

Frequently Asked Questions

1. How do I buy SDXILEVK?

- North America: The SDXILEVK board can be purchased from Avnet. The Avnet part number for the board is AES-EXP-SDI-G. The Avnet product site can be accessed by following this <u>link</u>.
- **Europe:** The SDXILEVK board can be purchased from EBV (http://www.ebv.com). The EBV part number for the board is SDXILEVK.
- Japan: The SDXILEVK board can be purchased from Avnet US site by following this <u>link</u>. The Avnet part number for the board is AES-EXP-SDI-G.
- Asia Pacific: The SDXILEVK board can be purchased from Avnet US site by following this <u>link</u>. The Avnet part number for the board is AES-EXP-SDI-G.

Distributors in Europe, Japan & Asia Pacific who do not wish to go through Avnet can purchase the board can purchase the board directly through National.

2. Does SDXILEVK (AES-EXP-SDI-G) come with the Spartan-3A development kit?

The daughter card does not come with the Spartan 3A development kit. It must be purchased separately.

- North America: The Spartan-3A development kit can be <u>purchased</u> from any of Xilinx distributors.
- **Europe:** The Spartan-3A development kit can be purchased from Silica (http://www.silica.com/).
- Japan: Japanese customers can order part number HW-SD1800A-DSP-SB-UNI-G-J through <u>local Japan distributor</u>.
- Asia Pacific: The Spartan-3A development kit can be purchased from any of Xilinx distributors

3. Is the FPGA source code included in the SDXILEVK box? If not, how do I get access to the source code?

The FPGA IP source code is not included in the SDXILEVK box. For customers who purchased the board from Avnet, the source code for the FPGA can be downloaded (for free) from Avnet's website. To get the source code, customers need to do the following steps:

- Go to Avnet's EXP-SDI website
- Purchase the SDXILEVK (AES-EXP-SDI-G) board. If you purchased the daughter card through another distributor, have your P.O number ready.
- Follow the link "Support Files & Downloads" on Avnet's EXP-SDI website.
- The customer will be asked to register at Avnet's website. Follow registration procedures.



- Login with your registered user ID & password.
- Follow the link "EXP 3 Gbps SDI Module IP Release Document". Print and fill the IP request form. You will need your P.O. number to complete the form. Mail the form to the contacts listed in the form.
- Avnet will mail the IP reference design to you.

Access to the Xilinx FPGA firmware and source code for the EXP 3G SDI Module reference design is limited to customers who have purchased the SDXILEVK daughter card.

For customers/distributors who have purchased the board directly from National, the source code can be downloaded from National's FTP server.

- The customer has to download the SLA (Software License Agreement). The form can be downloaded from National's <u>website</u>.
- The customer has to fill and sign the form.
- The completed form can be scanned and sent as e-mail or faxed to the local National representative. The customer also needs to provide their mailing address as a part of the SLA.
- Once National receives the SLA, it will be processed. The customer will receive a login ID and password to National's FTP server that hosts the FPGA code.
- The customer can use this login to download the FPGA IP source code.

4. How do I get access to the source code for Spartan 3A FPGA IP? Do I need a SLA?

The source code for the FPGA can be downloaded from Avnet by registering at Avnet's site as detailed above. No SLA is needed.

5. What formats are the source code available in?

The source code is available in both Verilog and VHDL formats.

6. Where do I locate information about the FPGA IP? Where is the FPGA IP description document located?

The Firmware description document is located in Xilinx\DOCS directory (after uncompressing the Zip file). The document provides a detailed description of the various modules and modes supported by the FPGA IP.

7. What are the formats supported the FPGA IP?

	Format	Specification
SD	576i25	SMPTE 259M /C
	486i29	SMPTE 259M /C
HD	720p23	SMPTE 292M
	720p24	SMPTE 292M
	720p29	SMPTE 292M



1	
720p30	SMPTE 292M
720p50	SMPTE 296M
720p59	SMPTE 296M
720p60	SMPTE 296M
1080sf23	SMPTE 274M + RP211
1080sf24	SMPTE 274M + RP211
1080i25	SMPTE 274M
1080i29	SMPTE 274M
1080i30	SMPTE 274M
1080p23	SMPTE 274M
1080p24	SMPTE 274M
1080p25	SMPTE 274M
1080p29	SMPTE 274M
1080p30	SMPTE 274M
1080p50	SMPTE 424M
1080p59	SMPTE 424M
1080p60	SMPTE 424M
	720p59 720p60 1080sf23 1080sf24 1080i25 1080i29 1080i30 1080p23 1080p24 1080p29 1080p29 1080p30 1080p50

8. What are the Dual link formats supported?

	Format	Specification
Dual Link	1080p50	SMPTE 372M + 425M
	1080p59	SMPTE 372M + 425M
LIIK	1080p60	SMPTE 372M + 425M

9. What are the audio formats supported by this FPGA IP?

Currently the FPGA source code supports 4 simultaneous channels of audio embedding/de-embedding. The 4 channels can be chosen from one of 4 groups. The audio format supported is I2S. Audio support for AES formats will be added shortly.

10. Who do I contact for support?

- North America: Customer support for the FPGA IP is provided by Avnet. Contact your local Avnet representative.
- **Europe:** Customer support for the FPGA IP is provided by Silica. Contact your local Silica representative.
- Japan: Customer support for the FPGA IP is provided by National/Avnet US.
- Asia Pacific: Customer support for the FPGA IP is provided by National/Avnet US.

The table below summarizes the Hardware vendors and the Customer support for FPGA IP.

Xilinx Spartan- FPGA IP

FPGA IP



	(AES-EXP-SDI-G) Daughter card	3A Development board	source code	support
North America	Avnet	Avnet	Avnet.com w/ site registration or National with SLA	Avnet
Europe	EBV	Silica	Avnet.com w/ site registration or National with SLA	Silica
Japan	Avnet	Avnet	Avnet.com w/ site registration or National with SLA	
Asia Pacific	Avnet	Avnet	Avnet.com w/ site registration or National with SLA	Avnet US/National

IMPORTANT NOTICE

Texas Instruments Incorporated and its subsidiaries (TI) reserve the right to make corrections, modifications, enhancements, improvements, and other changes to its products and services at any time and to discontinue any product or service without notice. Customers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All products are sold subject to TI's terms and conditions of sale supplied at the time of order acknowledgment.

TI warrants performance of its hardware products to the specifications applicable at the time of sale in accordance with TI's standard warranty. Testing and other quality control techniques are used to the extent TI deems necessary to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed.

TI assumes no liability for applications assistance or customer product design. Customers are responsible for their products and applications using TI components. To minimize the risks associated with customer products and applications, customers should provide adequate design and operating safeguards.

TI does not warrant or represent that any license, either express or implied, is granted under any TI patent right, copyright, mask work right, or other TI intellectual property right relating to any combination, machine, or process in which TI products or services are used. Information published by TI regarding third-party products or services does not constitute a license from TI to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from TI under the patents or other intellectual property of TI.

Reproduction of TI information in TI data books or data sheets is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. Reproduction of this information with alteration is an unfair and deceptive business practice. TI is not responsible or liable for such altered documentation. Information of third parties may be subject to additional restrictions.

Resale of TI products or services with statements different from or beyond the parameters stated by TI for that product or service voids all express and any implied warranties for the associated TI product or service and is an unfair and deceptive business practice. TI is not responsible or liable for any such statements.

TI products are not authorized for use in safety-critical applications (such as life support) where a failure of the TI product would reasonably be expected to cause severe personal injury or death, unless officers of the parties have executed an agreement specifically governing such use. Buyers represent that they have all necessary expertise in the safety and regulatory ramifications of their applications, and acknowledge and agree that they are solely responsible for all legal, regulatory and safety-related requirements concerning their products and any use of TI products in such safety-critical applications, notwithstanding any applications-related information or support that may be provided by TI. Further, Buyers must fully indemnify TI and its representatives against any damages arising out of the use of TI products in such safety-critical applications.

TI products are neither designed nor intended for use in military/aerospace applications or environments unless the TI products are specifically designated by TI as military-grade or "enhanced plastic." Only products designated by TI as military-grade meet military specifications. Buyers acknowledge and agree that any such use of TI products which TI has not designated as military-grade is solely at the Buyer's risk, and that they are solely responsible for compliance with all legal and regulatory requirements in connection with such use.

TI products are neither designed nor intended for use in automotive applications or environments unless the specific TI products are designated by TI as compliant with ISO/TS 16949 requirements. Buyers acknowledge and agree that, if they use any non-designated products in automotive applications, TI will not be responsible for any failure to meet such requirements.

Following are URLs where you can obtain information on other Texas Instruments products and application solutions:

Products		Applications	
Audio	www.ti.com/audio	Automotive and Transportation	www.ti.com/automotive
Amplifiers	amplifier.ti.com	Communications and Telecom	www.ti.com/communications
Data Converters	dataconverter.ti.com	Computers and Peripherals	www.ti.com/computers
DLP® Products	www.dlp.com	Consumer Electronics	www.ti.com/consumer-apps
DSP	dsp.ti.com	Energy and Lighting	www.ti.com/energy
Clocks and Timers	www.ti.com/clocks	Industrial	www.ti.com/industrial
Interface	interface.ti.com	Medical	www.ti.com/medical
Logic	logic.ti.com	Security	www.ti.com/security
Power Mgmt	power.ti.com	Space, Avionics and Defense	www.ti.com/space-avionics-defense
Microcontrollers	microcontroller.ti.com	Video and Imaging	www.ti.com/video
RFID	www.ti-rfid.com		
OMAP Mobile Processors	www.ti.com/omap		
Wireless Connectivity	www.ti.com/wirelessconnectivity		
	TI 505 0		

TI E2E Community Home Page

e2e.ti.com

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265 Copyright © 2012, Texas Instruments Incorporated