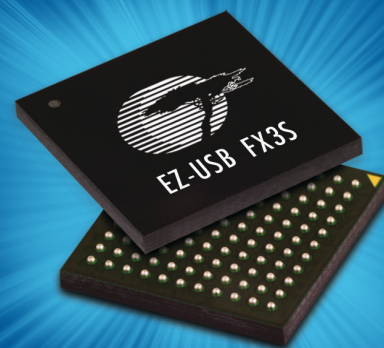


CYPRESS

EZ-USB® FX3S™

USB 3.0 PERIPHERAL CONTROLLER



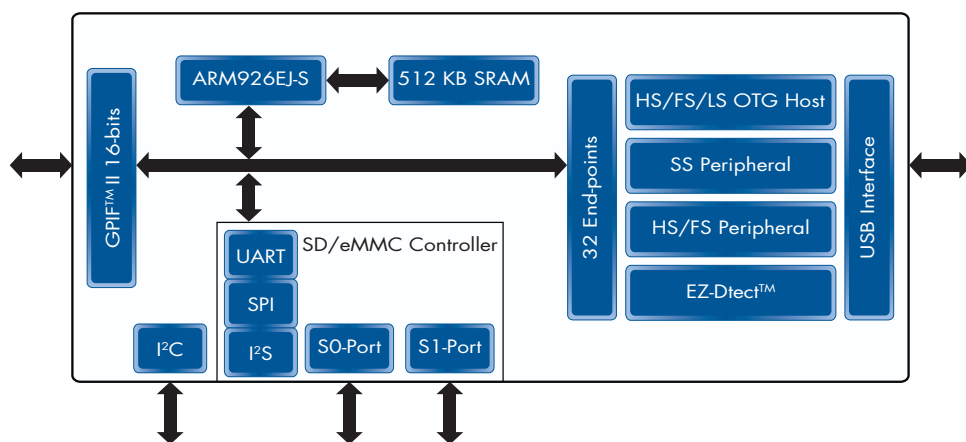
PRODUCT OVERVIEW

INTRODUCTION

Cypress is the market leader in USB and has shipped over 1.2 billion USB controllers. We provide the industry's most comprehensive whole product support including software, reference designs and driver suites.



EZ-USB® FX3S™ is the latest offering in the industry leading FX3™ USB 3.0 peripheral controller family that enables developers to add USB 3.0 device functionality to any system. In addition to USB 3.0 functionality and a powerful ARM core, FX3S's integrated storage controllers enable you to add support for SD/eMMC memories and SDIO devices to your products without adding any extra controller chip. Based on the proven FX3 Platform, FX3S leverages FX3's familiar ecosystem and package to reduce your time-to-market and design complexity. FX3S has the fully configurable General Programmable Interface (GPIF™ II), which can interface with virtually any processor, ASIC, Image Sensor or FPGA. The FX3S's programming flexibility makes it an ideal solution to any USB 3.0 device that want to differentiate itself while keeping cost and time-to-market down.



FX3S Block Diagram

FEATURES

SUPER SPEED IT™ WITH FX3S™

- Add USB 3.0 capability to any system
- Upto 16-bits, 100 MHz, parallel General Programmable Interface (GPIF II)

ENABLE POWERFUL DATA PROCESSING AND CUSTOMIZATION

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

SUPPORT MEMORY CARDS USING ONE CHIP

- Built-in SD/eMMC storage controller
- 2 Storage ports supporting SD 3.0 (SDXC) UHS-I/eMMC 4.41 standards
- System I/O expansion with 2 secure digital I/O (SDIO) ports

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

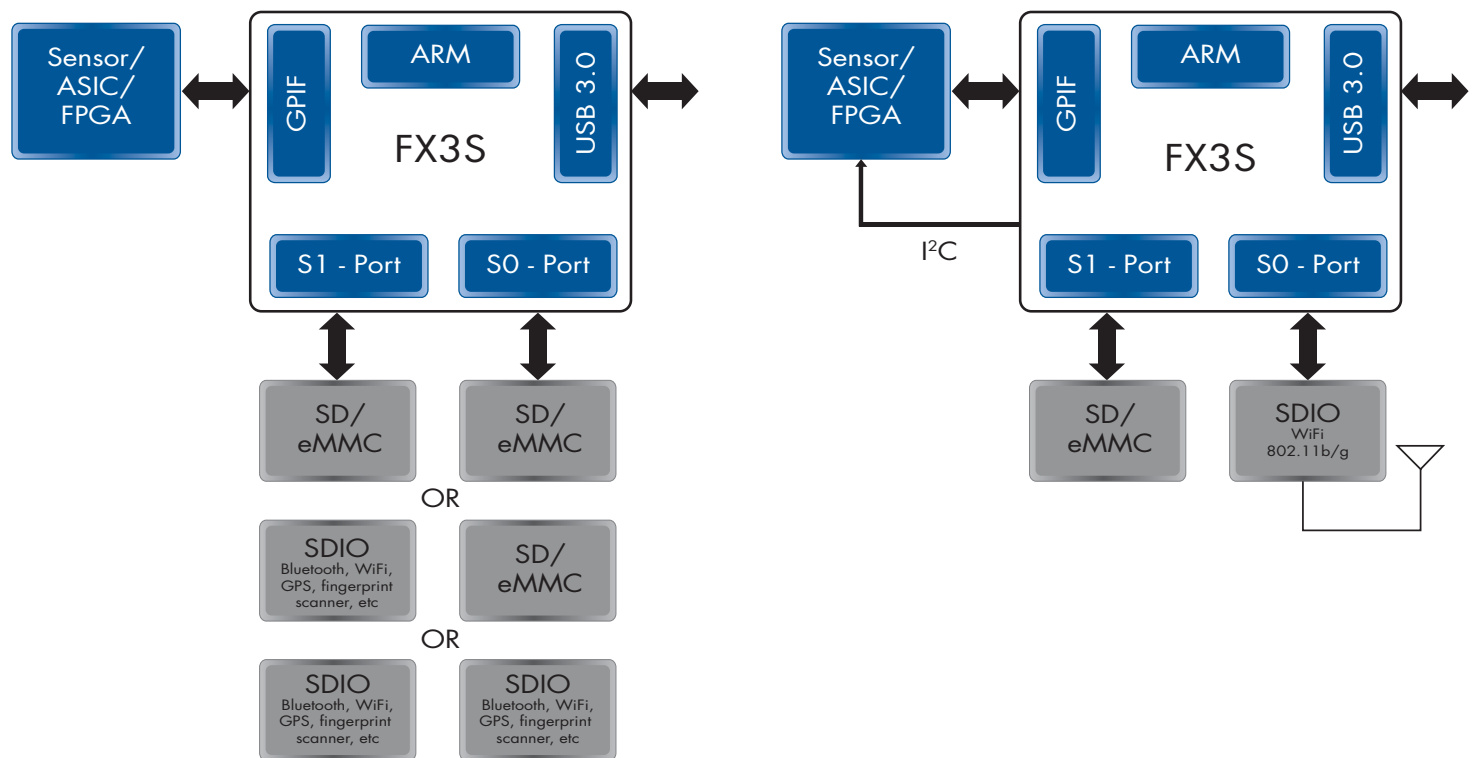
- Compliant with USB BC v1.1

DESIGNED TO BE FOOTPRINT AND PIN COMPATIBLE WITH FX3

EZ-USB FX3S PART DETAILS

Part number	GPIF-II	Processor	Storage Controller	OTG Controller	Connectivity Support	Package	Battery Charging	Operating Temperature
CYUSB3035-BZXI	Upto 16-bits, 100 MHz, Parallel GPIF	ARM9 @ 200 MHz, 512 KB embedded SRAM	Upto 2 storage ports supporting SD 3.0, eMMC 4.4, SDIO 3.0	Hi-Speed	I ² C, I ² S, SPI, UART, and GPIOs	121-ball FBGA	USB battery charging v1.1 compliant	- 40°C to +85°C

FX3S EXAMPLE APPLICATIONS



FX3S Capabilities: Add USB 3.0, Storage support and more capabilities to your system

GET STARTED NOW

Email usb3@cypress.com for more information on Cypress's EZ-USB FX3S.

To purchase FX3S parts, visit us at www.cypress.com/buyonline. For information on our EZUSB FX3S development kit, contact your nearest sales representative.

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001-84033 Rev*A

