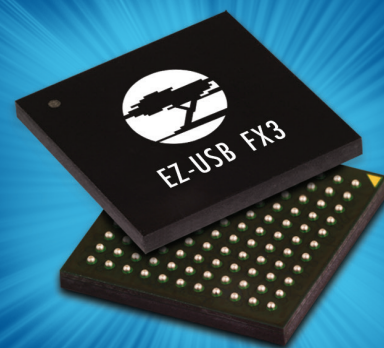


CYPRESS

EZ-USB® FX3™

USB 3.0 PERIPHERAL CONTROLLER



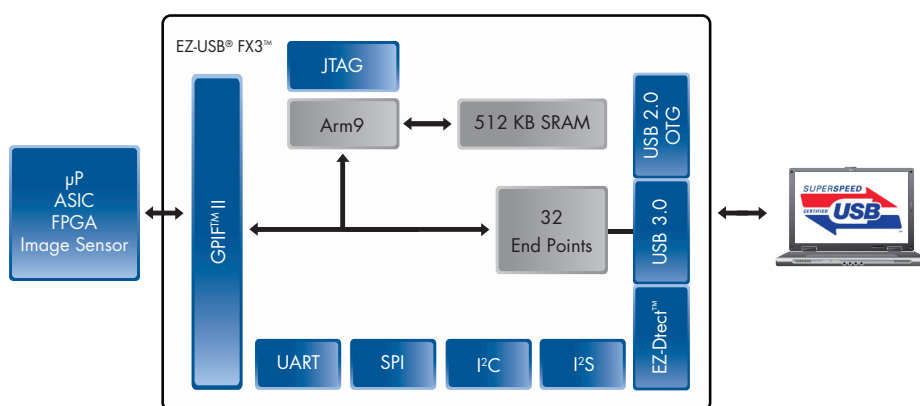
PRODUCT OVERVIEW

INTRODUCTION

Cypress is the market leader in USB and has shipped over 1.3 billion USB controllers. We provide the industry's most comprehensive whole product support including software, reference designs and driver suites. With a broad-based USB 3.0 product portfolio, Cypress continues to innovate on USB technologies.



EZ-USB® FX3™ is the next-generation USB 3.0 peripheral controller that enables developers to add USB 3.0 device functionality to any system. FX3 has a fully configurable General Programmable Interface (GPIF™ II), which can interface with virtually any processor, ASIC, image sensor or FPGA. GPIF II is an enhanced version of the GPIF in FX2LP™, Cypress's flagship USB 2.0 product. It provides easy and glueless connectivity to popular industry interfaces such as synchronous Slave FIFO, asynchronous SRAM, asynchronous and synchronous Address Data Multiplexed interface, parallel ATA, etc. The FX3's programming flexibility makes it an ideal solution to any USB 3.0 devices.



FX3 Block Diagram

FEATURES

SUPER SPEED IT™ WITH FX3™

- Add USB 3.0 capability to any system
- Upto 32-bits, 100 MHz, parallel General Programmable Interface (GPIF II)

ENABLE POWERFUL DATA PROCESSING AND CUSTOMIZATION

- Full accessible 32-bits, 200 MHz, ARM9 core with upto 512 KB of embedded SRAM

EASY CODE DEVELOPMENT AND INTEGRATION

- EZ-USB tools: complete solution with silicon, SDK, APIs, GPIF II Designer GUI and DVK

USB 2.0 OTG COMPLIANCE

- Hi-Speed On-The-Go (HS-OTG) host and peripheral compliant with On-The-Go Supplement Version 2.0

ADDITIONAL CONNECTIVITY TO PERIPHERALS

- Easy connectivity to peripherals such as I²C, I²S, UART, SPI and GPIOs

IMPROVED BATTERY CHARGING CAPABILITIES

- Compliant with USB BC v1.1



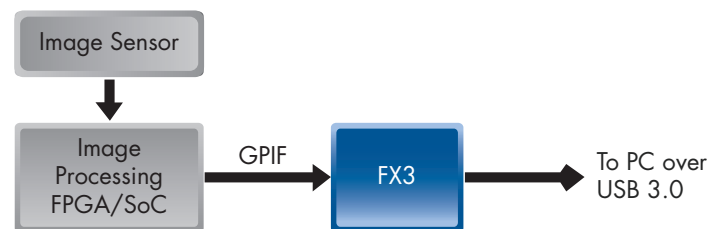
EZ-USB FX3 PART DETAILS

Part number	GPIF II	USB	Processor	SRAM	OTG Controller	Connectivity Support	Package	Battery Charging	Operating Temperature
CYUSB3011-BZXC	16-bits, 100 MHz	USB 3.1 Gen 1	Arm9 core	256 KB	Hi-Speed	I ² C, I ² S, UART, SPI, and GPIOs	121-ball FBGA	USB battery charging v1.1 compliant	0°C to +70°C
CYUSB3012-BZXC	32-bits, 100 MHz	USB 3.1 Gen 1							
CYUSB3013-BZXC	16-bits, 100 MHz	USB 3.1 Gen 1							
CYUSB3014-BZXC	32-bits, 100 MHz	USB 3.1 Gen 1							
CYUSB3014-BZXI	32-bits, 100 MHz	USB 3.1 Gen 1		- 40°C to +85°C					
CYUSB2014-BZXC	16-bits, 100 MHz	USB 2.0		0°C to +70°C					
CYUSB2014-BZXI	16-bits, 100 MHz	USB 2.0		- 40°C to +85°C					

FX3 EXAMPLE APPLICATIONS

HD Video/ 3-D Imaging

USB 3.0 provides 5 Gbps bandwidth and supports the streaming of HD video without the need for compression. The EZ-USB FX3 connects directly with a variety of image sensors, enabling USB 3.0 camera and 3-D imaging designs while saving bill-of-material cost and PCB footprint.



EZ-USB FX3 Solution

PC Peripherals

Printers, scanners and other multifunction peripherals need to transfer increasingly large amount of data in less time. The EZ-USB FX3, with a 10x bandwidth increase over USB 2.0, is an ideal solution to support data-rich applications.



EZ-USB FX3 Solution

GET STARTED NOW

Go to www.cypress.com/fx3 or email usb3@cypress.com for more information on Cypress's EZ-USB FX3.

To purchase FX3 parts, visit us at www.cypress.com/buyonline. For information on our EZUSB FX3 development kit, CYUSB3KIT-003, contact your nearest sales representative.

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