

### Description

The [XR5R921](#) is a High Definition Composite Video Interface (HDCVI) compliant, four channel, single-lane PCIe DVR add-in card. It features two S7100 video processors, and can capture four high definition HDCVI streams, demodulate and compress them using the Exar H.264 high profile Advanced Video CODEC (AVC) encoder to produce the surveillance industry's best high-definition video quality.

The XR5R921 uses the XR5P900 4-channel HDCVI decoder to receive four streams of the new high-definition (HD) video standard, HDCVI. This HD video supports both 1080p and 720p format and the card is capable of full 1080p capture and compression at 30 frames per second on all four channels. High performance equalization and automatic gain correction inside the HDCVI decoder enables reception of undistorted, uncompressed, full-color HD video at distances over 500-m. HDCVI also provides for transmission of audio and data in the same signal path – no additional cabling for audio and control of PTZ cameras. For backwards compatibility with existing cameras, the XR5R921 also support standard definition PAL and NTSC video.

The XR5R921 features Exar's standard Application Programming Interface (API), ensuring plug-and-play compatibility with existing Exar installations and rapid porting of third-party applications. The XR5R921 is available as production-ready OEM units for volume production, or as Evaluation Kits (EVKs). The kit contain a complete software load for the card, a sample host application, and source code for all included software (the intelligent encoder and CODEC plug-ins are supplied as object code). Exar EVKs are intended for evaluation purposes and produce watermarked streams.

Exar Reference Design Kits (RDks) can be used as the basis for highly differentiated derivative designs and include a distribution license for the supplied software and hardware design files.

The card also has a debug connector for UART and JTAG interfaces, which facilitates hardware and software debugging.

### FEATURES

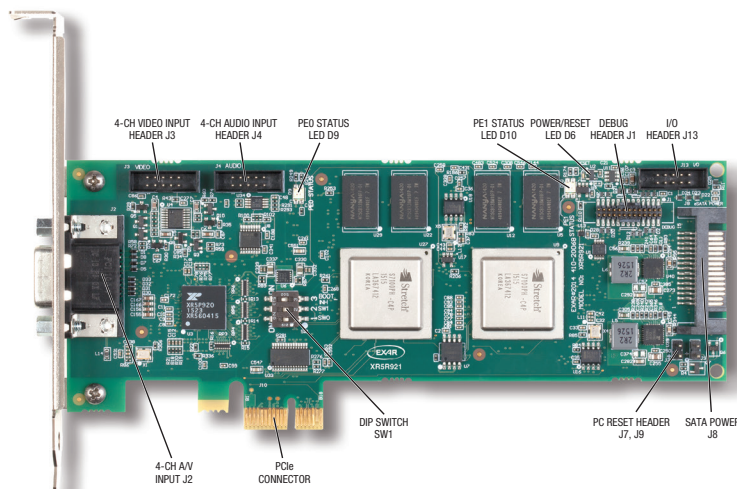
- 4-channel HDCVI capture and compression
- H.264 high profile and scalable video CODECs
- Industry's best video quality
- Compatible with Exar DVR SDK

### BENEFITS

- HD video over 500m of coax
- Seamless HD upgrade and integration with existing equipment
- Video, audio and control signals over coax
- Fast time to market
- Plug-and-play compatibility

### APPLICATIONS

- Affordable high-definition video surveillance
- Upgrade CVBS infrastructure to support HD video



## Ordering Information

Part Number	Minimum Order Multiple	Description
XR5R921-H	20	4-channel HDCVI low-profile PCI-Express DVR card with standard height bracket.
XR5R921-L	20	4-channel HDCVI low-profile PCI-Express DVR card with low-profile bracket.
CAB-DB15-V4A4S0	-	Cable, DB15 to 4 video inputs, 4 audio inputs.
EVK-XR5R921	-	Evaluation kit.

Please contact [videotechsupport@exar.com](mailto:videotechsupport@exar.com) to request a complete datasheet.



[www.exar.com](http://www.exar.com)

48720 Kato Road  
Fremont, CA 94538  
USA

Tel.: +1 (510) 668-7000  
Fax: +1 (510) 668-7001  
Email: [videotechsupport@exar.com](mailto:videotechsupport@exar.com)

Exar Corporation reserves the right to make changes to the products contained in this publication in order to improve design, performance or reliability. Exar Corporation conveys no license under any patent or other right and makes no representation that the circuits are free of patent infringement. While the information in this publication has been carefully checked, no responsibility, however, is assumed for inaccuracies.

Exar Corporation does not recommend the use of any of its products in life support applications where the failure or malfunction of the product can reasonably be expected to cause failure of the life support system or to significantly affect its safety or effectiveness. Products are not authorized for use in such applications unless Exar Corporation receives, in writing, assurances to its satisfaction that: (a) the risk of injury or damage has been minimized; (b) the user assumes all such risks; (c) potential liability of Exar Corporation is adequately protected under the circumstances.

Reproduction, in part or whole, without the prior written consent of Exar Corporation is prohibited. Exar, XR and the XR logo are registered trademarks of Exar Corporation. All other trademarks are the property of their respective owners.

©2016-2017 Exar Corporation

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

MaxLinear:

[XR5R921-H](#) [XR5R921-L](#)