Resource Manager (RM)

Release Notes

TEXAS INSTRUMENTS

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Contents

RM version 02.01.00.01

Overview

This document provides the release information for the latest Resource Manager (RM) which can be used by applications that want to manage device resources.

RM includes:

- Pre-compiled library for DSP (Big and Little) Endian of RM.
- Source code.
- API reference guide

Dependencies

RM is dependent on following external components delivered in PDK package:
- None

New/Updated Features and Quality

This is an **engineering release**, tested by the development team.

Release 2.1.0.1

- Sync with 2.0.0.6

- K2E and K2L support

Release 2.0.0.6

- See Table 1 for resolved IRs

Release 2.0.0.5

- Add Global resource list and Policy to support Qmss_QueueType_INTC_SET[234]_QUEUE to add all INTC(CIC) accessible queues.

- Service responses now contain the number of times the requesting instance has allocated the resource.

- Update policies and global resource lists to latest linux DTS.

- See Table 1 for resolved IRs

Release 2.0.0.4

o Added example that has Client running on DSP that communicates with a Server running in Linux user-space. Communication between ARM and DSP is over IPC MessageQ. Instructions for running the test application can be found in the RM User Guide: http://processors.wiki.ti.com/index.php/MCSDK_UG_Chapter_Developing_System_Mgmt#Running_RM_Test_Projects

o See Table 1 for resolved IRs

Release 2.0.0.3

o Added high priority accumulation and starvation counter queues to QM2.

o Extensive bug fixes and cleanup of RM source and test code

o Added ability to request a resource's reference count

o Added ability for Client Delegates to locally manage resources

o Added Server process for Linux

o Added Linux process to process test project that exchanges messages between a Client process and the latter Server process

o See list of Resolved IRs

Release 2.0.0.2

o Added Shared Server and Shared Client instance types that use shared memory to communicate internally. No transport code is needed for these instance types to communicate. Intended for use in DSP only, time-critical applications where, non-blocking APIs are required.

  o Includes example showing how to setup and use Shared Server/Client

o Added RM instance cleanup APIs

o Extensive bug fixes and cleanup of RM source

Release 2.0.0.1

o Initial release

Resolved Incident Reports (IR)

Table 1 provides information on IR resolutions incorporated into this release.

Table 1   Resolved IRs for this Release

IR Parent/ Child Number	Severity Level	IR Description

IR Parent/ Child Number	Severity Level	IR Description

Known Issues/Limitations

IR Parent/ Child Number	Severity Level	IR Description
SDOCM00099461	S2 - Major	Resource Manager exhibits memory leaks when allocating and freeing resources

Licensing

Please refer to the SDK licensing document for the details.

Delivery Package

There is no separate delivery package. RM is being delivered as part of PDK.

Installation Instructions

RM is currently bundled as part of Platform Development Kit (PDK). Refer installation instruction to the release notes provided for PDK.

Directory structure

The following is the directory structure after the RM package has been installed:

```
rm
    build
    device
    docs
    include
    lib
    package
    src
    test
    util
```
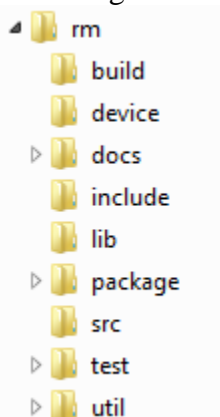
The following table explains each individual directory:

Directory Name	Description
ti/drv/rm	The top level directory contains the following:- 1. *Environment configuration batch file*

	The file "`setupenv.bat`" is used to configure the build environment for RM.
	2. *XDC Build and Package files* These files (`config.bld, package.xdc` etc) are the XDC build files which are used to create the RM package.
	3. *Exported Driver header files* Header files which are provided by RM and should be used by the application developers for customization and usage.
`ti/drv/rm/build`	The directory contains internal XDC build related files which are used to create the RM package.
`ti/drv/rm/device`	The directory contains the device specific RM global resource list and policy files.
`ti/drv/rm/docs`	The directory contains the RM documentation.
`ti/drv/rm/include`	The "include" directory has private RM header files. These files should not be used by application developers.
`ti/drv/rm/lib`	The "`lib`" folder has pre-built Big and Little Endian libraries for RM along with their *code/data size information*.
`ti/drv/rm/package`	Internal RM package files.
`ti/drv/rm/src`	Source code for the RM.
`ti/drv/rm/test`	The "`test`" directory in RM has unit test cases which are used by the development team to test RM.
`ti/drv/rm/util`	The "util" directory has BSD-licensed, open source components used by RM.

Customer Documentation List

Table 2 lists the documents that are accessible through the **/docs** folder on the product installation CD or in the delivery package.

Table 2   Product Documentation included with this Release

Document #	Document Title	File Name
1	API documentation (generated by Doxygen)	docs/rmDocs.chm