

SYSLIB

Release Notes

Applies to Product Release: 4.00.00.00-Alpha
Publication Date: September 17, 2014



Document License

This work is licensed under the Creative Commons Attribution-NoDerivs 3.0 Unported License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nd/3.0/> or send a letter to Creative Commons, 171 Second Street, Suite 300, San Francisco, California, 94105, USA.

Copyright (C) 2012 Texas Instruments Incorporated - <http://www.ti.com>

Contents

1	INTRODUCTION.....	1
1.1	Overview	1
2	RELEASE OVERVIEW	1
2.1	Hardware Device Support.....	1
2.2	Components and Tools.....	1
2.3	Licensing	2
2.4	MCSDK Patches	2
3	What's new.....	3
3.1	New Features.....	3
3.2	Bug Fixes.....	3
4	RELEASE BUILDING.....	3

SYSLIB 4.00.00.00-Alpha

1 INTRODUCTION

1.1 Overview

This document provides the release information for the SYSLIB software package. The SYSLIB package includes the following:-

- SYSLIB Release Notes
- SYSLIB User's Guide
- Source code of all SYSLIB components
- Pre-built libraries (both Big and Little Endian) of all SYSLIB components
- API reference guide
- Software Manifest

This is an engineering tested alpha release package. Release notes from previous releases are also available in the release notes archive directory

2 RELEASE OVERVIEW

2.1 Hardware Device Support

The device and platforms tested for this release include:

- TMDXEVM6638Ixe

2.2 Components and Tools

The SYSLIB package is verified/tested using the MCSDK 3.1.00.03 package. Please refer to the MCSDK Release notes for a list of all the component information. The following is the list of additional packages which were used to test the release:

1. SNOW3G 1.0.0.2
2. CUIA 1.01.00.03 Custom

3. [SA3GPP Enabler 3.0.0.0](#)

The SYSLIB supports only the RT kernel from the MCSDK release. Similarly please use the RT DEVKIT for the development of user space applications.

2.3 Licensing

Please refer to the software manifest

2.4 MCSDK Patches

Please ensure that the following environment variable is defined and saved in the UBOOT environment:-

```
setenv mem_reserve 1536M
```

This will ensure that the kernel reserved the higher order 1.5GB of memory for the DSP. Failure to do so will result in the kernel overwriting DSP memory.

Please refer to the MCSDK patches (`SYSLIB_INSTALL_PATH/ti/mcsdk_patches`) directory and manually apply the following patches:

File Name	Issue	How to patch
libhplib-no-osal_k2h.so.1.0.0	HPLIB bitmap allocator overruns and corrupts allocated memory	TFTP the shared library object onto the EVM into the <code>/usr/lib</code> directory.
libqmss_k2h.so.1.0.0	Incorrect programming of the QMSS Memory region	TFTP the shared library object onto the EVM into the <code>/usr/lib</code> directory.
ti.drv.qmss.ae66 ti.drv.qmss.ae66e	Incorrect programming of the QMSS Memory region	Copy the files and overwrite the default library files which are present in the <code>PDK_INSTALL_PATH/ti/drv/qmss/lib/k2h/c66</code>

3 What's new

3.1 New Features

1. The policy files have been modified to align with a standardized naming convention.
 - a. The RM_Server in the policy files has been updated to Rm_Server.
 - b. The DAT Server & NETFP Server configuration files for Rel10 have been updated. Please download the new policy & global resource list files provided as a part of the resource manager (`ti/runtime/resmgr/dts/k2h` directory)
2. Release 10 Deployment2 (D2) demo has been created. The demo executes on all 8 DSP cores with a single instance of the NETFP, DAT server. There is a single instance of the RAT database instantiated on the ARM.

3.2 Bug Fixes

Not applicable

4 RELEASE BUILDING

Please install the MCSDK 3.01.00.03 release on a Linux machine. Please setup the following environment variables:-

```
export ARMTOOLS_INSTALL_PATH=~/.tools/gcc-linaro-arm-linux-gnueabihf-4.7-2013.03-20130313_linux

export
ARAGO_INSTALL_PATH=~/.ti/mcsdk_3_01_00_03_devkit_rt/sysroots/cortexa15hf-vfp-neon-3.8-oe-linux-gnueabi

export CGT_INSTALL_PATH=~/.ti/cgt_7.4.4

export XDC_INSTALL_PATH=~/.ti/xdctools_3_25_06_96

export PDK_INSTALL_PATH=~/.ti/pdk_keystone2_3_01_00_03/packages

export SYSLIB_INSTALL_PATH=~/.ti/syslib4.x/packages

export SNOW3G_INSTALL_PATH=~/.ti/snow3g_1_0_0_2

export UIA_INSTALL_PATH=~/.ti/uia_1_03_00_02/packages

export INSTALL_JAMMER_INSTALL_PATH=~/.tools/installjammer-1.2.15

export CUIA_INSTALL_PATH=~/.tools/cuia_1_01_00_03Custom
```

```
export SYSLIB_DEVICE=k2h
```

The environment variables are illustrative and should be modified by the customer as per their install paths.

Once configured please setup the build environment by executing the following script:-
SYSLIB_INSTALL_PATH/scripts/setupenv.sh. This will setup the build environment and will also sanity check to make sure that all the required environment variables are configured.

Please execute the release script (SYSLIB_INSTALL_PATH/scripts/release.sh) as follows:-

```
source ./release.sh 1 0 1
```

The script takes 3 arguments:-

1. Argument1: Build the SYSLIB ARM libraries.
2. Argument2: Build the SYSLIB DSP libraries. [Should always be set to 0]
3. Argument3: Build the SYSLIB LTE Demo

To rebuild the DSP libraries; please execute the following path from the SYSLIB_INSTALL_PATH

```
xdc clean -PR .  
xdc -PR .
```

For information on how to build the DSP and ARM unit tests and for execution instructions please refer to the SYSLIB Unit Test documentation.