
XTP025 (v4.3) October 21, 2013

Note: As of Vivado Design Suite 2013.1, all new Vivado release notes for IP will be handled by answer records. See http://www.xilinx.com/support/index.html/content/xilinx/en/supportNav/design_tools.html. XTP025 will continue to document IP updates for ISE Design Suite only.

Xilinx Intellectual Property (IP) cores, including LogiCORE™ IP for the Connectivity, DSP and Embedded application spaces, are provided in the Xilinx Vivado™ Design Suite and ISE® Design Suite software. The Design Suite software enables you to generate these IP on your desktop.

New IP and IP versions are provided in each Design Suite release. Detailed listings of these new IP and IP versions can be accessed on release-specific IP Update information pages linked from the Xilinx.com [Intellectual Property](#) area (www.xilinx.com/ipcenter/coregen/updates.htm). The latest Design Suite releases are available from the [Xilinx Download Center](#).

This document contains a listing of release note tables, one for each IP core. Within each release note table you will find a list of links to multiple answer records. Release note information for a particular version of a core is provided in an IP-specific answer record.

A given version of an IP core is intended to be used with a specific version of Design Suite software. The release note tables in xtp025 display the version of Design Suite software which can be used with a particular IP core version.

Please note that this hypertext document is intended for online use only.

["List of IP Cores"](#)

[ISE® CORE Generator™ IP Updates - Installation Instructions](#)

[Archived IP Downloads](#)

["CORE Generator Software Known Issues"](#)

List of IP Cores

Automotive

- "CAN"
- "FlexRay™"
- "MOST® NIC"

AXI Infrastructure

- "AXI4-Stream Interconnect"
- "AXI Bus Function Model (BFM)"
- "AXI Central Direct Memory Access (CDMA)"
- "AXI DataMover"
- "AXI Direct Memory Access (DMA)"
- "AXI Interconnect"
- "AXI Video Direct Memory Access (VDMA)"
- "AXI Virtual FIFO Controller"
- "ChipScope AXI Monitor"

Communications and Networking

- "Aurora 8B10B for Virtex®-4 FPGA"
- "Aurora 8B10B (AXI)"
- "Aurora 8B10B"
- "Aurora 64B/66B"
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- "Tri-Mode Ethernet MAC"
- "Gigabit Ethernet MAC"
- "Ethernet 1000BASE-X PCS/PMA or SGMII"
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- "Ethernet Statistics"
- "Ethernet AVB Endpoint"
- "Fibre Channel Pt. to Pt."
- "Fibre Channel Arbitrated Loop"
- "SPI-3 PHY"
- "SPI-3 Link Layer Interface, Multi-channel"
- "SPI-4.2"

DSP Digital Communications

- "3GPP Downlink Chip Rate"
- "3GPP LTE Channel Estimator"
- "3GPP LTE MIMO Decoder"
- "3GPP LTE MIMO Encoder"
- "3GPP LTE Turbo Decoder"
- "3GPP LTE Turbo Encoder"
- "3GPP RACH Preamble Detector"
- "3GPP Searcher"
- "3GPP Turbo Convolutional Code Decoder"
- "3GPP Turbo Convolutional Code Encoder"
- "3GPP2 Turbo Convolutional Code Decoder"
- "3GPP2 Turbo Convolutional Code Encoder"
- "802.16E Convolutional Turbo Code (CTC) Decoder"
- "802.16E Convolutional Turbo Code (CTC) Encoder"
- "Additive White Gaussian Noise Generator (AWGN)"
- "Convolutional Encoder"

- "Digital Pre-Distortion (DPD) (AXI)"
- "DVB-S.2 FEC Encoder"
- "G.975.1 EFEC 1.7 Encoder/Decoder"
- "JESD204"
- "Interleaver/De-interleaver"
- "LDPC 802.16 Encoder"
- "LTE Fast Fourier Transform (FFT)"
- "LTE DL Channel Encoder"
- "LTE UL Channel Decoder"
- "LTE UL PUCCH Receiver"
- "LTE RACH Detector"
- "Mixed Mode Turbo Decoder (AXI)"
- "Peak Cancellation Crest Factor Reduction"
- "Reed-Solomon Decoder"
- "Reed-Solomon Encoder"
- "Turbo Product Code (TPC) Decoder"
- "Viterbi Decoder"

DSP Horizontal

- "Accumulator"
- "Adder/Subtractor"
- "Binary Counter"
- "Cascaded Integrator Comb Compiler (CIC Compiler)"
- "Complex Multiplier"
- "CORDIC"
- "Direct Digital Synthesizer Compiler (DDS Compiler)"
- "Divider"
- "Discrete Fourier Transform (DFT)"
- "DSP48 Macro"
- "DUC/DDC Compiler"
- "Fast Fourier Transform (FFT)"
- "FIR Compiler"
- "Floating-Point Operator"
- "Multiplier"
- "Multiply Accumulator (MACC)"
- "Multiply Adder"
- "RAM-based Shift Register"
- "Sine Cosine Look-Up Table (Sin Cos LUT)"
- "VLINQ™"

DSP MVI

- "Asynchronous Sample Rate Converter"
- "AXI4-Stream to Video Out"
- "Chroma Resampler"
- "Color Correction Matrix"
- "Color Filter Array Interpolation"
- "Defective Pixel Correction"
- "DisplayPort"
- "Gamma Correction"
- "H.264 Deblocking Filter"
- "H.264 CABAC Encoder"
- "H.264 Motion Estimation Engine"
- "Image Characterization"
- "Image Edge Enhancement"
- "Image Noise Reduction"
- "Image Processing Pipeline"
- "Image Statistics Engine"

List of IP Cores (continued)

- "Motion Adaptive Noise Reduction"
- "MPEG-4 Part 2 Simple Profile Decoder (MPEG-4 Part 2 SP)"
- "MPEG-4 Part 2 Simple Profile Encoder (MPEG-4 Part 2 SP)"
- "Object Segmentation"
- "RGB to YCrCb Color-Space Converter (RGB2YCrCb)"
- "SMPTE SD/HD/3G-SDI"
- "SMPTE2022-5/6 Video Over IP Receiver"
- "SMPTE2022-5/6 Video Over IP Transmitter"
- "Spartan-6 FPGA Triple-Rate SDI"
- "Virtex-6 FPGA Triple-Rate SDI"
- "Video Deinterlacer (AXI)"
- "Video Deinterlacer"
- "Video Into AXI4-Stream"
- "Video Scaler"
- "Video Timing Controller"
- "Video Direct Memory Access"
- "Video On-Screen Display"
- "YCrCb to RGB Color-Space Converter (YCrCb2RGB)"

Embedded

- "Embedded IP"
- "MicroBlaze Microprocessor Control System"

FPGA Features and Design

- "7 Series FPGA Transceiver Wizard"
- "Clocking Wizard"
- "RocketIO™ GT11 Transceiver Wizard (Virtex-4 FX Family)"
- "RocketIO GTP Transceiver Wizard (Virtex-5 LXT or SXT Platform)"
- "RocketIO GTX Transceiver Wizard (Virtex-5 FXT Platform)"
- "Soft Error Mitigation"
- "Virtex-6 FPGA GTX Transceiver Wizard"
- "Virtex-6 FPGA GTH Transceiver Wizard"
- "SelectIO Interface Wizard"

- "Spartan-6 FPGA GTP Transceiver Wizard"
- "System Monitor Wizard"
- "XADC Wizard"

Memories and Storage Elements

- "Block Memory Generator"
- "Content Addressable Memory (CAM)"
- "Distributed Memory Generator"
- "FIFO Generator"
- "Packet Queue"
- "Memory Interface Generator (MIG) 7 Series"
- "Memory Interface Generator (MIG) Virtex-6 and Spartan-6"
- "Memory Interface Generator (MIG)"

Standard Bus Interfaces

- "7 Series Integrated Block for PCI Express"
- "AXI Bridge for PCI Express"
- "Virtex-7 FPGA Gen3 Integrated Block for PCI Express"
- "Virtex-6 FPGA Integrated Block for PCI Express"
- "Spartan-6 FPGA Integrated Block for PCI Express"
- "Endpoint Block Plus Wrapper for PCI Express"
- "Endpoint Block Wrapper for PCI Express"
- "Endpoint for PCI Express (Soft IP Implementation)"
- "Endpoint PIPE for PCI Express (Soft IP Implementation)"
- "Initiator/Target for PCI™ v3"
- "Initiator/Target for PCI v4"
- "Initiator/Target for PCI-X™ v5"
- "Initiator/Target for PCI-X v6 (Virtex-5 FPGA)"
- "UCF Generator for PCI/PCI-X"
- "Serial RapidIO"
- "Serial RapidIO Gen2"

Wireless

- "CPRI™"
- "OBSAI"

CORE Generator Software Known Issues

Release Version	Release Note
13.x	40493
12.1	35214
11.3	32288
11.2	32288
11.1	32288
10.1	30291
9.2i	29193
9.1i	24408
8.2i	23396
8.1i	22609
7.1i	20491

Automotive IP

CAN

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Version	Release Note	Initial Release	Date
v5.0	54449	Vivado 2013.1	April 3, 2013
v4.1	37994	12.3	October 5, 2010
v3.2	35176	12.1	May 3, 2010
v2.1	32262	11.1	April 27, 2009
v1.5	25451	9.2i IP Update 1	August 15, 2007
v1.4	23876	8.2i IP Update 2	October 3, 2006
v1.3	22342	8.1i IP Update 1	January 18, 2006
v1.2*	22412	7.1i IP Update 3	August 31, 2005
v1.1	21937	7.1i IP Update 3	August 31, 2005

**v1.2 was an asynchronous update also released for 7.1i IP Update 3.*

FlexRay™

Note: This core has been discontinued.

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Version	Release Note	Initial Release	Date
v1.1	25142	9.1i IP Update 3	May 2007

MOST® NIC

Note: This core has been discontinued. Use the XPS version available in EDK.

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Version	Release Note	Initial Release	Date
v1.4	31555	10.1 IP Update 3	September 19, 2008
v1.2	25452	9.2i IP Update 1	August 2007
v1.1	25141	9.1i IP Update 3	May 2007

AXI Infrastructure

AXI4-Stream Interconnect

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Version	Release Note	Initial Release	Date
v1.1	54813	Vivado 2013.1	April 3, 2013
v1.1	47407	14.2	July 25, 2012
v1.0	47407	14.1	May 8, 2012

AXI Bus Function Model (BFM)

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Version	Release Note	Initial Release	Date
v4.0	54678	Vivado 2013.1	April 3, 2013
v2.1	47649	14.1/Vivado 2012.1	May 8, 2012

AXI Central Direct Memory Access (CDMA)

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Version	Release Note	Initial Release	Date
v4.0	54685	Vivado 2013.1	April 3, 2013
v3.03.a	47650	14.1	May 8, 2012

AXI DataMover

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Version	Release Note	Initial Release	Date
v5.0	54684	Vivado 2013.1	April 3, 2013
v4.02.a	47651	14.3/Vivado 2012.3	October 23, 2012
v4.01.a	47651	14.2	July 25, 2012
v3.0.a	47651	14.1	May 8, 2012

AXI Direct Memory Access (DMA)

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Version	Release Note	Initial Release	Date
v7.0	54682	Vivado 2013.1	April 3, 2013
v.6.02.a	47652	14.3/Vivado 2012.3	October 23, 2012
v6.01.a	47652	14.2	July 25, 2012
v6.0.a	47652	14.1	May 8, 2012

AXI Interconnect

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Version	Release Note	Initial Release	Date
v1.06.a	54453	Vivado 2013.1	April 3, 2013
v1.06.a	47653	14.1/Vivado 2012.1	May 8, 2012

AXI Video Direct Memory Access (VDMA)

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Version	Release Note	Initial Release	Date
v6.0	54448	Vivado 2013.1	April 3, 2013
v5.03.a	47654	14.3/Vivado 2012.3	October 23, 2012
v5.02.a	47654	14.2	July 25, 2012
v5.01.a	47654	14.1	May 8, 2012

AXI Virtual FIFO Controller

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Version	Release Note	Initial Release	Date
v2.0	54809	Vivado 2013.1	April 3, 2013
v1.1	47655	14.2/Vivado 2012.2	June 25, 2012

ChipScope AXI Monitor

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Version	Release Note	Initial Release	Date
v3.05.a	47656	14.2	July 25, 2012
v5.01.a	47656	14.1	May 8, 2012

Communications and Networking

Aurora 8B10B for Virtex®-4 FPGA

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Version	Release Note	Initial Release	Date
v3.1	32234	11.1	April 27, 2009
v3.0	31521	10.1 IP Update 3	September 19, 2008
v2.9	31396	10.1 Initial IP Update	March 24, 2008
v2.8	29367	9.2i IP Update 2	October 17, 2007
v2.7	25067	9.1i IP Update 3	May 17, 2007
v2.6	24596	9.1i IP Update 1	March 5, 2007

Aurora 8B10B (AXI)

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Version	Release Note	Initial Release	Date
v9.0	54368	Vivado 2013.1	April 3, 2013
v8.3	52311	14.3/Vivado 2012.3	October 23, 2012
v8.2	44596	Vivado 2012.2	July 25, 2012
v8.1	47702	14.1/Vivado 2012.1	May 8, 2012
v7.1	44596	13.3	October 26, 2011
v6.2	42586	13.1	March 1, 2011
v6.1	38409	12.3	October 5, 2010

Aurora 8B10B

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Version	Release Note	Initial Release	Date
v5.3	45672	13.4	January 18, 2012
v5.2	42585	12.2	July 23, 2010
v5.1	35372	12.1	May 3, 2010
v4.2	32745	11.2	June 24, 2009
v4.1	32235	11.1	April 27, 2009
v3.0	31084	10.1 IP Update 2	June 27, 2008
v2.9	30781	10.1 Initial IP Update	March 24, 2008
v2.8	29368	9.2i IP Update 2	October 17, 2007
v2.7	25068	9.1i IP Update 3	May 17, 2007
v2.6	24595	9.1i IP Update 1	March 5, 2007

Aurora 64B/66B

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Version	Release Note	Initial Release	Date
v8.0	54367	Vivado 2013.1	April 3, 2013
v7.3	52313	14.3/Vivado 2012.3	October 23, 2012

Version	Release Note	Initial Release	Date
v7.2	50615	Vivado 2012.2	July 25, 2012
v7.1	47704	14.1/Vivado 2012.1	May 8, 2012
v6.2	45671	13.4	January 18, 2012
v6.1	42804	13.2	July 6, 2011
v4.2	42624	13.1	March 1, 2011
v4.1	35371	12.1	May 3, 2010
v3.1	33248	11.3	September 16, 2009
v2.1	32233	11.1	April 27, 2009
v1.3	31520	10.1 IP Update 3	September 19, 2008
v1.2	31085	10.1 IP Update 2	June 27, 2008
v1.1	30670	10.1 Initial IP Update	March 25, 2008

General Framing Procedure (GFP)

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Version	Release Note	Initial Release	Date
v2.1.1	30640	10.1 IP Update 3	September 19, 2008
v2.1	30640	10.1 IP Update 1	April 25, 2008

Soft Error Mitigation

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Version	Release Note	Initial Release	Date
v4.0	54642	Vivado 2013.1	April 3, 2013
v3.5	44541	14.5	April 3, 2013
v3.4	44541	14.4	December 18, 2012
v3.3	44541	14.2	October 23, 2012
v3.2	44541	14.1	May 8, 2012
v3.1	44541	13.3	October 26, 2011
v2.1	42519	13.2	July 6, 2011
v1.3	40444	13.1	March 1, 2011
v1.2	39372	12.4	December 20, 2010
v1.1	37934	12.3	October 5, 2010

Tri-Mode Ethernet MAC

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Version	Release Note	Initial Release	Date
v6.0	54251	Vivado 2013.1	April 3, 2013
v5.5	47695	14.4/Vivado 2012.4	December 18, 2012
v5.4	47695	14.2/Vivado 2012.2	July 25, 2012
v5.3	47695	14.1	May 8, 2012
v5.2	45707	13.4	January 18, 2012
v5.1	40624	13.1	March 1, 2011

Version	Release Note	Initial Release	Date
v4.6	47694	14.1	May 8, 2012
v4.5	40623	13.1	March 1, 2011
v4.4	35279	12.1	April 23, 2010
v4.3	33307	11.3	September 16, 2009
v4.2	32762	11.2	June 24, 2009
v4.1	32204	11.1	April 27, 2009
v3.5	30146	10.1 Initial IP Update	March 24, 2008
v3.4	25488	9.2i IP Update 1	August 15, 2007
v3.31	24591	9.1i IP Update 2	April 2, 2007
v3.3	24591	9.1i IP Update 1	March 5, 2007
v3.2	23921	8.2i IP Update 2	October 3, 2006
v3.1	23500	8.2i IP Update 1	July 19, 2006
v2.2	22328	8.1i IP Update 1	January 18, 2006
v2.1	21044	7.1i IP Update 1	May 12, 2005
v1.2	19882	6.3i IP Update 3	September 30, 2004

Gigabit Ethernet MAC

Note: This core has been discontinued.

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Version	Release Note	Initial Release	Date
v8.5	32205	11.1	April 27, 2009
v8.4	30145	10.1 Initial IP Update	March 24, 2008
v8.3	25487	9.2i IP Update 1	August 15, 2007
v8.2.1	23919	9.1i IP Update 2	April 2, 2007
v8.2	23919	9.1i IP Update 1	March 5, 2007
v8.1	23919	8.2i IP Update 2	October 3, 2006
v8.0	23498	8.2i IP Update 1	July 19, 2006
v7.0	22326	8.1i IP Update 1	January 18, 2006
v6.0	21043	7.1i IP Update 1	May 12, 2005
v5.0	19878	6.3i IP Update 3	September 30, 2004

Ethernet 1000BASE-X PCS/PMA or SGMI

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Version	Release Note	Initial Release	Date
v12.0	54667	Vivado 2013.1	April 3, 2013
v11.5	47524	14.4/Vivado 2012.4	December 18, 2012
v11.4	47524	14.2/Vivado 2012.2	July 25, 2012
v11.3	47524	14.1	May 8, 2012
v11.2	45677	13.4	January 18, 2012
v11.1	40625	13.1	March 1, 2011
v10.5	36674	12.2	July 23, 2010

Version	Release Note	Initial Release	Date
v10.4	35280	12.1	April 23, 2010
v10.3	33306	11.3	September 16, 2009
v10.2	32761	11.2	June 24, 2009
v10.1	32206	11.1	April 27, 2009
v9.1	30144	10.1 Initial IP Update	March 24, 2008
v9.0	25486	9.2i IP Update 1	August 15, 2007
v8.1.1	24590	9.1i IP Update 2	April 2, 2007
v8.1	24590	9.1i IP Update 1	March 5, 2007
v8.0	24041	8.2i IP Update 2 Virtex-5 LXT Supplement	October 26, 2006
v7.1	23502	8.2i IP Update 1	July 19, 2006
v7.0	22327	8.1i IP Update 1	January 18, 2006
v6.0	21045	7.1i IP Update 1	May 12, 2005
v5.0	19880	6.3i IP Update 3	September 30, 2004

QSGMII

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Version	Release Note	Initial Release	Date
v2.0	54668	Vivado 2013.1	April 3, 2013
v1.4	45711	14.3/2012.3	October 23, 2012
v1.3	45711	14.2/Vivado 2012.2	July 25, 2012
v1.2	45711	14.1	May 8, 2012
v1.1	45711	13.4	January 18, 2012

10-Gigabit Ethernet MAC

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Version	Release Note	Initial Release	Date
v12.0	54252	Vivado 2013.1	April 3, 2013
v11.6	47697	14.5	April 3, 2013
v11.5	47697	2012.4	December 18, 2012
v11.4	47697	14.2/Vivado 2012.2	July 25, 2012
v11.3	47697	14.1	May 8, 2012
v11.2	44476	13.3	October 26, 2011
v11.1	40628	13.1	March 1, 2011
v10.3	47696	14.1	May 8, 2012
v10.2	40627	13.1	March 1, 2011
v10.1	35244	12.1	April 23, 2010
v9.3	33304	11.3	September 16, 2009
v9.2	32764	11.2	June 24, 2009
v9.1	32207	11.1	April 27, 2009
v8.6	31513	10.1 IP Update 3	September 19, 2008

Version	Release Note	Initial Release	Date
v8.5	30965	10.1 IP Update 2	June 27, 2008
v8.4	30142	10.1 Initial IP Update	March 24, 2008
v8.3	25456	9.2i IP Update 1	August 15, 2007
v8.2	24588	9.1i IP Update 1	March 5, 2007
v8.1	23920	8.2i IP Update 2	October 3, 2006
v8.0	23501	8.2i IP Update 1	July 19, 2006
v7.0	22330	8.1i IP Update 1	January 18, 2006
v6.0	21046	7.1i IP Update 1	May 12, 2005
v5.0	19879	6.3i IP Update 3	September 30, 2004

10-Gigabit Ethernet PCS/PMA (10GBASE-R/10GBASE-KR))

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Version	Release Note	Initial Release	Date
v3.0	54669	Vivado 2013.1	April 3, 2013
v2.6	47698	14.4/2012.4	December 18, 2012
v2.5	47698	14.3/Vivado 2012.3	October 23, 2012
v2.4	47698	14.2/Vivado 2012.2	July 25, 2012
v2.3	47698	14.1	May 8, 2012
v2.2	44477	13.3	October 26, 2011
v2.1	40629	13.1	March 1, 2011
v1.2	35267	12.1	April 23, 2010
v1.1	33738	11.4	December 2, 2009

RXAUI

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Version	Release Note	Initial Release	Date
v3.0	54249	Vivado 2013.1	April 3, 2013
v2.4	47692	14.3/Vivado 2012.3	October 23, 2012
v2.3	47692	14.1	May 8, 2012
v2.2	45706	13.4	January 18, 2012
v2.1	40630	13.1	March 1, 2011
v1.2	35243	12.1	April 23, 2010
v1.1	33311	11.3	September 16, 2009

XAUI

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Version	Release Note	Initial Release	Date
v11.0	54666	Vivado 2013.1	April 3, 2013
v10.4	47684	14.2/Vivado 2012.2	July 25, 2012
v10.3	47684	14.1	May 8, 2012
v10.2	45705	13.4	January 18, 2012

Version	Release Note	Initial Release	Date
v10.1	40631	13.1	March 1, 2011
v9.2	35239	12.1	April 23, 2010
v9.1	33302	11.3	September 16, 2009
v8.2	32759	11.2	June 24, 2009
v8.1	32208	11.1	April 27, 2009
v7.4	31514	10.1 IP Update 3	September 19, 2008
v7.3	30143	10.1 Initial IP Update	March 24, 2008
v7.2	25484	9.2i IP Update 1	August 15, 2007
v7.1	24589	9.1i IP Update 1	March 5, 2007
v7.0	24043	8.2i IP Update 2 Virtex-5 LXT Supplement	October 26, 2006
v6.2	23497	8.2i IP Update 1	July 19, 2006
v6.1	22331	8.1i IP Update 1	January 18, 2006
v6.0	21047	7.1i IP Update 1	May 12, 2005
v5.0	19881	6.3i IP Update 3	September 30, 2004

Embedded Tri-Mode Ethernet MAC Wrapper (Virtex-4 FX Family)

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Version	Release Note	Initial Release	Date
v4.8	34940	12.1	April 23, 2010
v4.7	32209	11.1	April 27, 2009
v4.6	30148	10.1 Initial IP Update	March 24, 2008
v4.5	25439	9.2i IP Update 1	August 15, 2007
v4.4	24587	9.1i IP Update 1	March 5, 2007
v4.3	23922	8.2i IP Update 2	October 26, 2006
v4.2	23503	8.2i IP Update 1	July 19, 2006
v4.1	22332	8.1i IP Update 1	January 18, 2006
v3.1	21903	7.1i IP Update 3	August 31, 2005
v2.1	21049	7.1i IP Update 1	May 12, 2005
v1.0	20193	6.3i IP Update 4	November 11, 2004

Virtex-5 FPGA Embedded Tri-Mode Ethernet MAC Wrapper

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Version	Release Note	Initial Release	Date
v1.8	40632	13.1	March 1, 2011
v1.7	34968	12.1	April 23, 2010
v1.6	32210	11.1	April 27, 2009
v1.5	31511	10.1 IP Update 3	September 19, 2008
v1.4	30149	10.1 Initial IP Update	March 24, 2008
v1.3	25441	9.2i IP Update 1	August 15, 2007
v1.2	24593	9.1i IP Update 1	March 5, 2007

Version	Release Note	Initial Release	Date
v1.1	24042	8.2i IP Update 2 Virtex-5 LXT Supplement	October 26, 2006

Virtex-6 FPGA Embedded Tri-Mode Ethernet MAC Wrapper

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Version	Release Note	Initial Release	Date
v2.3	47365	14.1	May 8, 2012
v2.2	44428	13.3	October 26, 2011
v2.1	40634	13.1	March 1, 2011
v1.6	47362	14.1	May 8, 2012
v1.5	40633	13.1	March 1, 2011
v1.4	34972	12.1	April 23, 2010
v1.3	33309	11.3	September 16, 2009
v1.2	32755	11.2	June 24, 2009

Ethernet Statistics

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Version	Release Note	Initial Release	Date
v3.5	40635	13.1	March 1, 2011
v3.4	35271	12.1	April 23, 2010
v3.3	33303	11.3	September 16, 2009
v3.2	32763	11.2	June 24, 2009
v3.1	32211	11.1	April 27, 2009
v2.5	30147	10.1 Initial IP Update	March 24, 2008
v2.4	25489	9.2i IP Update 1	August 15, 2007
v2.3.1	24592	9.1i IP Update 2	April 2, 2007
v2.3	24592	9.1i IP Update 1	March 5, 2007
v2.2	24040	8.2i IP Update 2 Virtex-5 LXT Supplement	October 26, 2006
v2.1	23499	8.2i IP Update 1	July 19, 2006
v1.2	22325	8.1i IP Update 1	January 18, 2006
v1.1	21055	7.1i IP Update 1	May 12, 2005

Ethernet AVB Endpoint

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Version	Release Note	Initial Release	Date
v3.1	40636	13.1	March 1, 2011
v2.4	36676	12.2	July 23, 2010
v2.3	35203	12.1	April 23, 2010
v2.2	33305	11.3	September 16, 2009
v2.1	32760	11.2	June 24, 2009
v1.2	32212	11.1	April 27, 2009

Version	Release Note	Initial Release	Date
v1.1	31512	10.1 IP Update 3	September 19, 2008

Fibre Channel Pt. to Pt.

Note: This core has been discontinued.

Version	Release Note	Initial Release	Date
v3.5	35263	12.1	April 23, 2010
v3.4	32213	11.1	April 27, 2009
v3.3	30150	10.1 Initial IP Update	March 24, 2008
v3.2	25454	9.2i IP Update 1	August 15, 2007
v3.1	24584	9.1i IP Update 1	March 5, 2007
v2.1	22323	8.1i IP Update 1	January 18, 2006
v2.0	21048	7.1i IP Update 1	May 12, 2005
v1.0	19527	6.3i IP Update 4	November 11, 2004

Fibre Channel Arbitrated Loop

Note: This core has been discontinued.

Version	Release Note	Initial Release	Date
v2.3	30151	10.1 Initial IP Update	March 24, 2008
v2.2	25455	9.2i IP Update 1	August 15, 2007
v2.1	24585	9.1i IP Update 1	March 5, 2007
v1.1	22324	8.1i IP Update 1	January 18, 2006

SPI-4.2

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Version	Release Note	Initial Release	Date
v13.0	54616	Vivado 2013.1	April 3, 2013
v12.2	50942	Vivado 2012.2	July 25, 2012
v11.2	42612	13.2	July 6, 2011
v10.5	42572	13.2	July 6, 2011
v11.1	40640	13.1	March 1, 2011
v10.4	40638	13.1	March 1, 2011
v10.3	39376	12.4	December 20, 2010
v10.2	38211	12.3	October 5, 2010
v10.1	35109	12.1	May 3, 2010
v9.3	33313	11.3	September 16, 2009
v9.2	32766	11.2	June 24, 2009
v9.1	32197	11.1	April 27, 2009
v8.6	31506	10.1 IP Update 3	September 19, 2008
v8.5	30058	10.1 Initial IP Update	March 24, 2008
v8.4	25427	9.2i IP Update 1	August 15, 2007
v8.3	24557	9.1i IP Update 1	March 5, 2007

Version	Release Note	Initial Release	Date
v8.2	23846	8.2i IP Update 3	December 7, 2007
v8.1	23487	8.2i IP Update 1	July 19, 2006
v7.4	22300	8.1i IP Update 1	January 18, 2006
v7.3	21918	7.1i IP Update 3	August 31, 2005
v7.2	21032	7.1i IP Update 1	May 12, 2005

SPI-4.2 (Virtex-II Pro Devices Only)

[Product Page](#)

Version	Release Note	Initial Release	Date
v6.3	22301	8.1i IP Update 1	July 19, 2006

SPI-4.2 Lite

Note: This core has been discontinued.

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Version	Release Note	Initial Release	Date
v5.2	35138	12.1	May 3, 2010
v5.1	32767	11.2	June 24, 2009
v4.4	32198	11.1	April 27, 2009
v4.3	30970	10.1 IP Update 2	June 27, 2008
v4.2.1	24556	9.1i IP Update 3	May 17, 2007
v4.2	24556	9.1i IP Update 1	March 5, 2007
v4.1	23488	8.2i IP Update 1	July 19, 2006
v3.1	22390	8.1i IP Update 1	January 18, 2006
v3	21919	7.1i IP Update 1	August 31, 2005

SPI-3 Link Layer Interface, Multi-channel

Note: This core has been discontinued.

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Version	Release Note	Initial Release	Date
v7.3	39377	12.4	December 10, 2010
v7.2	35141	12.1	May 3, 2010
v7.1	33779	11.4	December 2, 2009
v6.1	33314	11.3	September 16, 2009
v5.2	32199	11.1	April 27, 2009
v5.1	25461	9.1i IP Update 1	March 5, 2007
v4.1	22382	8.2i IP Update 1	July 19, 2006
v4	21921	7.1i IP Update 3	August 31, 2005

SPI-3 PHY

Note: This core has been discontinued.

Version	Release Note	Initial Release	Date
v5.2	32200	11.1	April 27, 2009
v5.1	25460	9.1i IP Update 1	March 5, 2007
v4.1	22381	8.2i IP Update 1	July 19, 2006
v4	21920	7.1i IP Update 3	August 31, 2005

Wireless

CPRI™

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Version	Release Note	Initial Release	Date
v7.0	54473	Vivado 2013.1	April 3, 2013
v5.1	36969	14.1	May 8, 2012
v4.1	36969	13.1	March 1, 2011
v3.2	36969	12.2	July 23, 2010
v3.1	36968	12.1	April 19, 2010
v2.3	33310	11.3	September 16, 2009
v2.2	32757	11.2	June 24, 2009
v2.1	32214	11.1	April 27, 2009
v1.2	30060	10.1 Initial IP Update	March 24, 2008
v1.1	29162	9.1i IP Update 1	March 5, 2007

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Version	Release Note	Initial Release	Date
v6.0	54485	Vivado 2013.1	April 3, 2013
v5.1	36971	13.1	March 1, 2011
v4.2	36971	12.2	July 23, 2010
v4.1	36970	12.1	April 19, 2010
v3.3	33308	11.3	September 16, 2009
v3.2	32758	11.2	June 24, 2009
v3.1	32215	11.1	April 27, 2009
v2.1	30969	10.1 IP Update 2	June 27, 2008
v1.2	30061	10.1 Initial IP Update	March 24, 2008
v1.1	29165	9.1i IP Update 1	March 5, 2007

DSP Horizontal

Accumulator

[Product Page](#)

Version	Release Note	Initial Release	Date
v12.0	54492	Vivado 2013.1	April 3, 2013
v11.0	32138	11.1	April 27, 2009

Adder/Subtractor

[Product Page](#)

Version	Release Note	Initial Release	Date
v12.0	54491	Vivado 2013.1	April 3, 2013
v11.0	32139	11.1	April 27, 2009

Binary Counter

[Product Page](#)

Version	Release Note	Initial Release	Date
v12.0	54493	Vivado 2013.1	April 3, 2013
v11.0	32140	11.1	April 27, 2009

Cascaded Integrator Comb Compiler (CIC Compiler)

[Product Page](#)

Version	Release Note	Initial Release	Date
v4.0	54494	Vivado 2013.1	April 3, 2013
v3.0	29297	13.2	July 6, 2011
v2.0	29297	12.1	April 23, 2010
v1.3	29297	11.3	September 16, 2009
v1.2	29297	10.1 IP Update 1	April 25, 2008
v1.1	29297	10.1 Initial IP Update	March 24, 2008

Complex Multiplier

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Version	Release Note	Initial Release	Date
v6.0	54495	Vivado 2013.1	April 3, 2013
v5.0	21591	13.1	March 1, 2011
v4.0	21591	12.3	October 5, 2010
v3.1	21591	11.4	December 2, 2009
v3.0	21591	11.1	April 27, 2009
v2.1	21591	7.1i IP Update 0	April 28, 2005

CORDIC[Product Page](#)

Version	Release Note	Initial Release	Date
v6.0	54497	Vivado 2013.1	April 3, 2013
v5.0	29570	13.3	October 26, 2011
v4.0	29570	11.1	April 27, 2009
v3.0	29570	6.3i IP Update 1	May 21, 2004

Direct Digital Synthesizer Compiler (DDS Compiler)[Product Page](#)

Version	Release Note	Initial Release	Date
v6.0	54498	Vivado 2013.1	April 3, 2013
v5.0	29976	12.3	October 5, 2010
v4.0	29976	11.3	September 16, 2009
v3.0	29976	11.2	June 24, 2009
v2.1	29976	10.1 Initial IP Update	March 24, 2008

Divider[Product Page](#)

Version	Release Note	Initial Release	Date
v5.0	54499	Vivado 2013.1	April 3, 2013
v4.0	29120	13.2	July 6, 2011
v3.0	29120	11.2	June 24, 2009
v2.0	29120	10.1 IP Update 2	June 27, 2008
v1.0	29120	8.1i IP Update 1	January 18, 2006

Discrete Fourier Transform (DFT)[Product Page](#)

Version	Release Note	Initial Release	Date
v4.0	54475	Vivado 2013.1	April 3, 2013
v3.1	29978	11.4	December 2, 2009
v3.0	29978	10.1 IP Update 2	June 27, 2008
v2.1	29978	10.1 Initial IP Update	March 24, 2008

DSP48 Macro[Product Page](#)

Version	Release Note	Initial Release	Date
v3.0	54500	Vivado 2013.1	April 3, 2013
v2.1	33537	13.1	March 1, 2011
v2.0	33537	11.4	December 2, 2009

DUC/DDC Compiler[Product Page](#)

Version	Release Note	Initial Release	Date
v3.0	54476	Vivado 2013.1	April 3, 2013
v2.0	36823	13.2	July 6, 2011
v1.1	36823	12.3	October 5, 2010
v1.0	36823	12.2	July 23, 2010

Fast Fourier Transform (FFT)[Product Page](#)

Version	Release Note	Initial Release	Date
v9.0	54501	Vivado 2013.1	April 3, 2013
v8.0	29209	12.3	October 5, 2010
v7.1	29209	12.1	April 23, 2010
v7.0	29209	11.2	June 24, 2009
v6.0	29209	10.1 IP Update 3	September 19, 2008
v5.0	29209	9.2i IP Update 2	October 17, 2007

FIR Compiler[Product Page](#)

Version	Release Note	Initial Release	Date
v7.0	54502	Vivado 2013.1	April 3, 2013
v6.3	29138	13.3	October 26, 2011
v6.2	29138	13.1	March 1, 2011
v6.1	29138	12.4	December 10, 2010
v6.0	29138	12.3	October 5, 2010
v5.0	29138	11.2	June 24, 2009
v4.0	29138	10.1 IP Update 2	June 27, 2008
v3.2	29138	9.2i IP Update 2	October 17, 2007

Floating-Point Operator[Product Page](#)

Version	Release Note	Initial Release	Date
v7.0	54504	Vivado 2013.1	April 3, 2013
v6.1	29598	14.2/Vivado 2012.2	July 25, 2012
v6.0	29598	13.2	July 6, 2011
v5.0	29598	11.2	June 24, 2009
v4.0	29598	10.1 IP Update 1	April 25, 2008
v3.0	29598	8.1i IP Update 2	October 3, 2006

LTE Fast Fourier Transform (FFT)[Product Page](#)

Version	Release Note	Initial Release	Date
v2.0	54882	Vivado 2013.1	April 3, 2013
v1.0	36977	12.2	July 23, 2010

Multiplier[Product Page](#)

Version	Release Note	Initial Release	Date
v12.0	54506	Vivado 2013.1	April 3, 2013
v11.2	30160	11.3	September 16, 2009
v11.0	30160	11.1	April 27, 2009
v10.1	30160	10.1 IP Update 1	April 25, 2008
v10.0	30160	9.1i IP Update 2	April 2, 2007

Multiply Accumulator (MACC)[Product Page](#)

Version	Release Note	Initial Release	Date
v3.0	54509	Vivado 2013.1	April 3, 2013
v2.0	30161	11.1	April 27, 2009

Multiply Adder[Product Page](#)

Version	Release Note	Initial Release	Date
v3.0	54507	Vivado 2013.1	April 3, 2013
v2.0	32141	11.1	April 27, 2009

RAM-based Shift Register[Product Page](#)

Version	Release Note	Initial Release	Date
v12.0	54508	Vivado 2013.1	April 3, 2013
v11.0	32142	11.1	April 27, 2009

Sine Cosine Look-Up Table (Sin Cos LUT)[Product Page](#)

Version	Release Note	Initial Release	Date
v5.0	30162	6.3i IP Update 1	May 21, 2004

VLYNQ™

[Product Page](#)

Version	Release Note	Initial Release	Date
v1.4	23509	11.1	April 27, 2009
v1.3	23509	10.1 Initial IP Update	March 24, 2008

DSP Digital Communications

3GPP Downlink Chip Rate

[Product Page](#)

Version	Release Note	Initial Release	Date
v1.0	30163	9.2i IP Update 1	August 15, 2007

3GPP LTE Channel Estimator

[Product Page](#)

Version	Release Note	Initial Release	Date
v2.0	54467	Vivado 2013.1	April 3, 2013
v1.1	38011	13.3	October 26, 2011
v1.0	38011	12.3	October 5, 2010

3GPP LTE MIMO Decoder

[Product Page](#)

Version	Release Note	Initial Release	Date
v3.0	54468	Vivado 2013.1	April 3, 2013
v2.1	33758	13.2	July 6, 2011
v2.0	33758	12.4	December 20, 2010
v1.0	33758	11.4	December 2, 2009

3GPP LTE MIMO Encoder

[Product Page](#)

Version	Release Note	Initial Release	Date
v4.0	54469	Vivado 2013.1	April 3, 2013
v3.0	33266	13.4	January 18, 2012
v2.0	33266	11.3	September 16, 2009

3GPP LTE Turbo Decoder

[Product Page](#)

Version	Release Note	Initial Release	Date
v2.0	54470	Vivado 2013.1	April 3, 2013
v2.0	30630	11.2	June 24, 2009
v1.0	30630	10.1 IP Update 1	April 25, 2008

3GPP LTE Turbo Encoder

[Product Page](#)

Version	Release Note	Initial Release	Date
v5.0	54472	Vivado 2013.1	April 3, 2013
v3.1	30631	12.1	April 23, 2010
v3.0	30631	11.1	April 27, 2009

Version	Release Note	Initial Release	Date
v2.0	30631	10.1 IP Update 3	September 19, 2008
v1.0	30631	10.1 IP Update 1	April 25, 2008

3GPP RACH Preamble Detector

[Product Page](#)

Version	Release Note	Initial Release	Date
v1.0	30164	9.2i IP Update 1	August 15, 2007

3GPP Searcher

[Product Page](#)

Version	Release Note	Initial Release	Date
v1.0	30165	9.2i IP Update 1	August 15, 2007

3GPP Turbo Convolutional Code Decoder

[Product Page](#)

Version	Release Note	Initial Release	Date
v4.1	30166	Vivado 2012.2	July 25, 2012
v4.0	30166	11.2	June 24, 2009
v3.1	30166	9.1i IP Update 3	May 17, 2007

3GPP Turbo Convolutional Code Encoder

[Product Page](#)

Version	Release Note	Initial Release	Date
v4.0	30167	11.2	June 24, 2009
v3.1	30167	10.1 Initial IP Update	March 24, 2008

3GPP2 Turbo Convolutional Code Decoder

[Product Page](#)

Version	Release Note	Initial Release	Date
v2.1	30168	9.1i IP Update 1	March 5, 2007

3GPP2 Turbo Convolutional Code Encoder

[Product Page](#)

Version	Release Note	Initial Release	Date
v2.0	30169	9.1i IP Update 2	April 2, 2007

802.16E Convolutional Turbo Code (CTC) Decoder

[Product Page](#)

Version	Release Note	Initial Release	Date
v4.0	29447	11.2	June 24, 2009
v3.1	29447	10.1 IP Update 3	September 19, 2008

Version	Release Note	Initial Release	Date
v3.0	29447	9.2i IP Update 2	October 17, 2007

802.16E Convolutional Turbo Code (CTC) Encoder

[Product Page](#)

Version	Release Note	Initial Release	Date
v3.0	30170	11.1	April 27, 2009
v2.1	30170	9.1i IP Update 2	April 2, 2007

Additive White Gaussian Noise Generator (AWGN)

[Product Page](#)

Version	Release Note	Initial Release	Date
v1.0	30171	Stand Alone	October 30, 2002

Convolutional Encoder

[Product Page](#)

Version	Release Note	Initial Release	Date
v9.0	54496	Vivado 2013.1	April 3, 2013
v8.0	30172	13.4	January 18, 2012
v7.0	30172	11.2	June 24, 2009
v6.1	30172	9.1i IP Update 3	May 17, 2007

Digital Pre-Distortion (DPD) (AXI)

[Product Page](#)

Version	Release Note	Initial Release	Date
v6.0	33521	14.3	10/16/2012
v5.0	33521	13.2	July 6, 2011
v4.0	33521	12.3	October 25, 2010
v3.1	33521	12.1	April 23, 2010

DVB-S.2 FEC Encoder

[Product Page](#)

Version	Release Note	Initial Release	Date
v2.0	30173	11.4	December 2, 2009
v1.4	30173	10.1 IP Update 2	June 27, 2008
v1.3	30173	9.1i IP Update 3	May 17, 2007

G.975.1 EFEC I.7 Encoder/Decoder

[Product Page](#)

Version	Release Note	Initial Release	Date
v2.0	54479	Vivado 2013.1	April 3, 2013

Version	Release Note	Initial Release	Date
v1.0	52189	14.3/Vivado 2012.3	October 23, 2012

JESD204

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Version	Release Note	Initial Release	Date
v4.0	54480	Vivado 2013.1	April 3, 2013
v2.1	44405	14.1	May 8, 2012
v1.1	44405	13.3	October 26, 2011

Interleaver/De-interleaver

[Product Page](#)

Version	Release Note	Initial Release	Date
v8.0	54503	Vivado 2013.1	April 3, 2013
v7.1	30174	2012.2	July 25, 2012
v7.0	30174	13.4	January 18, 2012
v6.0	30174	12.1	April 23, 2010
v5.1	30174	10.1 Initial IP Update	March 24, 2008

Linear Algebra Toolkit

[Product Page](#)

Version	Release Note	Initial Release	Date
v2.0	54505	Vivado 2013.1	April 3, 2013
v1.0	40040	13.1	March 1, 2011

LDPC 802.16 Encoder

[Product Page](#)

Version	Release Note	Initial Release	Date
v1.0	30175	8.2i IP Update 1	July 19, 2006

LTE DL Channel Encoder

[Product Page](#)

Version	Release Note	Initial Release	Date
v3.0	54481	Vivado 2013.1	April 3, 2013
v2.2	31421	Vivado 2012.2	July 25, 2012
v2.1	31421	12.1	April 23, 2010
v2.0	31421	11.1	April 27, 2009
v1.0	31421	10.1 IP Update 3	September 19, 2008

LTE UL Channel Decoder[Product Page](#)

Version	Release Note	Initial Release	Date
v4.0	54484	Vivado 2013.1	April 3, 2013
v3.0	31422	13.2	July 6, 2011
v2.0	31422	11.2	June 24, 2009
v1.0	31422	10.1 IP Update 3	September 19, 2008

LTE UL PUCCH Receiver[Product Page](#)

Version	Release Note	Initial Release	Date
v2.0	54483	Vivado 2013.1	April 3, 2013
v1.0	39974	13.1	March 1, 2011

LTE RACH Detector[Product Page](#)

Version	Release Note	Initial Release	Date
v2.0	54487	Vivado 2013.1	April 3, 2013
v1.0	35106	12.1	April 23, 2010

Mixed Mode Turbo Decoder (AXI)[Product Page](#)

Version	Release Note	Initial Release	Date
v2.0	55471	Vivado 2013.1	April 3, 2013
v1.0	45594	13.4	January 18, 2012

Peak Cancellation Crest Factor Reduction[Product Page](#)

Version	Release Note	Initial Release	Date
v4.0	54486	Vivado 2013.1	April 3, 2013
v3.0	33760	13.2	July 6, 2011
v2.0	33760	11.4	December 2, 2009

Reed-Solomon Decoder[Product Page](#)

Version	Release Note	Initial Release	Date
v9.0	54510	Vivado 2013.1	April 3, 2013
v8.0	30176	13.3	October 26, 2011
v7.1	30176	12.2	July 23, 2010
v7.0	30176	11.2	June 24, 2009
v6.1	30176	9.1i IP Update 3	May 17, 2007

Reed-Solomon Encoder

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Version	Release Note	Initial Release	Date
v9.0	54511	Vivado 2013.1	April 3, 2013
v8.0	30177	13.4	January 18, 2012
v7.1	30177	12.2	July 23, 2010
v7.0	30177	11.2	June 24, 2009
v6.1	30177	9.1i IP Update 3	May 17, 2007

Turbo Product Code (TPC) Decoder

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Version	Release Note	Initial Release	Date
v1.1	30178	Stand Alone	January 21, 2003

Turbo Product Code (TPC) Encoder

[Product Page](#)

Version	Release Note	Initial Release	Date
v1.0	30179	Stand Alone	October 30, 2002

Viterbi Decoder

[Product Page](#)

Version	Release Note	Initial Release	Date
v9.0	54512	Vivado 2013.1	April 3, 2013
v8.0	29448	13.4	January 18, 2012
v7.0	29448	11.2	June 24, 2009
v6.2	29448	9.2i IP Update 2	October 17, 2007

DSP MVI

Asynchronous Sample Rate Converter

[Product Page](#)

Version	Release Note	Initial Release	Date
v2.0	54516	Vivado 2013.1	April 3, 2013
v1.0	47209	14.1	May 8, 2012

AXI4-Stream to Video Out

[Product Page](#)

Version	Release Note	Initial Release	Date
v3.0	54517	Vivado 2013.1	April 3, 2013.1
v2.01.a	47211	14.3/Vivado 2012.3	October 23, 2012
v2.00.a	47211	14.2/Vivado 2012.2	July 25, 2012
v1.0	47211	14.1	May 8, 2012

Chroma Resampler

[Product Page](#)

Version	Release Note	Initial Release	Date
v4.0	54518	Vivado 2013.1	April 3, 2013
v3.01.a	44487	14.3/Vivado 2012.3	October 23, 2012
v3.00.a	44487	14.2/Vivado 2012.2	July 25, 2012
v2.00.a	44487	14.1	May 8, 2012
v1.0	44487	13.3	October 26, 2011

Color Correction Matrix

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Version	Release Note	Initial Release	Date
v6.0	54519	Vivado 2013.1	April 3, 2013
v5.01.a	32132	14.3/Vivado 2012.3	October 23, 2012
v5.00.a	32132	14.2/Vivado 2012.2	July 25, 2012
v4.00.a	32132	14.1	May 8, 2012
v3.0	32132	13.3	October 26, 2011
v2.0	32132	12.2	July 23, 2010
v1.0	32132	11.1	April 27, 2009

Color Filter Array Interpolation

[Product Page](#)

Version	Release Note	Initial Release	Date
v7.0	54520	Vivado 2013.1	April 3, 2013
v6.01.a	32133	14.3/Vivado 2012.3	October 23, 2012
v6.00.a	32133	14.2/Vivado 2012.2	July 25, 2012
v5.00.a	32133	14.1	May 8, 2012
v4.0	32133	13.3	October 26, 2011
v3.0	32133	12.4	December 20, 2010
v2.0	32133	12.2	July 23, 2010
v1.0	32133	11.1	April 27, 2009

Defective Pixel Correction

[Product Page](#)

Version	Release Note	Initial Release	Date
v7.0	54521	Vivado 2013.1	April 3, 2013
v6.01.a	32134	14.3/Vivado 2012.3	October 23, 2012
v6.00.a	32134	14.2/Vivado 2012.2	July 25, 2012
v5.00.a	32134	14.1	May 8, 2012
v4.0	32134	13.3	October 26, 2011
v3.0	32134	13.1	March 1, 2011
v2.0	32134	12.2	July 23, 2010

Version	Release Note	Initial Release	Date
v1.0	32134	11.1	April 27, 2009

DisplayPort

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Version	Release Note	Initial Release	Date
v4.0	54522	Vivado 2013.1	April 3, 2013
v3.2	33258	14.2/Vivado 2012.2	July 25, 2012
v3.1	33258	14.1	May 8, 2012
v2.3	33258	13.2	July 6, 2011
v2.2	33258	13.1	March 1, 2011
v2.1	33258	12.3	October 5, 2010
v1.3	33258	12.2	July 23, 2010
v1.2	33258	12.1	May 3, 2010
v1.1	33258	11.4	December 2, 2009

Gamma Correction

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Version	Release Note	Initial Release	Date
v7.0	54523	Vivado 2013.1	April 3, 2013
v6.01.a	32135	14.3/Vivado 2012.3	October 23, 2012
v6.00.a	32135	14.2/Vivado 2012.2	July 25, 2012
v5.00.a	32135	14.1	May 8, 2012
v4.0	32135	13.3	October 26, 2011
v3.0	32135	12.3	October 5, 2010
v2.0	32135	12.2	July 23, 2010
v1.0	32135	11.1	April 27, 2009

H.264 Deblocking Filter

Note: This core has been discontinued.

Version	Release Note	Initial Release	Date
v1.0	25253	Stand Alone	May 31, 2007

H.264 CABAC Encoder

Note: This core has been discontinued.

Version	Release Note	Initial Release	Date
v1.0	25254	Stand Alone	May 31, 2007

H.264 Motion Estimation Engine

Note: This core has been discontinued.

Version	Release Note	Initial Release	Date
v1.0	29129	Stand Alone	October 24, 2007

Image Characterization

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Version	Release Note	Initial Release	Date
v3.0	54524	Vivado 2013.1	April 3, 2013
v2.0	34574	13.3	October 26, 2011
v1.1	34574	12.3	October 5, 2010
v1.0	34574	12.1	May 3, 2010

Image Edge Enhancement

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Version	Release Note	Initial Release	Date
v7.0	54525	Vivado 2013.1	April 3, 2013
v5.01.a	33749	14.3/Vivado 2012.3	October 23, 2012
v5.00.a	33749	14.2/Vivado 2012.2	July 25, 2012
v4.00.a	33749	14.1	May 8, 2012
v3.0	33749	13.3	October 26, 2011
v2.0	33749	12.4	December 20, 2010
v1.0	33749	11.4	December 2, 2009

Image Noise Reduction

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Version	Release Note	Initial Release	Date
v6.0	54526	Vivado 2013.1	April 3, 2013
v5.01.a	33750	14.3/Vivado 2012.3	October 23, 2012
v5.00.a	33750	14.2/Vivado 2012.2	July 25, 2012
v4.00.a	33750	14.1	May 8, 2012
v3.0	33750	13.3	October 26, 2011
V2.0	33750	12.4	December 20, 2010
v1.0	33750	11.4	December 2, 2009

Image Processing Pipeline

Note: This core has been discontinued.

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Version	Release Note	Initial Release	Date
v1.0	32136	11.1	April 27, 2009

Image Statistics Engine

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Version	Release Note	Initial Release	Date
v6.0	54527	Vivado 2013.1	April 3, 2013
v5.01.a	33748	14.3/Vivado 2012.3	October 23, 2012
v5.00.a	33748	14.2/Vivado 2012.2	July 25, 2012

Version	Release Note	Initial Release	Date
v4.00.a	33748	14.1	May 8, 2012
v3.0	33748	14.1	May 8, 2012
v3.0	33748	13.3	October 26, 2011
v2.0	33748	13.1	March 1, 2011
v1.0	33748	11.4	December 2, 2009

Motion Adaptive Noise Reduction

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Version	Release Note	Initial Release	Date
v6.0	54528	Vivado 2013.1	April 3, 2013
v5.00.a	33751	14.2/Vivado 2012	July 25, 2012
v4.00.a	33751	14.1	May 8, 2012
v3.0	33751	13.3	October 26, 2011
v2.0	33751	13.1	March 1, 2011
v1.1	33751	12.3	October 5, 2010
v1.0	33751	11.4	December 2, 2009

MPEG-4 Part 2 Simple Profile Decoder (MPEG-4 Part 2 SP)

Note: This core has been discontinued.

Version	Release Note	Initial Release	Date
v1.1	30157	Stand Alone	April 4, 2006

MPEG-4 Part 2 Simple Profile Encoder (MPEG-4 Part 2 SP)

Note: This core has been discontinued.

Version	Release Note	Initial Release	Date
v1.1	30158	Stand Alone	December 15, 2006

Object Segmentation

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Version	Release Note	Initial Release	Date
v3.0	54529	Vivado 2013.1	April 3, 2013
v2.0	38992	13.3	October 26, 2011
v1.0	38992	13.1	March 1, 2011

RGB to YCrCb Color-Space Converter (RGB2YCrCb)

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Version	Release Note	Initial Release	Date
v7.0	54530	Vivado 2013.1	April 3, 2013
v6.01.a	29982	14.3/Vivado 2012.3	October 23, 2012
v6.00.a	29982	14.2/Vivado 2012.2	July 25, 2012
v5.00.a	29982	14.1	May 8, 2012

Version	Release Note	Initial Release	Date
v4.0	29982	13.3	October 26, 2011
v3.0	29982	12.2	July 23, 2010
v2.0	29982	11.1	April 27, 2009
v1.0	29982	10.1 Initial IP Update	March 24, 2008

SMPTE SD/HD/3G-SDI

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Version	Release Note	Initial Release	Date
v2.0	54531	Vivado 2013.1	April 3, 2013
v1.0	50905	14.2/Vivado 2012.2	July 25, 2012

SMPTE2022-5/6 Video Over IP Receiver

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Version	Release Note	Initial Release	Date
v3.0	54534	Vivado 2013.1	April 3, 2013
v2.0	47208	14.2/Vivado 2012.2	July 25, 2012
v1.0	47208	14.1	May 8, 2012

SMPTE2022-5/6 Video Over IP Transmitter

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Version	Release Note	Initial Release	Date
v3.0	54535	Vivado 2013.1	April 3, 2013
v2.0	47207	14.2/Vivado 2012.2	July 25, 2012
v1.0	47207	14.1	May 8, 2012

Spartan-6 FPGA Triple-Rate SDI

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Version	Release Note	Initial Release	Date
v1.0	42805	13.2	July 6, 2011

Virtex-6 FPGA Triple-Rate SDI

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Version	Release Note	Initial Release	Date
v1.0	40473	13.1	March 1, 2011

Video Deinterlacer

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Version	Release Note	Initial Release	Date
v4.0	54537	Vivado 2013.1	April 3, 2013
v3.00.a	41969	14.3/Vivado 2012.3	October 23, 2012
v2.00.a	41969	14.1	May 8, 2012

Version	Release Note	Initial Release	Date
v1.0	41969	13.3	October 26, 2011

Video Into AXI4-Stream

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Version	Release Note	Initial Release	Date
v3.0	54538	Vivado 2013.1	April 3, 2013
v2.01.a	47210	14.3/Vivado 2012.3	October 23, 2012
v2.00.a	47210	14.2/Vivado 2012.2	July 25, 2012
v1.0	47210	14.1	May 8, 2012

Video Scaler

[Product Page](#)

Version	Release Note	Initial Release	Date
v8.0	54540	Vivado 2013.1	April 3, 2013
v7.01.a	31958	14.3/Vivado 2012.3	October 23, 2012
v7.00.a	31958	14.2/Vivado 2012.2	July 25, 2012
v6.00.a	31958	14.1	May 8, 2012
v5.0	31958	13.3	October 26, 2011
v4.0	31958	13.1	March 1, 2011
v3.0	31958	12.3	October 5, 2010
v2.1	31958	12.1	May 3, 2010
v2.0	31958	11.3	September 16, 2009
v1.0	31958	11.1	April 27, 2009

Video Timing Controller

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Version	Release Note	Initial Release	Date
v6.0	54541	Vivado 2013.1	April 3, 2013
v5.01.a	32754	14.3/Vivado 2012.3	October 23, 2012
v5.00.a	32754	14.2/Vivado 2012.2	July 25, 2012
v4.00.a	32754	14.1	May 8, 2012
v3.0	32754	13.2	July 6, 2011
v2.1	32754	12.3	October 5, 2010
v2.0	32754	11.4	December 2, 2009
v1.0	32754	11.2	June 24, 2009

Video Direct Memory Access

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Version	Release Note	Initial Release	Date
v1.1	33256	12.3	October 5, 2010
v1.0	33256	11.3	September 16, 2009

Video On-Screen Display

[Product Page](#)

Version	Release Note	Initial Release	Date
v6.0	54539	Vivado 2013.1	April 3, 2013
v5.00.a	33257	14.2/Vivado 2012.2	July 25, 2012
v4.00.a	33257	14.1	May 8, 2012
v3.0	33257	13.3	October 26, 2011
v2.0	33257	13.1	March 7, 2011
v1.0	33257	11.3	September 16, 2009

YCrCb to RGB Color-Space Converter (YCrCb2RGB)

[Product Page](#)

Version	Release Note	Initial Release	Date
v7.0	54542	Vivado 2013.1	April 3, 2013
v6.01.a	29980	14.3/Vivado 2012.3	October 23, 2012
v6.00.a	29980	14.2/Vivado 2012.2	July 25, 2012
v5.00.a	29980	14.1	May 8, 2012
v4.0	29980	13.3	October 26, 2011
v3.0	29980	12.2	July 23, 2010
v2.0	29980	11.1	April 27, 2009
v1.0	29980	10.1 Initial IP Update	March 24, 2008

Embedded IP

Embedded IP Master Answer Records

Release Note	Initial Release	Date
47392	14.3	October 23, 2012
47392	14.2	July 25, 2012
47392	14.1	May 8, 2012
39843	13.4	January 18, 2012
39843	13.3	October 26, 2011
39843	13.2	July 7, 2011
39843	13.1	March 1, 2011
34609	12.4	December 10, 2010
34609	12.3	October 5, 2010
34609	12.2	July 23, 2010
34609	12.1	April 23, 2010
32168	11.4	December 2, 2009
32168	11.3	September 16, 2009
32168	11.2	June 24, 2009
32168	11.1	April 27, 2009
30704	10.1 EDK SP3	September 19, 2008
30704	10.1 EDK SP2	June 27, 2008
30704	10.1 EDK SP1	April 25, 2008
29760	9.2i EDK SP2	December 17, 2007
29760	9.2i EDK SP1	November 1, 2007
29254	9.2i EDK	October 22, 2007
25239	9.1i EDK SP2	May 14, 2007
24309	8.2i EDK SP2	October 30, 2006
23313	8.1i EDK SP2	April 21, 2006
25091	7.1i EDK SP2	July 12, 2005

For information on which devices are supported by Embedded IP, see:

[Derivative Family Support](#)

MicroBlaze Microprocessor Control System

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Version	Release Note	Initial Release	Date
v2.0	54414	Vivado 2013.1	April 3, 2013
v1.2	46420	14.2	July 25, 2012
v1.0	46420	13.4	January 18, 2012

FPGA Features and Design

7 Series FPGA Transceiver Wizard

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Version	Release Note	Initial Release	Date
v2.6	56454	14.6	June 19, 2013
v2.5	55163	14.5	April 3, 2013
v2.5	54691	Vivado 2013.1	April 3, 2013
v2.4	53396	14.4/Vivado 2012.4	December 18, 2012
v2.3	52263	14.3/Vivado 2012.3	October 23, 2012
v2.2	50827	14.2/Vivado 2012.2	July 25, 2012
v2.1	47477	14.1/Vivado 2012.1	May 8, 2012
v1.6	45685	13.4	January 18, 2012
v1.5	44463	13.3	October 26, 2011
v1.4	42809	13.2	July 6, 2011
v1.3	40748	13.1	March 1, 2011

Clocking Wizard

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Version	Release Note	Initial Release	Date
v4.5	54102	Vivado 2013.1	April 3, 2013
v4.4	53157	Vivado 2012.4	December 18, 2012
v4.3	52090	Vivado 2012.3	October 23, 2012
v3.6/v4.2	50719	14.2/Vivado 2012.2	July 25, 2012
v3.5	47620	14.1	May 8, 2012
v3.3	44517	13.4	January 18, 2012
v3.2	44517	13.3	October 26, 2011
v1.4	33910	11.4	December 8, 2009

RocketIO™ GT11 Transceiver Wizard (Virtex-4 FX Family)

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Version	Release Note	Initial Release	Date
v1.7	31519	10.1 IP Update 3	September 19, 2008
v1.6	30576	10.1 Initial IP Update	March 24, 2008
v1.5	25437	9.2i IP Update 1	August 15, 2007

RocketIO GTP Transceiver Wizard (Virtex-5 LXT or SXT Platform)

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Version	Release Note	Initial Release	Date
v1.10	31517	11.2	June 24, 2009
v1.9	30955	10.1 Initial IP Update 2	June 27, 2008
v1.8	30575	10.1 Initial IP Update	March 24, 2008

Version	Release Note	Initial Release	Date
v1.7	29368	9.2i IP Update 2	October 17, 2007
v1.6	25475	9.1i IP Update 1	March 5, 2007

RocketIO GTX Transceiver Wizard (Virtex-5 FXT Platform)

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Version	Release Note	Initial Release	Date
v1.6	32748	11.2	June 24, 2009
v1.5	31518	10.1 IP Update 3	September 19, 2008
v1.4	30954	10.1 IP Update 2	June 27, 2008
v1.3	30636	10.1 IP Update 1	April 25, 2008
v1.2	30577	10.1 Initial IP Update	March 24, 2008

SelectIO Interface Wizard

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Version	Release Note	Initial Release	Date
v5.0	54649	Vivado 2013.1	April 3, 2013
v4.2/v4.1	47635	14.2/Vivado 2012.2	July 25, 2012
v4.1	47635	14.1	May 8, 2012
v3.3	44514	13.4	January 18, 2012
v3.2	41644	13.3	October 26, 2011
v1.2	33911	11.4	December 8, 2009

Virtex-6 FPGA GTX Transceiver Wizard

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Version	Release Note	Initial Release	Date
v1.12	45686	13.4	January 18, 2012
v1.11	44489	13.3	October 26, 2011
v1.10	42806	13.2	July 6, 2011
v1.9	40739	13.1	March 1, 2011
v1.8	39757	12.4	December 20, 2010
v1.7	38396	12.3	October 5, 2010
v1.4	33864	11.4	December 2, 2009
v1.3	33469	11.3	September 16, 2009
v1.2	32746	11.2	June 24, 2009

Virtex-6 FPGA GTH Transceiver Wizard

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Version	Release Note	Initial Release	Date
v1.11	47478	14.1	May 8, 2012
v1.7 Rev 3	47479	14.1	May 8, 2012
v.1.10	45660	13.4	January 18, 2012

Version	Release Note	Initial Release	Date
v1.9	44488	13.3	October 26, 2011
v1.8	41518	13.2	July 6, 2011
v1.7	40746	13.1	March 1, 2011
v1.6	39758	12.4	December 20, 2010
v1.5	38397	12.3	October 5, 2010
v1.2	33866	11.4	December 2, 2009
v1.1	33470	11.3	September 16, 2009

Spartan-6 FPGA GTP Transceiver Wizard

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Version	Release Note	Initial Release	Date
v1.11	44490	13.3	October 26, 2011
v1.10	42807	13.2	July 7, 2011
v1.9	40745	13.1	March 1, 2011
v1.8	39755	12.4	December 20, 2010
v1.7	38398	12.3	October 5, 2010
v1.4	33865	11.4	December 2, 2009
v1.3	33468	11.3	September 16, 2009
v1.2	32747	11.2	June 24, 2009

System Monitor Wizard

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Version	Release Note	Initial Release	Date
v2.1	40949	13.1	March 1, 2011
v1.0	24512	9.1i	March 5, 2007

XADC Wizard

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Version	Release Note	Initial Release	Date
v3.0	54260	Vivado 2013.1	April 3, 2013
v2.4	53158	Vivado 2012.4	December 18, 2012
v2.3	52088	Vivado 2012.3	October 23, 2012
v4.1/v2.1	50720	14.2/Vivado 2012.2	July 25, 2012
v1.4	40906	13.4	January 18, 2012
v1.3	40906	13.3	October 26, 2011
v1.0	40906	13.1	March 1, 2011

Memories and Storage Elements

Block Memory Generator

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Version	Release Note	Initial Release	Date
v8.0	54662	Vivado 2013.1	April 3, 2013
v7.3	50918	14.3/Vivado 2012.3	October 23, 2012
v7.2	50960	14.2/Vivado 2012.2	July 25, 2012
v7.1	47736	14.1	May 8, 2012
v6.3	45701	13.4	August 18, 2012
v6.2	42712	13.2	July 6, 2011
v6.1	40591	13.1	March 1, 2011
v4.3	38076	12.3	October 5, 2010
v4.2	36456	12.2	July 23, 2010
v4.1	35523	12.1	April 23, 2010
v3.3	33298	11.3	September 16, 2009
v3.2	32770	11.2	June 24, 2009
v3.1	32202	11.1	April 27, 2009
v2.8	31556	10.1 IP Update 3	September 19, 2008
v2.7	30055	10.1 Initial IP Update	March 24, 2008
v2.6	29247	9.2i IP Update 2	October 17, 2007
v2.5	25459	9.2i IP Update 1	August 15, 2007
v2.4.1	24555	9.1i IP Update 2	April 2, 2007
v2.4	24555	9.1i IP Update 1	March 5, 2007
v2.3	24229	8.2i IP Update 3	December 7, 2006
v2.2	23849	8.2i IP Update 2	October 3, 2006
v2.1	23849	8.2i IP Update 1	July 19, 2006

Content Addressable Memory (CAM)

Note: This Core has been discontinued.

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Version	Release Note	Initial Release	Date
v6.1	31558	10.1 IP Update 3	September 19, 2008

Distributed Memory Generator

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Version	Release Note	Initial Release	Date
v8.0	54661	Vivado 2013.1	April 3, 2013
v7.2	50961	14.2/Vivado 2012.2	July 25, 2012
v7.1	47737	14.1	May 8, 2012
v6.3	45703	13.4	January 18, 2012
v6.2	42716	13.2	July 6, 2011
v4.2	33299	11.3	September 16, 2009

Version	Release Note	Initial Release	Date
v4.1.1	32771	11.2	June 24, 2009
v4.1	32203	11.1	April 27, 2009
v3.4	30057	10.1 Initial IP Update	March 24, 2008
v3.3.1	24553	9.1i IP Update 2	April 2, 2007
v3.3	24553	9.1i IP Update 1	March 5, 2007
v3.2	23848	8.2i IP Update 2	October 3, 2006
v3.1	23491	8.2i IP Update 1	July 19, 2006

FIFO Generator

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Version	Release Note	Initial Release	Date
v10.0	54663	Vivado 2013.1	April 3, 2013
v9.3	50917	14.3/Vivado 2012.3	October 23, 2012
v9.2	50959	14.2/Vivado 2012.2	July 25, 2012
v9.1	47735	14.1	May 8, 2012
v8.4	45700	13.4	January 18, 2012
v8.3	44594	13.3	October 26, 2011
v8.2	42715	13.2	July 6, 2011
v8.1	40592	13.1	March 1, 2011
v7.2	37976	12.3	October 5, 2010
v6.2	36426	12.2	July 23, 2010
v6.1	35524	12.1	April 23, 2010
v5.3	33297	11.3	September 16, 2009
v5.2	32769	11.2	June 24, 2009
v5.1	32201	11.1	April 27, 2009
v4.4	31557	10.1 IP Update 3	September 19, 2008
v4.3	30056	10.1 Initial IP Update	March 24, 2008
v4.2	29246	9.2i IP Update 2	October 17, 2007
v4.1	25458	9.2i IP Update 1	August 15, 2007
v3.3.1	24552	9.1i IP Update 2	April 2, 2007
v3.3	24552	9.1i IP Update 1	March 5, 2007
v3.2	23847	8.2i IP Update 2	October 3, 2006
v3.1	23490	8.2i IP Update 1	July 19, 2006
v2.2	21848	7.1i IP Update 3	August 31, 2006

Packet Queue

Note: This core has been discontinued.

Version	Release Note	Initial Release	Date
v2.2	25463	9.2i IP Update 1	August 15, 2007
v2.1	24562	9.1i IP Update 1	March 5, 2007
v1.2	22842	8.2i IP Update 1	July 19, 2006

Memory Interface Generator (MIG) 7 Series

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Version	Release Note	Initial Release	Date
V1.9	54025	Vivado 2013.1	April 3, 2013
V1.9	45195	14.5	April 3, 2013
v1.8	45195	14.4/Vivado 2012.4	December 18, 2012
v1.7	45195	14.3/Vivado 2012.3	October 23, 2012
v1.6	45195	14.2	July 25, 2012
v1.5	45195	14.1	May 8, 2012
v1.4	45195	13.4	January 18, 2012
v1.3	45195	13.3	October 26, 2011
v1.2	45195	13.2	July 6, 2011
v1.1	45195	13.1	March 1, 2011

Memory Interface Generator (MIG) Virtex-6 and Spartan-6

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Version	Release Note	Initial Release	Date
v3.92	50642	14.1	May 8, 2012
v3.91	45194	13.4	January 18, 2012
v3.9	43130	13.3	October 26, 2011
v3.8	41347	13.2	July 6, 2011
v3.7	39128	13.1	March 1, 2011
v3.61	38951	12.4	December 20, 2010
v3.6	37173	12.3	October 5, 2010
v3.5	36211	12.2	July 23, 2010
v3.4	34587	12.1	April 23, 2010
v3.3	33706	11.4	December 2, 2009
v3.2	33249	11.3	September 16, 2009
v3.1	32641	11.2	June 24, 2009

Memory Interface Generator (MIG)

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Version	Release Note	Initial Release	Date
v3.61	38951	12.4	December 20, 2010
v3.6	37173	12.3	October 5, 2010
v3.5	36211	12.2	July 23, 2010
v3.4	34587	12.1	April 23, 2010
v3.3	33706	11.4	December 2, 2009
v3.2	33249	11.3	September 16, 2009
v3.1	32641	11.2	June 24, 2009
v3.0	32090	11.1	April 27, 2009
v2.3	31402	10.1 IP Update 3	September 19, 2008

Version	Release Note	Initial Release	Date
v2.2	30411	10.1 IP Update 1	April 25, 2008
v2.1	29911	10.1 Initial IP Update	March 24, 2008
v2.0	29312	9.2i IP Update 2	October 17, 2007
v1.73	25406	9.1i IP Update 3	May 17, 2007
v1.72	25056	9.1i IP Update 1	March 5, 2007
v1.7	24541	NA	March 21, 2007
v1.6	23787	NA	July 28, 2006
v1.5	22937	NA	February 15, 2006
v1.4	21971	NA	November 4, 2005

Standard Bus Interfaces

7 Series Integrated Block for PCI Express

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Version	Release Note	Initial Release	Date
v2.0	54643	Vivado 2013.1	April 3, 2013
v1.9	40469	14.5	April 3, 2013
v1.8	40469	14.4/Vivado 2012.4	December 18, 2012
v1.7	40469	14.3/Vivado 2012.3	October 23, 2012
v1.6	40469	14.2/Vivado 2012.2	July 25, 2012
v1.4	40469	14.1	May 8, 2012
v1.3	40469	13.4	January 18, 2012
v1.2	40469	13.3	October 26, 2011
v1.1 Rev 1	40469	13.2	July 6, 2011
v1.1	40469	13.1	March 1, 2011

AXI Bridge for PCI Express

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Version	Release Note	Initial Release	Date
v2.0	54646	Vivado 2013.1	April 3, 2013
v1.07.a	44969	14.5	April 3, 2013
v1.06.a	44969	14.4/Vivado 2012.4	December 18, 2012
v1.05.a	44969	14.3/Vivado 2012.3	October 23, 2012
v1.04.a	44969	14.2	July 25, 2012
v1.03.a	44969	14.1	May 8, 2012
v1.02.a	44969	13.4	January 18, 2012

Virtex-6 FPGA Integrated Block for PCI Express

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Version	Release Note	Initial Release	Date
v2.5	45723	13.4	January 18, 2012
v2.4	42756	13.2	July 7, 2011
v2.3	40445	13.1	March 1, 2011
v1.7	40446	13.1	March 1, 2011
v2.2	39353	12.4	December 20, 2010
v2.1	37937	12.3	October 5, 2010
v1.6	37936	12.3	October 5, 2010
v1.5	35322	12.1	April 23, 2010
v1.4	33763	11.4	December 2, 2009
v1.3	33276	11.3	September 16, 2009
v1.2	32742	11.2	June 24, 2009

Virtex-7 FPGA Gen3 Integrated Block for PCI Express

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Version	Release Note	Initial Release	Date
v2.0	54645	Vivado 2013.1	April 3, 2013
v1.5	47441	14.5	April 3, 2013
v1.4	47441	14.4/Vivado 2012.4	December 18, 2012
v1.3	47441	14.3/Vivado 2012.3	October 23, 2012
v1.2	47441	14.2/Vivado 2012.2	July 25, 2012
v1.1	47441	14.1	May 8, 2012

Spartan-6 FPGA Integrated Block for PCI Express

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Version	Release Note	Initial Release	Date
v2.5	45702	13.4	January 18, 2012
v2.3	42569	13.2	July 6, 2011
v2.2	39371	12.4	December 20, 2010
v2.1	37939	12.3	October 5, 2010
v1.4	37938	12.3	October 5, 2010
v1.3	35323	12.1	April 23, 2010
v1.2	33277	11.3	September 16, 2009
v1.1	32743	11.2	June 24, 2009

Endpoint Block Plus Wrapper for PCI Express

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Version	Release Note	Initial Release	Date
v1.15	42760	13.2	July 6, 2011
v1.14	35321	12.1	April 23, 2010
v1.13	33762	11.4	December 2, 2009
v1.12	33278	11.3	September 16, 2009
v1.11	32741	11.2	June 24, 2009
v1.10	32274	11.1	April 27, 2009
v1.9	31572	10.1 IP Update 3	September 19, 2008
v1.8	30980	10.1 IP Update 2	June 27, 2008
v1.7	30632	10.1 IP Update 1	April 25, 2008
v1.6	30120	10.1 Initial IP Update	March 24, 2008
v1.5	29468	9.2i IP Update 2	October 17, 2007
v1.4	25493	9.2i IP Update 1	August 15, 2007
v1.3	25162	9.1i IP Update 3	May 17, 2007
v1.2	24603	9.1i IP Update 1	March 5, 2007
v1.1	23985	8.2i IP Update 2 (Virtex-5 LXT)	October 26, 2006

Endpoint Block Wrapper for PCI Express

Note: This core has been discontinued.

Version	Release Note	Initial Release	Date
v1.7	30121	10.1 Initial IP Update	March 24, 2008
v1.6	29470	9.2i IP Update 2	October 17, 2007
v1.5	25494	9.2i IP Update 1	August 15, 2007
v1.4	25163	9.1i IP Update 3	May 17, 2007
v1.3	24604	9.1i IP Update 2	April 2, 2007
v1.2	24046	9.1i IP Update 1	March 5, 2007

Endpoint for PCI Express (Soft IP Implementation)

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Version	Release Note	Initial Release	Date
v3.7	35324	12.1	April 23, 2010
v3.6	29469	9.2i IP Update 2	October 17, 2007
v3.5	25160	9.1i IP Update 3	May 17, 2007
v3.4	24601	9.1i IP Update 1	March 5, 2007
v3.3	22320	8.2i IP Update 2	October 3, 2006
v3.2	22320	8.1i IP Update 1	July 19, 2006
v3.1	22320	8.1i IP Update 1	January 18, 2006

Endpoint PIPE for PCI Express (Soft IP Implementation)

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Version	Release Note	Initial Release	Date
v1.8	36645	12.2	July 23, 2010
v1.7	25161	9.2i IP Update 2	October 17, 2007
v1.6	24602	9.1i IP Update 3	May 17, 2007
v1.5	22232	9.1i IP Update 1	March 5, 2007
v1.4	22322	8.2i IP Update 2	October 3, 2006
v1.3	22322	8.1i IP Update 1	July 19, 2006
v1.2	21847	7.1i IP Update 3	August 31, 2005

Initiator/Target for PCI™ v3

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Version	Release Note	Initial Release	Date
v3.167	32324	11.1	April 27, 2009
v3.166	31567	10.1 IP Update 3	September 19, 2008
v3.165	30116	10.1 Initial IP Update	March 24, 2008
v3.164	29471	9.2i IP Update 2	October 17, 2007
v3.163	25495	9.1i IP Update 1	August 15, 2007
v3.162	25164	9.1i IP Update 3	May 17, 2007

Version	Release Note	Initial Release	Date
v3.161	24605	9.1i IP Update 1	March 5, 2007
v3.160	22321	8.2i IP Update 2	October 3, 2006

Initiator/Target for PCI v4

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Version	Release Note	Initial Release	Date
v5.0	54651	Vivado 2013.1	April 3, 2013
v4.18	52452	14.3/Vivado 2012.3	October 23, 2012
v4.17	50888	14.2/Vivado 2012.2	July 25, 2012
v4.16	45583	13.4	January 18, 2012
4.15	44584	13.3	October 26, 2011
4.14	42761	13.2	July 6, 2011
4.13	36646	12.2	July 23, 2010
4.12	35334	12.1	April 23, 2010
4.11	33764	11.4	December 2, 2009
4.10	33279	11.3	September 16, 2009
v4.9	32744	11.2	June 24, 2009
v4.8	31568	10.1 IP Update 3	September 19, 2008
v4.7	30633	10.1 IP Update 1	April 25, 2008
v4.6	30117	10.1 Initial IP Update	March 24, 2008
v4.5	29472	9.2i IP Update 2	October 17, 2007
v4.4	25496	9.2i IP Update 1	August 15, 2007
v4.3	25165	9.1i IP Update 3	May 17, 2007
v4.2	24606	9.1i IP Update 1	March 5, 2007
v4.1	22321	8.2i IP Update 2	October 3, 2006

Initiator/Target for PCI-X™ v5

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Version	Release Note	Initial Release	Date
v5.166	31569	10.1 IP Update 3	September 19, 2008
v5.165	30118	10.1 Initial IP Update	March 24, 2008
v5.164	29473	9.2i IP Update 2	October 17, 2007
v5.163	25497	9.2i IP Update 1	August 15, 2007
v5.162	25166	9.1i IP Update 3	May 17, 2007
v5.161	24607	9.1i IP Update 1	March 5, 2007
v5.160	22321	8.2i IP Update 2	October 3, 2006

Initiator/Target for PCI-X v6 (Virtex-5 FPGA)[Product Page](#)

Version	Release Note	Initial Release	Date
v6.8	31570	10.1 IP Update 3	September 19, 2008
v6.7	30634	10.1 IP Update 1	April 25, 2008
v6.6	30119	10.1 Initial IP Update	March 24, 2008
v6.5	29474	9.2i IP Update 2	October 17, 2007
v6.4	25498	9.2i IP Update 1	August 15, 2007
v6.3	25167	9.1i IP Update 3	May 17, 2007
v6.2	24608	9.1i IP Update 1	March 5, 2007
v6.1	22321	8.2i IP Update 2	October 3, 2006

UCF Generator for PCI/PCI-X

Version	Release Note	Initial Release	Date
v2.8	31571	10.1 IP Update 3	September 19, 2008
v2.7	30635	10.1 IP Update 1	April 25, 2008
v2.6	30122	10.1 Initial IP Update	March 24, 2008
v2.5	29475	9.2i IP Update 2	October 17, 2007
v2.4	25499	9.2i IP Update 1	August 15, 2007
v2.3	25168	9.1i IP Update 3	May 17, 2007
v2.2	24609	9.1i IP Update 1	March 5, 2007
v2.1	22321	8.2i IP Update 2	October 3, 2006

Serial RapidIO[Product Page](#)

Version	Release Note	Initial Release	Date
v5.6	40519	13.1	March 1, 2011
v5.5	35157	12.1	May 5, 2010
v5.4	33312	11.3	September 16, 2009
v5.3	32768	11.2	June 24, 2009
v5.2	32196	11.1	April 27, 2009
v5.1	31573	10.1 IP Update 3	September 19, 2008
v4.4	30941	10.1 IP Update 2	June 27, 2008
v4.3	30059	10.1 Initial IP Update	March 24, 2008
v4.2	25462	9.2i IP Update 2	October 17, 2007
v4.1	23850	9.1i IP Update 1	March 5, 2007

Serial RapidIO Gen2[Product Page](#)

Version	Release Note	Initial Release	Date
v2.0	54648	Vivado 2013.1	April 3, 2013
v1.7	55339	14.5	April 3, 2013

Version	Release Note	Initial Release	Date
v1.6	52797	14.4/Vivado 2012.4	December 18, 2012
v1.5	50829	14.2/Vivado 2012.2	July 25, 2012
v1.4	47190	14.1	May 8, 2012
v1.3	45708	13.4	January 18, 2012
v1.2	44605	13.3	October 26, 2011

Revision History

The following table shows the revision history for this document.

Date	Version	Revision
11/21/07	1.0	Initial Xilinx release.
03/24/08	1.1	Added Wireless category, which includes CPRI and OBSAI. Updated for 10.1 Initial IP Update. Added revision summary to first page. Corrected FlexRay table. Added individual DSP core entries.
04/25/08	1.2	Added ARs for 10.1 IP Update 1 cores. Added new Turbo Decoder and 3GPP LTE Turbo Encoder cores. Updated Multiplier core naming. Updated FPGA reference naming and trademark information.
06/27/08	1.3	Added CORE Generator Software Known Issues, updated for 10.1 IP Update 2, and corrected typographical errors.
09/19/08	1.4	Updated for 10.1 IP Update 3.
04/27/09	1.5	Updated for 11.1.
06/24/09	1.6	Updated for 11.2.
06/30/09	1.6.1	Minor updates; added link to " Ethernet Statistics " on page 1, and added discontinued notice to " SPI-3 PHY " per CR# 525998.
09/16/09	1.7	Updated for 11.3.
12/02/09	1.8	Updated for 11.4.
05/03/10	1.9	Updated for 12.1
05/04/10	1.9.1	Fixed broken link
05/06/10	2.0	Updated FIFO Generator and Block Memory Generator. Updated links
07/23/10	2.1	Updated for 12.2
08/05/10	2.2	Added DUC/DDC Compiler and LTE Fast Fourier Transform (FFT). Other Minor Edits
10/05/10	2.3	Updated for 12.3
12/20/10	2.4	Updated for 12.4
03/01/11	2.5	Updated for 13.1
03/02/11	2.6	Updated links to System Monitor Wizard and XADC Wizard
05/02/11	2.7	Added LogiCORE Video Deinterlacer, v1.0
07/06/11	2.8	Updated for 13.2
10/26/11	2.9	Updated for ISE 13.3 software release
01/18/12	3.0	Updated for ISE 13.4 software release
02/23/12	3.1	Added MicroBlaze Microprocessor Control System core
05/08/12	3.2	Updated for ISE 14.1 software release
05/17/12	3.3	Updated Soft Error Mitigation

Date	Version	Revision
07/25/12	3.4	Updated for ISE 14.2 and Vivado 2012.2 Design Suite releases
07/31/12	3.5	Minor updates to ISE 14.2 and Vivado 2012.2 IP release notes
10/23/12	3.6	Updated for ISE 14.3 and Vivado 2012.3 Design Suite releases
10/26/12	3.7	Minor update to Digital Pre-Distortion (DPD) (AXI)
12/18/12	3.8	Updated for ISE 14.4 and Vivado 2012.4 Design Suite releases
04/03/13	3.9	Updated for Vivado 2013.1 Design Suite release
04/04/13	4.0	Minor update to version 3.9
05/07/13	4.1	Fix to two broken links
6/19/13	4.2	Updated for ISE Design Suite 14.6
10/21/13	4.3	Updated DPD table on page 26