



## AAC-PLUS V2 (eHE-AAC) Decoder on ARM9E

Component name		HE-AACv2 (eAAC+) Decoder on ARM9E	
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>High-Efficiency Advanced Audio Coding (HE-AACv2) is a lossy data compression scheme for digital audio. HE-AAC v2 has proven in several independent tests to be the most efficient audio compression scheme available today. HE-AACv2 includes AAC, spectral band replication (SBR) and parametric stereo (PS) tools to enhance the compression efficiency. HE-AACv2 is standardized in ISO/IEC 14496-3:. AAC combined with SBR and PS tools offers the possibility to improve the performance of low bitrate audio and speech codecs by either increasing the audio bandwidth at a given bitrate or by improving coding efficiency at a given quality level encoded bitstream at a very low data rate.</p>		
Technical specifications	<p>CPU usage:</p> <ul style="list-style-type: none"> <li>• Peak MCPS 45 and Average MCPS 40 for 48 kHz 128 kbps streams</li> <li>• Peak MCPS 40 and Average MCPS 35 for 44 kHz 64 kbps streams</li> </ul> <p>Memory usage:</p> <ul style="list-style-type: none"> <li>• Program memory 89 KB, Constant tables (ROM)25 KB</li> <li>• Heap (RAM) 108KB, Stack 64 KB</li> </ul>		
Features /benefits	<ul style="list-style-type: none"> <li>• Standard - in ISO/IEC 14496-3:2001/Amd.1 and Amd.2</li> <li>• MPEG2,MPEG4 AAC – LC,SBR and PS</li> <li>• Sampling frequencies – 8 to 96 kHz</li> <li>• Bit-rates from 8 kbps to 576 kbps</li> <li>• Supports - TNS,PNS,MS and IS</li> <li>• Supports mono, stereo and dual channel</li> <li>• Supports Constant and Variable Bit-rates</li> <li>• Output : 16 bit LPCM</li> <li>• Supports CRC protection checking</li> <li>• Simple and C callable API set</li> <li>• Optimized implementation</li> </ul>		
Readiness	ARM 9E-optimized version in progress		