

OMX Media Component

Product Manual:

OMX Media Component VC-1 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 VC-1 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 VC-1 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 | RTM0AC0000XVVC1D20SL32C |
| Product Name | OMX Media Component VC-1 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 | 40 [Kbyte] |
| Stack Size | T.B.D. [Kbyte] |
| Heap Memory Size | 1 [Mbyte] |
| Shared Memory Size | 64 [Mbyte] ^{*1} |

*1: The memory size is for 1920x1080 Advanced Profile 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 |
|-------------------------|----------|----|---|-------------------------------|
| RTM0AC0000XVVC1D20SL32C | | | | |
| + | Document | en | RTM0AC0000XVVC1D20SL32E.pdf | Product Manual(This document) |
| | | | omx_users_manual_vc1d_en.pdf | User's Manual |
| | | | RTM0AC0000XVVC1D20SL32C_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_vc1d.txt | Configuration file |
| | | include | | | OMXR_Extension_vc1.h | Renesas OMX Extension header |
| | | | | | OMXR_Extension_vc1d.h | Renesas OMX Extension header |
| | | lib | linux | linaro_4_7_3 | libomxr_mc_vc1d.so.2.0.0 | Library |
| | | | | | libvcp3_vc1d.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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