



MP3 Decoder: ARM-9E

Component name		MP3 Decoder: ARM-9E	
Category (IP/ Reusable)	IP	Component type (HW/SW/product etc)	SW, Audio Codec
HW Platform	ARM-9E	SW Platform /OS	CCS, Linux
Applications / applicable products	Multimedia applications/ products		
Market/ industries applicable	Consumer Electronics		
Product Description	<p>MPEG-1/2 audio layer-3 (MP3) is the most popular format for playback of high quality compressed audio for portable devices such as audio players and mobile phones. The MPEG1 audio standard (ISO/IEC 11172-3) provides the syntax and decoding process for compressed audio bit-streams. MPEG1 Layer 3 encoded audio streams are called .mp3 files, which is one of the most popular audio formats for Internet audio applications. MPEG1 audio works for both mono and stereo signals.</p>		
Technical specifications	<p>CPU usage:</p> <ul style="list-style-type: none">• Peak MCPS 15.52 and Average MCPS 14.27 for 48 kHz 320 kbps streams• Peak MCPS 13.16 and Average MCPS 12.19 for 44 kHz 128 kbps streams <p>Memory usage:</p> <ul style="list-style-type: none">• Program memory 28 KB, Constant tables (ROM) 13 KB• Heap (RAM) 23KB, Stack 25 KB		
Features /benefits	<ul style="list-style-type: none">• Standard - ISO/IEC 11172-3 and 13818-3 Layer 3• Sampling frequencies – 8 to 48 kHz• Bit-rates from 8 kbps to 320 kbps• Upto two channels• Supported modes<ul style="list-style-type: none">– Mono, stereo, dual channel– Joint stereo (intensity stereo and MS stereo)• Output : 16 bit LPCM• Constant and Variable Bit-rates• Supports CRC protection checking• Support free format streams• Simple and C callable API set• Optimized implementation		
Readiness	Available: ARM 9E-optimized version		