardware	Desktop Hardware
Recommended RAM		2 MB	32MB	2 MB for stand alone content, more for video (varies by file size, duration)	32 MB	32 MB
Content size-to-heap ratio	1:10 [3]	1:15 [3]	1:30	1:15 [3] [4]		

Footnotes

Platform/Browser Support						
Reference platforms	Symbian	Symbian, BREW	Windows XP (Standalone, ActiveX), WinCE (activeX), Linux (Standalone, Netscape plug-in), PocketPC (ActiveX)	Symbian, Windows XP		
Browsers supported			IE, Firefox,		IE, Netscape, Firefox, Mozilla, AOL, Opera	IE, Netscape, Firefox, Mozilla, AOL, Opera

(1) Transparency supported
(2) JPEG & MP3; other formats dependent on device-specific codecs
(3) Estimated worst-case memory consumption: for example, for playback of 100k SWF file, the recommended memory configuration is 1.5 MB
(4) Memory usage when playing back video is managed by active buffering in Flash Lite 3.0