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Distributors

Basys2 FPGA Board

$79.00 [Add to Cart]
$59.00 [(Academic)]

Shipping immediately

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IC: Xilinx Spartan 3E FPGA, 100K or 250K gates *(Click "Add to Cart" to select gate size.)*
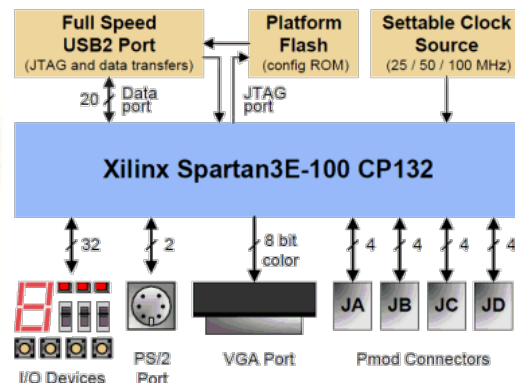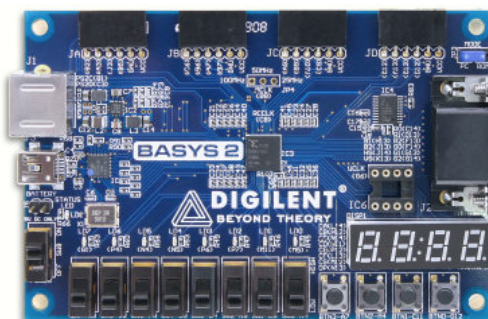
Connector(s): USB port
Four 6-pin Pmod connectors
VGA
PS/2

Programming: JTAG programming via on-board USB2 port using the free Adept Software (version 2.0 or later)

- Xilinx Spartan 3-E FPGA, 100K or 250K gate
- FPGA features 18-bit multipliers, 72Kbits of fast dual-port block RAM, and 500MHz+ operation
- USB 2 full-speed port for FPGA configuration and data transfers (using Adept 2.0 software available as a free download)
- XCF02 Platform Flash ROM that stores FPGA configurations indefinitely
- User-settable oscillator frequency (25, 50, and 100 MHz), plus socket for a second oscillator
- Three on-board voltage regulators (1.2V, 2.5V, and 3.3V) that allow use of 3.5V-5.5V external supplies
- 8 LEDs, 4-digit seven-segment display, four pushbuttons, 8 slide switches, PS/2 port, and a 8-bit VGA port
- Four 6-pin headers for user I/Os, and attaching Digilent PMOD accessory circuit boards
- *Requires Adept 2.0 or later for operation*

The Basys2 board is a circuit design and implementation platform that anyone can use to gain experience building real digital circuits. Built around a Xilinx Spartan-3E Field Programmable Gate Array and a Atmel AT90USB2 USB controller, the Basys2 board provides complete, ready-to-use hardware suitable for hosting circuits ranging from basic logic devices to complex controllers. A large collection of on-board I/O devices and all required FPGA support circuits are included, so countless designs can be created without the need for any other components.

Four standard expansion connectors allow designs to grow beyond the Basys2 board using breadboards, user-designed circuit boards, or Pmods (Pmods are inexpensive analog and digital I/O modules that offer A/D & D/A conversion, motor drivers, sensor inputs, and many other features). Signals on the 6-pin connectors are protected against ESD damage and short-circuits, ensuring a long operating life in any environment. The Basys2 board works seamlessly with all versions of the Xilinx ISE tools, including the free WebPack. It ships with a USB cable that provides power and a programming interface, so no other power supplies or programming cables are required.

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Support Documents

DSD-0000232	BASYS BASYS2 NEXYS NEXYS2 S3EBOARD	4/20/09	Programmable Logic	RD	ActivePowerMeter.zip

Active Power Meter reference design

DSD-0000260	ADEPT BASYS BASYS2 NEXYS NEXYS2 S3BOARD	5/15/09	Programmable Logic Software	RD	Adept IOExpansion.zip

Adept I/O expansion reference design

DSD-0000219	BASYS2	10/22/09	Programmable Logic	DP	Basys2UserDemo.zip

Basys2 User Demo project

DSD-0000218	BASYS2	4/20/09	Programmable Logic	DP	Basys2UserTest.zip

Basys2 User Verification Test project

DSD-0000266	BASYS2	10/02/09	Programmable Logic		Basys2_100_250General.zip

Basys2 general UCF files

502-155	BASYS2	5/26/09	Programmable Logic	PD	Basys2_rm.pdf

Basys 2 reference manual

500-155	BASYS2	5/18/09	Programmable Logic	PD	Basys2_sch.pdf

Basys 2 Schematic

DSD-0000233	BASYS BASYS2 NEXYS NEXYS2 S3BOARD S3EBOARD	4/20/09	Programmable Logic	RD	BramCfgRefProj.zip

BRAM Configuration reference design

DSD-0000235	BASYS BASYS2 NEXYS NEXYS2 PMOD-PS2 S3BOARD S3EBOARD	4/20/09	Peripheral Programmable Logic	RD	MouseDisplayer RefComp.zip

PS2 Mouse Displayer reference component

DSD-0000234	BASYS BASYS2 NEXYS NEXYS2 PMOD-PS2 S3BOARD S3EBOARD	4/20/09	Peripheral Programmable Logic	RD	MouseRefComp.zip

PS2 Mouse Control reference component

DSD-0000239	BASYS BASYS2 NEXYS NEXYS2 PMOD-PS2 S3BOARD S3EBOARD	4/20/09	Peripheral Programmable Logic	RD	PwmRefComp1.zip

Pulse-width modulation reference component

DSD-0000237	BASYS BASYS2 NEXYS NEXYS2 PMOD-PS2 S3BOARD S3EBOARD	4/20/09	Peripheral Programmable Logic	RD	Rs232 RefProj.zip

Pulse-width modulation reference component

DSD-0000241	BASYS BASYS2 NEXYS NEXYS2 S3BOARD S3EBOARD	4/20/09	Programmable Logic	RD	VGA RefComp.zip

VGA controller reference design