

	Platforms Supported	Key Features	Compliance			Performance Metrics			
			Standards	Certification	Typical Specifications	Performance (MHz)	Memory - ROM (KB)	Memory - RAM (KB)	Other
Audio Decoders									
AAC LC	<ul style="list-style-type: none"> Hardware – i.MX ARM11 platforms Software - eLinux and WinCE operating systems 	<ul style="list-style-type: none"> Supports MPEG-2 and MPEG-4 audio decoding Supports 2-channel low complexity (LC) profile decoding Supports sampling frequency up to 96 kHz Supports aac input files (RAW, ADIF, ADTS bit streams) Supports CBR and VBR Supports TNS and PNS tools Supports mono, stereo, joint-stereo Configurable support for dynamic range control tool Supports multi-channel files Error concealment Configurability for 16-bit, 24-bit and 32-bit output Configurability for interleaved stereo output Gstreamer plugin wrapper for Linux platforms DirectShow filter wrapper for WinCE Platforms 	<ul style="list-style-type: none"> ISO/IEC 13818-7 ISO/IEC 13818-4 ISO/IEC 14496-3 	Standard compliant	48KHz, 256Kbps, stereo	eLinux: 16.05 WinCE: 16.81	86	61	
Enhanced aacPlus	<ul style="list-style-type: none"> Hardware – i.MX ARM11 platforms Software - eLinux and WinCE operating systems 	<ul style="list-style-type: none"> Supports MPEG-2 and MPEG-4 audio decoding Supports 2-channel low complexity (LC) profile decoding Supports sampling frequency up to 96 kHz Supports aac input files (RAW, ADIF, ADTS bit streams) Supports CBR and VBR Supports TNS and PNS tools Mono, stereo, joint-stereo Configurable support for dynamic range control tool Supports decoding of HE-AAC version 1.2 (Spectral Band Replication) Supports decoding of HE-AAC version 2.0 (Parametric Stereo, HIGH QUALITY mode) Supports low power (LP) mode Configurability for 16-bit, 24-bit and 32-bit output Supports down sampling Coding Technologies (Dolby Labs) platform certification Error concealment Configurability for interleaved stereo output Gstreamer plugin wrapper for Linux platforms DirectShow filter wrapper for WinCE platforms 	<ul style="list-style-type: none"> ISO/IEC 13818-7 ISO/IEC 13818-4 ISO/IEC 14496-3 ISO/IEC 14496-4 ISO/IEC 14496-3 	Code Technology Certification aacPlus Decoder Certification	44.1KHz, 48Kbps, stereo	eLinux: 52.72 WinCE: 58.69	169	140	
MP3	<ul style="list-style-type: none"> Hardware – i.MX ARM11 platforms Software - eLinux and WinCE operating systems 	<ul style="list-style-type: none"> Supports MPEG-1 Layer 1 audio decoding Supports MPEG-1 Layer 2 audio decoding Supports MPEG-1 Layer 3 audio decoding Supports MPEG-2 Layer 3 audio decoding Supports ABR, VBR and CBR Supports mono, stereo, and joint-stereo Configurable 16 or 24 bit PCM output Error concealment Bad frames trigger soft mute Configurability for interleaved stereo output Gstreamer plugin wrapper for Linux platforms DirectShow filter wrapper for WinCE platforms 	<ul style="list-style-type: none"> ISO/IEC 11172-3 ISO/IEC 11172-4 ISO/IEC 13818-3 	Standard compliant	48KHz, 320Kbps, stereo	eLinux: 14.89 WinCE: 16.54	47	24	
WMA10 Standard	<ul style="list-style-type: none"> Hardware – i.MX ARM11 platforms Software - eLinux and WinCE operating systems 	<ul style="list-style-type: none"> Supports Windows Media Audio (WMA) audio decoding Compatible with up to WMA version 10 Supports raw WMA and ASF formats Supports the L1, L2 and L3 profiles Supports all WMA bit rates and sampling rates, as specified in the L1, L2 and L3 profiles Supports stereo and mono Configurability for interleaved stereo output Configurability for 16-bit, 24-bit and 32-bit output Microsoft platform certification Gstreamer plugin wrapper for Linux platforms 	<ul style="list-style-type: none"> ASF Specification from Microsoft Corporation, Revision 01.20.02, June 2004 WMASdDecoderSpec 	Microsoft CTT 1.0	44KHz, 320Kbps	eLinux: 17.73 WinCE: 21.43	644	51	
WMA10 Lossless	<ul style="list-style-type: none"> Hardware – i.MX ARM11 platforms Software - eLinux and WinCE operating systems 	<ul style="list-style-type: none"> Supports Windows Media Audio (WMA) Pro audio decoding Compatible with up to WMA version 10 Supports up to N2 profile decoding Supports multi-channel Configurability for interleaved stereo output Supports bit rates up to 940 Kbps Microsoft platform certification Gstreamer plugin wrapper for Linux platforms 	<ul style="list-style-type: none"> ASF Specification from Microsoft Corporation, Revision 01.20.02, June 2004 WMALslDecoderSpec 	Under submission for Microsoft CTT 2.0	48KHz, 4100Kbps, 6 channels	eLinux: 194 WinCE: 206	774	146	
WMA10 Pro	<ul style="list-style-type: none"> Hardware – i.MX ARM11 platforms Software – eLinux and WinCE operating systems 	<ul style="list-style-type: none"> Supports Windows Media Audio (WMA) Pro audio decoding Compatible with up to WMA version 10 Supports device prefixes MoA, MoB, M1, M2, M3 Supports multi-channels and downmix Microsoft platform certification Gstreamer plugin wrapper for Linux platforms 	<ul style="list-style-type: none"> ASF Specification from Microsoft Corporation, Revision 01.20.02, June 2004 WMAProDecoderSpec 	Microsoft CTT 2.0	44.1KHz, 128Kbps	eLinux: 39.3 WinCE: 39.7	644	156	
Audio Encoders									
MP3	<ul style="list-style-type: none"> Hardware – i.MX ARM11 platforms Software - eLinux and WinCE operating systems 	<ul style="list-style-type: none"> Supports MPEG-1 Layer 3 audio encoding Supports 32kHz, 44.1kHz and 48kHz sample rates Supports mono and stereo output 16 bits PCM input GStreamer plugin wrapper for Linux platforms DMO filter wrapper for WinCE Platforms 	<ul style="list-style-type: none"> ISO/IEC 11172-3 ISO/IEC 11172-4 ISO/IEC 13818-3 	Standard compliant	44.1KHz, 128Kbps	eLinux: 33.01 WinCE: 40.82	52.3	35.9	
WMA	<ul style="list-style-type: none"> Hardware – i.MX ARM11 platforms Software – eLinux and WinCE operating systems 	<ul style="list-style-type: none"> Supports Windows Media Audio (WMA) audio encoding Compatible with up to WMA version 8 Supports raw WMA and ASF formats output Supports the L1, L2 and L3 Profile Supports all WMA bit rates and sampling rates, as specified in the L1, L2 and L3 profiles Supports stereo and mono 16 bits PCM input Microsoft® platform certification GStreamer plugin wrapper for Linux® platforms DMO filter wrapper for Windows® CE platforms 	<ul style="list-style-type: none"> ASF Specification from Microsoft Corporation, Revision 01.20.02, June 2004 WMAEncoderSpec 	Microsoft CTT 2.0	48KHz, 128kbps	eLinux: 118 WinCE: 144	368.3	905.8	
Video Decoders									
H.264 BP	<ul style="list-style-type: none"> Hardware – i.MX ARM11 platforms Software - eLinux and WinCE operating systems 	<ul style="list-style-type: none"> Supports MPEG-4, Part 10 video decoding Supports H.264 baseline profile (BP) decoding Supports ASO and FMO Decodes baseline profile streams with level up to 5.1 encoded bit streams at NAL-unit boundary Error resilience and concealment tools present Configurable to enable hardware de-blocking accelerators Configurable output formats, supported output format: IYUV and UYVY fourcc formats User configurability for video cropping Re-entrant and Re-locatable decoder (support for multi-threaded environment) Low latency ITU conformance Gstreamer plugin wrapper for Linux platforms DirectShow filter wrapper for WinCE platforms 	<ul style="list-style-type: none"> ITU-T Rec. H.264 ISO/IEC 14496-10 AVC ITU-T JVT-J011 	Under submission for MPEG IOT	CIF, 30fps, 768kbps Max: VGA, 15fps, 600kbps	eLinux: 236 WinCE: 312	80	1500	
MPEG-2 MP	<ul style="list-style-type: none"> Hardware – i.MX ARM11 platforms Software - eLinux operating system 	<ul style="list-style-type: none"> Supports MPEG-2 video decoding Supports main profile (MP) @ main level (ML) decoding Configurable output formats, supported output format: IYUV and UYVY fourcc formats Gstreamer plugin wrapper for Linux platforms DirectShow filter wrapper for WinCE Platforms 	ISO/IEC 13818-2	Standard compliant	D1, 25fps, 4Mbps	eLinux: 336 WinCE: N/A	40	2280	
MPEG-4 SP/H.263	<ul style="list-style-type: none"> Hardware – i.MX ARM11 platforms Software - eLinux and WinCE operating systems 	<ul style="list-style-type: none"> Supports MPEG-4 video decoding Supports simple profile (SP) @ level 5 (L5) Error resilience and concealment tools present Configurable output formats, supported output format: IYUV and UYVY fourcc formats Re-entrant and re-locatable decoder (support for multi-threaded environment) Low latency ISO conformance Gstreamer plugin wrapper for Linux platforms DirectShow filter wrapper for WinCE Platforms 	<ul style="list-style-type: none"> ISO/IEC 14496-2 ISO/IEC 14496-4 ITU-T H.263 Video coding spec. 	Standard compliant	CIF, 27fps, 522kbps Max: VGA, 25fps, 2Mbps	eLinux: 78 WinCE: 125	63	372	
Deinterlace	<ul style="list-style-type: none"> Hardware – i.MX ARM11 platforms Software - eLinux and WinCE operating systems 	<ul style="list-style-type: none"> Support optimization for Arm1136 Support optimization for Cortex Support chroma format 4:2:0, 4:2:2, 4:4:4 Support multiple deinterfacing algorithms 			720x480, 30fps	eLinux: 73 WinCE: N/A			
WMV	<ul style="list-style-type: none"> Hardware – i.MX ARM11 platforms Software - eLinux and WinCE operating systems 	<ul style="list-style-type: none"> Supports Windows Media® Video (WMV) video decoding Compatible with WMV1 WMV2 Configurable output formats, supported output format: IYUV and UYVY fourcc formats GStreamer plugin wrapper for Linux® platforms DirectShow filter wrapper for Windows® CE platforms 	<ul style="list-style-type: none"> WMV Version 9.0 Windows Media Video V9 Decoding Specification, revision 87 WMT Version 9.0 Functional Specification, Recommended Media Decoding - rev 8.1. 		CIF, 30fps, 384kbps Max: VGA, 15fps, 600kbps	eLinux: 190 WinCE: 230	203	720	
WMV9MP	<ul style="list-style-type: none"> Hardware – i.MX ARM11 platforms Software - eLinux and WinCE operating systems 	<ul style="list-style-type: none"> Supports Windows Media Video (WMV) video decoding Compatible with WMV9 version 9 Supports up to main profile (MP) decoding Microsoft platform certification Configurable output formats, supported output format: IYUV and UYVY fourcc formats GStreamer plugin wrapper for Linux platforms DirectShow filter wrapper for WinCE Platforms 	<ul style="list-style-type: none"> Windows Media Video V9 Decoding Specification revision 87 WMT Version 9.0 Functional Specification, Recommended Media Decoding - rev 8.1. 	Microsoft CTT 2.0	CIF, 30fps, 384kbps Max: VGA, 15fps, 600kbps	eLinux: 190 WinCE: 245	203	720	
Video Encoders									
MPEG-4 SP/H.263	<ul style="list-style-type: none"> Hardware – i.MX ARM11 platforms Software - eLinux and WinCE operating systems 	<ul style="list-style-type: none"> Hardware-accelerated video encoder Supports MPEG-4 video encoding Supports simple profile (SP) encoding Supports H.263 profile 0 and level 70 encoding Built-in video pre-processor, camera stabilization and cropping IP block. Supports up to VGA resolution input image. Gstreamer plugin wrapper for Linux platforms DirectShow filter wrapper for WinCE platforms 	<ul style="list-style-type: none"> ISO/IEC 14496-2 ISO/IEC 14496-4 	Standard compliant	eLinux: VGA, 30fps, 1Mbps WinCE: VGA, 30fps, 1.5Mbps	eLinux: 200 WinCE: 200	ROM: N/A (hardware accelerated) RAM: N/A (hardware accelerated)	ROM: N/A (hardware accelerated) RAM: N/A (hardware accelerated)	
Image Decoders									
BMP	<ul style="list-style-type: none"> Hardware – i.MX ARM11 platforms Software - eLinux operating system 	<ul style="list-style-type: none"> Supports Bitmap (BMP) image decoding Supports BMP formats as defined in Windows SDK (version 3 onward) BMP compressed (RL4E, RL6B) and uncompressed input format Supports color depth 1, 4, 8, 16 and 24 bits per pixel Configurable output formats: RGB555, 16 bit RGB (RGB565), RGB666 and 24 bit RGB (RGB888) Supports all sizes specified in BMP specification 	<ul style="list-style-type: none"> Windows SDK (version 3 onward) – BMP Format Documentation 	1MP	eLinux: 25 WinCE: 25	11	6.5		
GIF	<ul style="list-style-type: none"> Hardware – i.MX ARM11 platforms Software - eLinux operating system 	<ul style="list-style-type: none"> Supports Graphics Interchange Format (GIF) image decoding Supports GIF files containing more than one image with 1 to 8 bits per pixel (GIF 87a and 89a) Supports LZW compression method to compress image data. Supports interlacing in the image data. Supports transparency in the images. Supports animation of images. Configurable output formats: 24 bit RGB (RGB888), 16 bit RGB565, 15 bit RGB555, 18 bit RGB666 	<ul style="list-style-type: none"> GIF 87a GIF 89a 	Standard compliant	1MP	eLinux: 30 WinCE: 30	67	301.5	
JPEG	<ul style="list-style-type: none"> Hardware – i.MX ARM11 platforms Software - eLinux and WinCE operating systems 	<ul style="list-style-type: none"> Supports Joint Photographic Experts Group (JPEG) image decoding Supports baseline and progressive modes Configurable support all the integer sampling formats allowed by the Baseline DCT coding (4:4:4, 2:2:2, 4:2:0, 4:1:1 etc) Supports color conversion from YUV to RGB-565 or RGB-888. Configurable support for interleaved UYVY format Supports resizing Supports restart markers Supports JPEG, JFIF and EXIF thumbnails 	<ul style="list-style-type: none"> ISO/IEC 10918-1 DIS 10918-1 and draft DIS 10918-2 	Standard compliant	1MP	eLinux: 30 WinCE: 36	50	20.75	
PNG	<ul style="list-style-type: none"> Hardware – i.MX ARM11 platforms Software - eLinux operating system 	<ul style="list-style-type: none"> Supports Portable Network Graphics (PNG) image decoding Supports PNG specification 1.0, zlib data format v 3.3 and deflate compressed data format v 1.3 Supports PNG files that contain true-color image data (24 bits per pixel), grayscale mode, and indexed-color images of up to 256 colors Supports alpha transparency channel as well as transparency chunk handling Supports images encoded in interlaced order (Adams7 interfacing), as well as non-interlaced orders Supports RGB888, RGB666, RGB555 and RGB666 as output Supports RGB888, RGB666, RGB555 and RGB666 as output 	<ul style="list-style-type: none"> ISO/IEC 15948 PNG Specifications 1.0 (RFC 2083) 	Standard compliant	VGA	eLinux: 45 WinCE: 45	95	75.75	
Image Encoders									
SBC	<ul style="list-style-type: none"> Hardware – i.MX ARM11 platforms Software - eLinux and WinCE operating systems 	<ul style="list-style-type: none"> Supports sub-band encoder Supports 16KHz, 32KHz, 44.1KHz, 48KHz sample rates. Supports 4, 8, 12, 16 block length Supports MONO, DUAL MONO, STEREO mode Supports psycho-acoustic model GStreamer plugin wrapper for Linux® platforms DMO filter wrapper for Windows® CE platforms 	<ul style="list-style-type: none"> A2DP specification for E 		48 KHz, Stereo mode, 4 sub-bands, 4 blocks, bitpool is 24, psycho-acoustic model enable, bit rate is 48000 bps	eLinux: 24.72 WinCE: Coming Soon	22	9	
JPEG	<ul style="list-style-type: none"> Hardware – i.MX ARM11 platforms Software - eLinux operating system 	<ul style="list-style-type: none"> Supports Joint Photographic Experts (JPEG) image decoding Supports I420 raw data format Supports non-interleaved YUV in separate buffers. Supports YUV 422 interleaved input Configurability for various quality factors [0,100]. Configurability to set restart markers into the JPEG bit-stream. Supports compressed thumbnails. Both JFIF and EXIF thumbnails are supported Configurable support for macro-block row/group of macro-block rows based encoding 	<ul style="list-style-type: none"> ISO/IEC 10918-1 DIS 10918-1 and draft DIS 10918-2 	1MP	eLinux: 105 WinCE: 105	50	33.75		