

# DSP/BIOS™ LINK

DM6446/DM6467/DM6467T Media Processor

LNK 184 USR

Version 1.65

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## A. PLATFORM GUIDE

### 1 Purpose

DSP/BIOS™ LINK is foundation software for the inter-processor communication across the GPP-DSP boundary. It provides a generic API that abstracts the characteristics of the physical link connecting GPP and DSP from the applications. It eliminates the need for customers to develop such link from scratch and allows them to focus more on application development.

This document provides the users necessary information about usage of DSP/BIOS™ LINK on the DM6446/DM6467 platform.

This document corresponds to the product release Version 1.65.

### 2 Text Conventions

○	This bullet indicates important information. Please read such text carefully.
□	This bullet indicates additional information.
[ arg1   arg2 ]	In context of the commands, contents enclosed in square brackets are the optional arguments to the command. Different values of these arguments are separated by " ".

### 3 Terms & Abbreviations

CCS	Code Composer Studio
IPC	Inter Processor Communication
GPP	General Purpose Processor e.g. ARM
DSP	Digital Signal Processor e.g. TMS320C5510
CGTools	Code Gen Tools, e.g. Compiler, Linker, Archiver

### 4 References

1.	User Guide	DSP/BIOS™ LINK user guide
2.	InstallGuide_<OS>_Davinci.doc	Installation guide for relevant OS if present.
3.	Porting Guide	Porting guide for relevant OS if present.

### 5 Configuring CCS

#### 5.1 DM6446 / DM6467/DM6467T EVM

To use CCS for debugging the DSP side application, you will need to configure CCS to use both ARM and DSP with the DM6446 EVM.

- q CCS can attach to only ARM in the beginning. It can attach to the DSP only after the ARM-side application releases it from reset through a call to `PROC_Start ()`.

## 6 Platform specific information

### 6.1 Boot mode support

DSP/BIOS™ LINK supports both ARM – boot mode as well as DSP – boot mode on DM6446 i.e. DM6446 platform as well as DM6467 i.e. DM6467 platform.

### 6.2 Readwrite sample

The addresses to be passed as parameters for readwrite samples are platform specific.

Read write sample can be used for addresses in DDR, GEM L1D RAM and L2 RAM on DM6446 i.e. DM6446 platform as well as DM6467.

For e.g. Sample addresses for DM6446/DM6467 platform

**For DM6446**

```
$ ./readwritegpp readwrite.out 2414804992 1024 10000
$ ./readwritegpp readwrite.out 293601280 1024 10000
$ ./readwritegpp readwrite.out 300957696 1024 10000
```

**For DM6467**

```
$ ./readwritegpp readwrite.out 2414804992 1024 10000
$ ./readwritegpp readwrite.out 293699584 1024 10000
```