

OMX Media Component

Product Manual:

OMX Media Component H.264 Encoder 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 H.264 Encoder 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 H.264 Encoder 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 | RTM0AC0000XV264E20SL32C |
| Product Name | OMX Media Component H.264 Encoder 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 | 2 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 | 64 [Kbyte] |
| Stack Size | T.B.D. [Kbyte] |
| Heap Memory Size | 1 [Mbyte] T.B.D. |
| Shared Memory Size | 52 [Mbyte] ^{*1} |

*1: The memory size is for 1920x1080 Level 4.2 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 |
|-------------------------|----------|----|---|-------------------------------|
| RTM0AC0000XV264E20SL32C | | | | |
| + | Document | en | RTM0AC0000XV264E20SL32E.pdf | Product Manual(This document) |
| | | | omx_users_manual_h264e_en.pdf | User's Manual |
| | | | RTM0AC0000XV264E20SL32C_Releas eNote.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_h264e.txt | Configuration file |
| | | include | | | OMXR_Extension_h264.h | Renesas OMX Extension header |
| | | | | | OMXR_Extension_h264e.h | Renesas OMX Extension header |
| | | lib | linux | linaro_4_7_3 | libomxr_mc_h264e.so.2.0.0 | Library |
| | | | | | libvcp3_avce.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 |
|-------------------------|--|
| RTM0AC0000XVCMNE20SL32C | OMX Media Component Video Encoder Common Library for Linux |

5. Installation

See related document [2].

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