



Release Notes

SiRFprima Video Codec SDK (for WinCE)

July 2008

Document Number: CSM-00418

Revision B

INTRODUCTION

This document serves as the release notes for the SiRFprima™ Video Codec Software Development Kit (SDK) on the WinCE platform. Please refer to *CSM-00416: SiRFprima Video Codec SDK API User Guide* for details on how to use the video codec.

FEATURES

The video codec SDK supports the MPEG-2 ES stream. The H.264 decoder supports both raw NAL and AnnexB formatted bit streams. While decoding the raw NAL unit format, the decoder accepts one NAL unit each time.

The SiRFprima Video Codec SDK includes libraries which provide video codec APIs for application development. The APIs support the following features:

- Video Encoding
 - MPEG-4 SP@L3
 - H.264 BP@L3
- Video Decoding
 - H.264 BP@L3, FMO currently not supported.
 - MPEG-4 ASP@L5, GMC not supported.
 - MPEG-2 MP@ML
 - WMV V9 SP@ML

PACKAGE LIST

This package includes the H.264 decoder, MPEG-2 decoder, MPEG-4 decoder, WMV decoder, H.264 encoder, MPEG-4 encoder and JPEG codecs.

```
SiRFprimaVideoCodecSDK\  
  Common\                ... common directory for all codecs  
  Include\               ... common header files for all codecs  
  Documents\             ... SDK document directory  
  H264dec\               ... H.264 decoder SDK  
  H264enc\               ... H.264 encoder SDK  
  ...
```

Each codec contains a directory structured in the following manner.

```
H264dec\  
  Build\                 ... build environment  
  Document\              ... codec corresponding documents  
  Include\               ... header files  
  Release\               ... library and binary files  
  Test\                  ... test and sample code
```

NOTES AND RESTRICTIONS

In this package only Windows CE 6.0 is supported. Before testing any samples, make sure that the video codec is enabled in the SiRFprima WinCE6.0 BSP/CSP.

The video codec SDK provides several macros to check the return code: CODEC_STAT_OK checks if the return status is correct or not, CODEC_STAT_RECOV_ERROR means there are recoverable errors such as a bit stream error but the decoder can continue decoding. CODEC_STAT_FAT_ERROR means there is a fatal error such as out of memory or hardware fault and the decoder can not continue functioning.

The video codec SDK manages the decoded frame buffer by itself. Note that the frame buffer for output is read-only because the frame data will be used for decoding. For MPEG-4 and MPEG-2, the decoder might have a one frame delay as input while WMV and H.264 does not have any frame delay.

Each codec binary file is built as a standard Windows CE DLL and supports both EVC and Visual Studio 2005. It is recommended to put all the codec DLLs in *windows* directory if they are not packaged together with the OS image.

Please refer to the corresponding *readme.txt* in each codec directory for corresponding notes specific to each codec.

The profiles, levels and restrictions for each codec supported can be found in *CSM-00416: SiRFprima Video Codec SDK API User Guide*.

WORLDWIDE SALES OFFICES

North America

Corporate HQ
(1) (408) 467-0410
✉ Sales@sirf.com

Europe

United Kingdom
(44) (1344) 668390
✉ SalesUK@sirf.com

Germany
(49) (81) 529932-90
✉ SalesGermany@sirf.com

Belgium
(32) (496) 152969
✉ SalesBelgium@sirf.com

Asia Pacific

China
(86) (21) 5854-7153
✉ SalesChina@sirf.com

Taiwan
(886) (2) 8174-8966
✉ SalesTaiwan@sirf.com

Japan
(81) (44) 829-2186
✉ SalesJapan@sirf.com

India
(91) (80) 41966000
✉ SalesIndia@sirf.com

South Korea
(82) (2) 3424-3150
✉ SalesKorea@sirf.com

© 2008 SiRF Technology, Inc.

This document contains proprietary information to SiRF Technology, Inc. and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without expressed written consent of SiRF Technology, Inc.

All other products or company names mentioned herein are used for identification purposes only, and may be trademarks of registered trademarks of their respective owners.

SiRF Technology, Inc. reserves the right to make changes in its products, specifications and other information at any time without notice. SiRF assumes no liability or responsibility for any claims or damages arising out of the use of this document, or from the use of integrated circuits based on this document, including, but not limited to claims or damages based on infringement of patents, copyrights or other intellectual property rights. SiRF makes no warranties, either express or implied with respect to the information and specifications contained in this document. Performance characteristics listed in this data sheet do not constitute a warranty or guarantee of product performance. All terms and conditions of sale are governed by the SiRF Terms and Conditions of Sale, a copy of which you may obtain from your authorized SiRF sales representative.