# mail

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#### Virtex®-6 FPGA Development Boards and Kits

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Product Name	Purpose	Part Number	Devices Supported	Features	
Virtex-6 FPGA ML605 Evaluation Kit www.xilinx.com/ml605	General-purpose FPGA Evaluation kit	EK-V6-ML605-G	XC6VLX240T-1FFG1156	x8 PCI Express, FMC (HPC & LPC), DDR3 SO-DIMM (512 MB), PlatformFlash & BPI Flash Memory, System ACE™, USB-To-UART, USB 2.0 Host & Device, 10/100/1000 Ethernet, SFP, DVI Out, 16x2 Character Display	
Virtex-6 FPGA ML623 Characterization Kit www.xilinx.com/ml623	GTX Characterization Kit	CK-V6-ML623-G	XC6VLX240T-1FFG1156	40 SMA pairs. System ACE controller, SuperClock-2 module, 10 differential SMA connector pairs for GTX transceiver clock inputs, Three FMC HPC connectors (Each with 79 differential user-defined pairs, no GTX transceivers), USB-to- UART bridge	
Virtex-6 FPGA Connectivity Kit	Serial Connectivity Kit with Targeted Reference Design	DK-V6-CONN-G	XC6VLX240T-1FFG1156	ML605 (EK-V6-ML605-G) + Serial Connectivity FMC Module (HW-FMC-XM104-G) and Serial Connectivity Reference Design	
Virtex-6 FPGA Embedded Kit	Embedded Kit with Targeted Reference Design	DK-V6-EMBD-G	XC6VLX240T-1FFG1156	ML605 (EK-V6-ML605-G) + Embedded Reference Design	
Virtex-6 FPGA DSP Kit	DSP Kit with Targeted Reference Design	AES-V6DSP-LX240T-G	XC6VLX240T-1FFG1156	ML605 (EK-V6-ML605-G) + DSP Reference Design	
Virtex-6 FPGA Broadcast Connectivity Kit	Broadcast Connectivity Kit with Targeted Reference Design	DK-V6-BCCN-G	XC6VLX240T-1FFG1156	ML605 (EK-V6-ML605-G) + Broadcast FMC Module and Broadcast Reference Design	

#### Virtex®-5 FPGA Development Boards and Kits

Product Name	Purpose	Part Number	Devices Supported	Features
Virtex-5 FPGA ML501 www.xilinx.com/ml501	General-purpose FPGA development board	HW-V5-ML501-UNI-G	XC5VLX50FFG676	DDR2 SO-DIMM (256 MB), ZBT SRAM (1 MB), NOR Flash, PlatformFlash PROM and SPI Flash Memory, System ACE™ CompactFlash, JTAG Header or External JTAG Connector, 2x USB, 2x PS/2, 10/100/1000 Ethernet, RS-232, 2x Audio In/Out, DVI/VGA Video, XGI Expansion Port
Virtex-5 FPGA ML505 www.xilinx.com/ml505	General-purpose FPGA and RocketlO <sup>™</sup> GTP development board	HW-V5-ML505-UNI-G	XC5VLX50TFF1136	DDR2 SO-DIMM (266 MB), ZBT SRAM (1 MB), Linear, platform, and SPI flash, System ACE CompactFlash, JTAG Header or External JTAG Connector, 2x USB, 2x PS/2, 10/100/1000 Ethernet, RS-232, 2x Audio In/Out, DVI/VGA Videt XGI Expansion Port, MGT support with PCI Express, SFP, SMA, SGMII
/irtex-5 FPGA ML506 www.xilinx.com/ml506	General-purpose FPGA, DSP, and RocketIO GTP transceiver development board	HW-V5-ML506-UNI-G	XC5VSX50TFF1136	DDR2 SO-DIMM (266 MB), ZBT SRAM (1 MB), Linear, platform, and SPI flash, System ACE CompactFlash, JTAG Header or External JTAG Connector, 2x USB, 2x PS/2, 10/100/1000 Ethernet, RS-232, 2x Audio In/Out, DVI/VGA Vider XGI Expansion Port, MGT support with PCI Express, SFP, SMA, SGMII
/irtex-5 FPGA ML507 www.xilinx.com/ml507	General-purpose FPGA , PPC®440 processor, and RocketIO GTX transceiver development platform	HW-V5-ML507-UNI-G	XC5VFX70TFF1136	DDR2 SO-DIMM (256 MB), ZBT SRAM (1 MB), Linear, platform, and SPI flash, System ACE CompactFlash, JTAG Header or External JTAG Connector, 2x USB, xpS/2, 10/10/1000 Ethernet, RS-232, 2x Audio In/Out, DVI/VGA Videt XGI Expansion Port, MGT support with PCI Express, SFP, SMA, SGMII
/irtex-5 FPGA ML510 vww.xilinx.com/ml510	Advanced hardware/software embedded processing development platform	HW-V5-ML510-G	XC5VFX130T-FFG1738	32-bit component DDR memory and 64-bit DDR2 DIMM, 512 MB CompactFlash card and System ACE CompactFlash controller for configuration, Two onboard 10/100/1000 Ethernet PHYs with RJ-45 connectors, Two PCI Express® interface, VGA graphics interface, ATX Form Factor, 4x PCI 32-bit/33MHz slots, 2x USB ports, 2x SATA ports, 2x RS- 232, 2x PS/2, XPM Expansion Port
/irtex-5 FPGA ML523 www.xilinx.com/ml523	RocketIO GTP transceiver characterization development platform	HW-V5-ML523-UNI-G	XC5VLX110T-FF1136	16 RocketIO GTP Transceivers connected to SMA pairs, 8 RocketIO GTP REFCLK inputs connected to SMA pairs, SuperClk module supporting a wide range of clock frequencies, Power indicator LEDs, General-purpose DIP switches, LEDs, and pushbutton switches
/irtex-5 FPGA Gigabit Ethernet Development Kit www.xilinx.com/ gbedevkit	Virtex-5 FPGA Gigabit Ethernet development	HW-V5GBE-DK-UNI-G	XC5VLX50T-1FF1136C	Quick Start Guide and platform USB programming cable, ISE® evaluation software and access to LogiCORE™ IP, Resource CD (reference designs, labs, and demonstrations), Connectors: GbE - SFP and RJ-45 connectors, 10/100 Mb/s, RJ-45 connector
/irtex-5 LXT Development Kit for PCI Express, PCI- < and PCI vww.xilinx.com/v5pciekit	Application development board for PCI Express and PCI	HW-V5-ML555-G	Virtex-5 FPGA LXT XC5VLX50T- 1FF1136CES	Ouick Start Guide and platform USB programming cable, ISE evaluation software and access to LogiCORE IP, Resour CD (reference designs, labs, and demonstrations), Connectors: PCIe - 8-land add-in card connector, PCI/PCI-X; standa edge connector
/irtex-5 FPGA Embedded Kit www.xilinx.com/v5embedded	Advanced embedded processing development kit	DK-V5-EMBD-ML507-G	X5LX50T-1FFG1136C	Powerful Virtex-5 FPGA MC507 development board, Full seat of Platform Studio Embedded tool suite, Full seat of ISE Foundation™ FPGA design software, Reference designs, USB JTAG probe, flash device, cables, and power supply
Virtex-4 FPGA Development Boa	ards and Kits			
Product Name	Purpose	Part Number	Devices Supported	Features
/irtex-4 FPGA ML401 www.xilinx.com/ml401	General-purpose FPGA development board	HW-V4-ML401-UNI-G	XC4VLX25-FF668	64 MB DDR SDRAM, ZBT synchronous SRAM, 10/100/1000 tri-speed Ethernet PHY transceiver, USB interface device with host and peripheral ports, RS-232 serial port, XGI Expansion Port
/irtex-4 FPGA ML402 www.xilinx.com/ml402	General-purpose FPGA/DSP development board	HW-V4-ML402-UNI-G	XC4VSX35-FF668	64 MB DDR SDRAM, ZBT synchronous SRAM, 10/100/1000 tri-speed Ethernet PHY transceiver, USB interface device with host and peripheral ports, RS-232 serial port, XGI Expansion Port
/irtex-4 FPGA ML403 vww.xilinx.com/ml403	General-purpose FPGA/PPC processor development board	HW-V4-ML403-UNI-G	XC4VFX12-FF668	64 MB DDR SDRAM, ZBT synchronous SRAM, 10/100/1000 tri-speed Ethernet PHY transceiver, USB interface device with host and peripheral ports, RS-232 serial port, XGI Expansion Port
/irtex-4 FPGA ML405 vww.xilinx.com/ml405	General-purpose FPGA/PPC/RocketIO transceiver development board	HW-V4-ML405-UNI-G	XC4VFX20-FF672	128 MB SDRAM DDR SDRAM, ZBT synchronous DRAM, MGT: Serial ATA host connectors (x2), MGT: SFP connector (x1), MGT: SMA connector connected to one RocketIO MGT, XGI Expansion Port
Virtex-4 FPGA ML410 www.xilinx.com/ml410	Embedded system development platform	HW-V4-ML410-UNI-G	XC4VFX60-11FFG1152	ATX form factor motherboard, 64 MB DD and 256 MB DDR2 DIMM, 512 MB CompactFlash card and System ACE CompactFlash controller for configuration, 10/100/1000 tri-speed Ethernet PHY transceiver, RJ-45 connectors (x2), XPM Evanansion Port

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XC4VFX100-11FF1152

HW-V4-ML423-UNI-G

Expansion Port

LEDs, and pushbutton switches

20 RocketIO GTP Transceivers connected to SMA pairs, 10 RocketIO GTP REFCLK inputs connected to SMA pairs, SuperClk module supporting a wide range of clock frequencies, Power indicator LEDs, General-purpose DIP switches,

### XILINX BOARDS AND KITS

RocketIO transceiver characterization

Virtex-4 FPGA ML423

www.xilinx.com/ml423



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#### Spartan®-6 FPGA Development Boards and Kits

Spartan®-6 FPGA Development	Boards and Kits			
Product Name	Purpose	Part Number	Devices Supported	Features
Spartan-6 FPGA SP601 Evaluation Kit www.xilinx.com/sp601	General-purpose FPGA development board	EK-S6-SP601-G EK-S6-SP601-G-J (Japan)	XC6SLX16-CS324	Onboard configuration circuitry, Quad SPI flash 64 MB, 16 MB parallel (BPI) flash, DDR2 component memory 128 MB
Spartan-6 FPGA SP605 Evaluation Kit www.xilinx.com/sp605	General-purpose FPGA evaluation board	EK-S6-SP605-G EK-S6-SP605-G-J (Japan)	XC6SLX45T-FGG484 -3	Onboard JTAG configuration circuitry, 128 MB Platform Flash XL, Quad SPI flash 64 MB, System ACE 2G CompactFlash card
Avnet Spartan-6 LX150T Development Kit http://www.xilinx.com/products/devkits/AES-S6DEV- _X150T-G.htm	General-purpose FPGA evaluation board	AES-S6DEV-LX150T-G	XC6SLX150T-3FGG676	The Xilinx Spartan-6 LX150T Development Kit provides a complete development platform for designing and verifying applications based on the Xilinx Spartan-6 LXT FPGA family.
Avnet Spartan-6 LX16 Evaluation Kit http://www.xilinx.com/products/devkits/AES-S6EV- LX16-G.htm	General-purpose FPGA evaluation board	AES-S6EV-LX16-G	XC6SLX16-CSG324	Utilizing Spartan-6, Avnet introduces the first-ever battery-powered Xilinx FPGA development board, the Xilinx Spartan-6 LX16 Evaluation Kit.
Spartan-6 FPGA Embedded Kit http://www.xilinx.com/products/devkits/DK-S6-EMBD G.htm	- Spartan-6 FPGA Embedded Kit	DK-S6-EMBD-G DK-S6-EMBD-G-J (Japan)	XC6SLX45T-FGG484 -3	Embedded Design Platforms enable rapid software application development as well as easy customization of the processor hardware subsystems.
Spartan-6 FPGA Connectivity Kit http://www.xilinx.com/products/devkits/DK-S6-CONN G.htm	- Spartan-6 FPGA Connectivity Kit	DK-S6-CONN-G DK-S6-CONN-G-J (Japan)	XC6SLX45T-FGG484 -3	The Spartan®-6 FPGA Connectivity kit is a complete, easy-to-use Connectivity Development and Demonstration platform for designing with standards based protocols – PCIe®, Ethernet, implementing low-cost protocol bridging, providing highe efficiency alternative to LVDS communication, etc in multiple market segments.
Spartan-6 FPGA DSP Kit http://www.xilinx.com/products/devkits/AES-S6DSP- LX150T-G.htm	Spartan-6 FPGA DSP Development	AES-S6DSP-LX150T-G	XC6SLX150T-3	Wireless, aerospace and defense, instrumentation and medical imaging applications continue to demand greater performance to support standards, while high-level design flows continue to improve to provide an easier entry point for using FPGAs for DSP.
Spartan-6 FPGA Industrial Ethernet Kit http://www.xilinx.com/products/devkits/AES-S6IEK- LX150T-G.htm	Spartan-6 FPGA Industrial Ethernet Developmet	AES-S6IEK-LX150T-G	XC6SLX150T-3FGG676	The Spartan-6 FPGA Industrial Ethernet Kit is a comprehensive design environment for rapid prototyping and development of leading edge industrial applications in connectivity, motor control, and embedded processing.
Spartan-6 FPGA Industrial Video Processing Kit http://www.xilinx.com/products/devkits/AES-S6IVK- LX150T-G.htm	Spartan-6 FPGA Industrial Video Processing	AES-S6IVK-LX150T-3FGG676	XC6SLX150T-3	The Spartan-6 FPGA Industrial Video Processing Kit is a comprehensive design environment for rapid prototyping and streamlined development of high resolution video conferencing, video surveillance and machine vision systems.
Spartan-6 FPGA Consumer Video Kit http://www.xilinx.com/products/devkits/TB-6S- CVK.htm	Spartan-6 FPGA Consumer Video	TB-6S-CVK	XC6SLX150T-3	Speed up development of video algorithms and incorporate the latest video interface standards right out of the box. The Spartan-6 FPGA Consumer Video Kit is a comprehensive design environment for developing and debugging advanced video algorithms.
Spartan-3 FPGA Development K	its			
Product Name	Purpose	Part Number	Devices Supported	Features
Spartan-3A FPGA Starter Kit www.xilinx.com/s3astarter	Low-cost Spartan-3A FPGA board evaluation kit	HW-SPAR3A-SK-UNI-G	XC3S700A-FG484	Evaluation board with Spartan-3A FPGA, onboard 10/100 Ethernet PHY, SPI based ADC and DAC circuitry, 64 MB DDR2, two 16 Mb SPI serial flash. Interfaces include a 2x16 LCD display and various I/O ports, including a PS/2 port, a VGA display port, and two serial ports. Kit includes evaluation board, power supply with universal adaptors, programming cable, quick-start guide, design tools, evaluation software, and collateral.
Spartan-3AN FPGA Starter Kit www.xilinx.com/s3anstarter	Low-cost Spartan-3AN FPGA board evaluation kit	HW-SPAR3AN-SK-UNI-G	XC3S700AN-4FGG484C	Evaluation board with Spartan-3AN FPGA, onboard 10/100 Ethernet PHY, SPI based ADC and DAC circuitry, 64 MB DDR2, and two 16 Mb SPI serial flash. Interfaces include a 2x16 LCD display and various I/O ports, including a PS/2 por a VGA display port, and two serial ports. Kit includes evaluation board, power supply with universal adaptors, programming cable, quick-start guide, design tools, evaluation software, and collateral.
Spartan-3A DSP FPGA 1800A Edition				
XtremeDSP™ Solution Starter Board	Low-cost, entry-level environment for developing signal processing designs	HW-SD1800A-DSP-SB-UNI-G	XC3SD1800A-4FGG676C	Memory: 128 MB (32M x 32) DDR2 SDRAM; 16M x 8 parallel / BPA configuration flash; 64 Mb SPI configuration/storage flash (with 4 extra SPI selects), EXP expansion connector
XtremeDSP™ Solution Starter Board www.xilinx.com/s3adspstarter Spartan-3E FPGA Starter Kit		HW-SD1800A-DSP-SB-UNI-G	XC3SD1800A-4FGG676C XC3S700A-FG484	
XtremeDSP™ Solution Starter Board www.xilinx.com/s3adspstarter Spartan-3E FPGA Starter Kit www.xilinx.com/s3estarterkit XtremeDSP Solution Video Kit	processing designs	HW-SPAR3E-SK-UNFG	XC3S700A-FG484	Evaluation board with Spartan-3E FPGA, CoolRunner™-II CPLD, 128 Mb parallel flash, 16 Mb SPI flash, 64 MB DDR SDRAM, Interfaces include Ethernet 10/100 PHY, two RS-232 serial ports, PS/2 style mouse/keyboard, 2x16 character LCD, Kit includes evaluation board, power supply with universal adaptors, programming cable, quick-start-guide, design
Spartan-SA DSP FPGA ToUM EUIU01 XtremeDSP* Solution Statter Board www.xilinx.com/s3adspstarter Spartan-3E FPGA Starter Kit www.xilinx.com/s3astarterkit XtremeDSP Solution Video Kit www.xilinx.com/sk_s3 Spartan-3A DSP S3D1800A MicroBlaze Processor Edition Embedded Development HW/SW Kit www.xilinx.com/s3adspmb	processing designs	HW-SPAR3E-SK-UNFG	XC3S700A-FG484	flash (with 4 extra SPI selects), EXP expansion connector Evaluation board with Spartan-3E FPGA, CoolRunner™-II CPLD, 128 Mb parallel flash, 16 Mb SPI flash, 64 MB DDR SDRAM, Interfaces include Ethernet 10/100 PHY, two RS-232 serial ports, PS/2 style mouse/keyboard, 2x16 character LCD, Kit includes evaluation board, power supply with universal adaptors, programming cable, quick-start-guide, design tools evaluation software, and collateral. Includes full seals of System Generator and EDK, Example video reference designs, Complete documentation, Platform USB cable, power supply, and video cables, Carrier board: Spartan-3A FPGA DSP DPFA F3400A Development Board,

CPLD Starter Kits					
Purpose	Part Number	Devices Supported	Features		
General-purpose CPLD evaluation board	SK-CRII-L-G	XC2C256-TQ144	Complete 'out-of-the-box' evaluation platform, CoolRunner-II CPLD utility window, Easy set-up and monitoring, DataGATE evaluation 'switch', Free reference designs		
FMC Daughter-cards					
Purpose	Part Number	Devices Supported	Features		
FMC XM105 Debug Mezzanine Card	HW-FMC-XM105-G		VITA 57.1 FMC HPC connector, Single-ended signals from the carrier board, clocks, JTAG, and power, 40 single-ended I/O (20 pairs) on the LPC pins, 80 single-ended I/O (40 pairs) on the HPC pins, Mictor connector 38 pins female Mictor connector		
FMC Connectivity	HW-FMC-XM104-G		The FMC XM104 Connectivity Card is designed to provide access to eight serial transceivers on the FMC HPC connector found on Xilinx FMC-supported boards including Virtex®-6 ML605. These eight serial transceivers can be accessed through one CX4 (x4 transceivers), two SATA (x2 transceivers), and eight SMA (x2 transceivers) connectors.		
	General-purpose CPLD evaluation board Purpose FMC XM105 Debug Mezzanine Card	General-purpose CPLD evaluation board SK-CRII-L-G Purpose Part Number FMC XM105 Debug Mezzanine Card HW-FMC-XM105-G	General-purpose CPLD evaluation board     SK-CRII-L-G     XC2C256-TQ144       Purpose     Part Number     Devices Supported       FMC XM105 Debug Mezzanine Card     HW-FMC-XM105-G     HW-FMC-XM105-G		

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