

OMX Media Component

Product Manual:

OMX Media Component MPEG-4 Decoder Library
for Linux

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1. Overview

1.1. Overview of This Document

This document is the Product Manual of OMX Media Component MPEG-4 Decoder Library for Linux. For the functional specifications of the library, see related documents [1].

1.2. Related Documents

Table 1-1 lists the related documents.

Table 1-1 List of Related Documents

No.	Document Name	Description
[1]	OMX Media Component User's Manual MPEG-4 Decoder Part	The user's manual that describes functional specifications of this library.
[2]	OMX Integration Guide for Linux	OMX Integration Guide documents describe how to integrate the OMX to the system.

2. Product Specification

2.1. Basic Specification

Table 2-1 shows the basic specification of this library.

Table 2-1 Basic Specification

Item	Description
Product Number	RTM0AC0000XVM4VD20SL32C
Product Name	OMX Media Component MPEG-4 Decoder Library for Linux
Software categories	Multimedia codec processing
Function	Provide OpenMAX IL 1.1.2 Core / Component API
Target CPU	ARMv7 Architecture
Target LSI	R-Car H2 / M2 / E2 Series
Language	C Language
Endian	Little endian
Supported OS	Linux 3.4 (For evaluation purpose only)
Tool chain	GCC 4.7.4 (cortexa15hf-vfp-neon-poky-linux-gnueabi) built by R-CarH2/M2 Yocto recipe package
Library Format	Dynamic Link Library
CPU load	T.B.D. [MHz]
Number of thread	3 threads per a Media Component instance except for the threads created in User Defined Function part.
Thread priority	Thread priority shall be determined in User Defined Functions part.
System Call	This library does not call system call functions directly. All OS-dependent processing shall be implemented in User Defined Functions part.

2.2. Memory Requirement

Table 2-2 shows the memory requirement of this library. The sizes in Table 2-2 do not include the memory consumption in User Defined Functions.

Table 2-2 Memory Requirement

Item	Description
Object Size	32 [Kbyte]
Stack Size	T.B.D. [Kbyte]
Heap Memory Size	1 [Mbyte]
Shared Memory Size	54 [Mbyte] ^{*1}

*1: The memory size is for 1920x1080 stream case. For more details, see related document [1].

2.3. Reserved Words

Table 2-3 lists reserved words of this library.

Table 2-3 Reserved Words

Reserved Words	Description
OMX	The prefix word for the names of defines, functions and Macros that is defined in OpenMAX IL Specification.
OMXR	The prefix word for the names of defines and Macros in this library.
Omxr	The prefix word for the names of functions and variables in this library.

3. List of Files

Table 3-1 shows the file list of this library.

Table 3-1 File List

Directory			File name	Description
RTM0AC0000XVM4VD20SL32C				
+	Document	en	RTM0AC0000XVM4VD20SL32E.pdf	Product Manual(This document)
			omx_users_manual_m4vd_en.pdf	User's Manual
			RTM0AC0000XVM4VD20SL32C_ReleaseNote.txt	Release Note
	-		Software.tar.gz	See Table 3-2

Table 3-2 Files included in Software.tar.gz

Directory					File name	Description
Software					-	
+	OMXR	config			omxr_config_m4vd.txt	Configuration file
		include			OMXR_Extension_m4v.h	Renesas OMX Extension header
					OMXR_Extension_m4vd.h	Renesas OMX Extension header
		lib	linux	linaro_4_7_3	libomxr_mc_m4vd.so.2.0.0	Library
					libvcp3_m4vd.so.1.0.0	Library

4. Dependent Products

Table 4-1 lists the dependent products of this library.

Table 4-1 Dependent Products

Product Number	Product Name
RTM0AC0000XVCMND20SL32C	OMX Media Component Video Decoder Common Library for Linux

5. Installation

See related document [2].

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