freescale
semiconductor ™

AAC Decoder
Product Data Sheet

v1.2

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Features

- Supports MPEG-2 and MPEG-4 audio decoding
- Supports up to 5.1 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
- Supports multi-channel files
- Error concealment
- ISO conformance
- Configurability for 16-bit or 24-bit output
- GStreamer plugin wrapper for Linux® platforms
- DirectShow filter wrapper for Windows® CE platforms
- OpenMAXIL layer component

Supported Platforms

- Hardware – i.MX ARM9™, ARM11™ and ARM Cortex-A8™ platforms
- Software – eLinux, Windows® Embedded CE operating systems

Performance Metrics

i.MX ARM9™ eLinux Platforms
Typical Specifications: 48KHz, 256kbps, Stereo
Performance (MHz): 20.18
Memory Footprint (KB)
- ROM: 42
- RAM: 84

i.MX ARM9™ Windows® CE Platforms
Typical Specifications: 48KHz, 256kbps, Stereo
Performance (MHz): 18.256
Memory Footprint (KB)
- ROM: 45
- RAM: 84

i.MX ARM11™ eLinux Platforms
Typical Specifications: 48KHz, 256kbps, Stereo
Performance (MHz): 12.93
Memory Footprint (KB)
- ROM: 42
- RAM: 84

i.MX ARM11™ Windows® CE Platforms
Typical Specifications: 48KHz, 256kbps, Stereo
Performance (MHz): 13.78
Memory Footprint (KB)
- ROM: 45
- RAM: 84

i.MX Cortex-A8™ eLinux Platforms
Typical Specifications: 48KHz, 256kbps, Stereo
Performance (MHz): 9.60
Memory Footprint (KB)
- ROM: 74
- RAM: 94

i.MX Cortex-A8™ Windows® CE Platforms
Typical Specifications: 48KHz, 256kbps, Stereo
Performance (MHz): 9.93
Memory Footprint (KB)
- ROM: 74
- RAM: 94

Performance measurements can deviate based on ARM core, memory and cache configuration on the board. To measure directly, enable the TIME_PROFILE in the test application provided in the release package.

For further details, contact a Freescale customer representative.