

EZ-USB™ FX3

USB 5Gbps peripheral controller

EZ-USB™ FX3 is an extremely flexible USB 3.1 peripheral controller which can add USB 5Gbps connectivity to virtually any system.

A processor, an image sensor, an FPGA, or an ASIC can all be connected to using the EZ-USB™ FX3's second-generation general programmable interface (GPIF II). Users can configure the general programmable interface (GPIF) to operate like a FIFO, an asynchronous SRAM, an address/data multiplexed interface, a CompactFlash, or a custom interface.

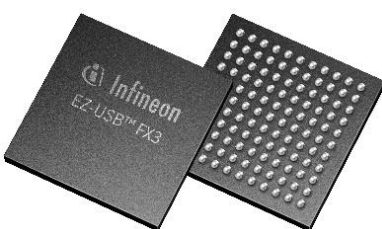
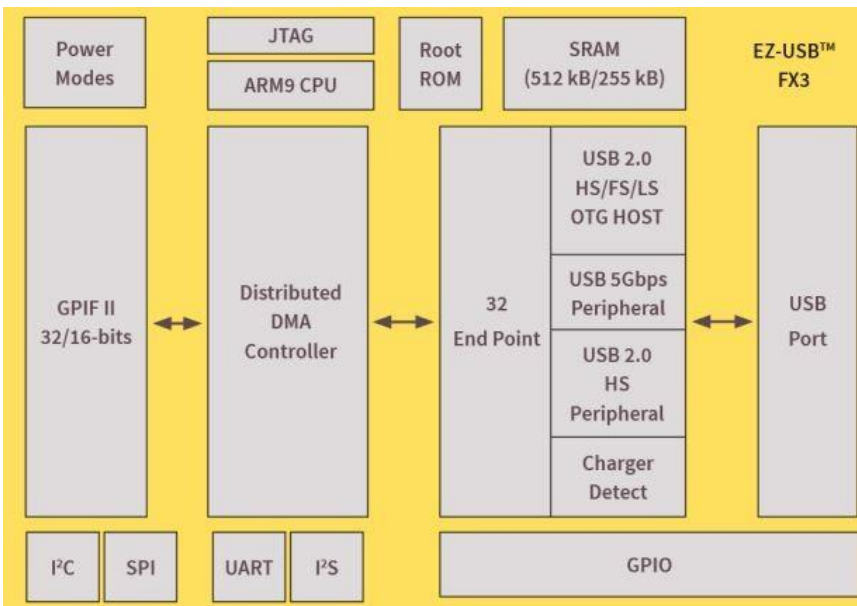
EZ-USB™ FX3 will enable applications like machine vision and medical imaging to achieve higher quality at a lower cost because USB 5Gbps and USB-C are now standard connectivity in all PCs.

Key features

- Compliant with USB BC v1.1
- USB 2.0 OTG compliance
- Hi-speed on-the-go (HS-OTG) host and peripheral compliant with on-the-go supplement version 2.0
- Full accessible 32-bits, 200 MHz, ARM9 core with up to 512 KB of embedded SRAM
- Additional connectivity to peripherals
- Improved battery charging capabilities

Key benefits

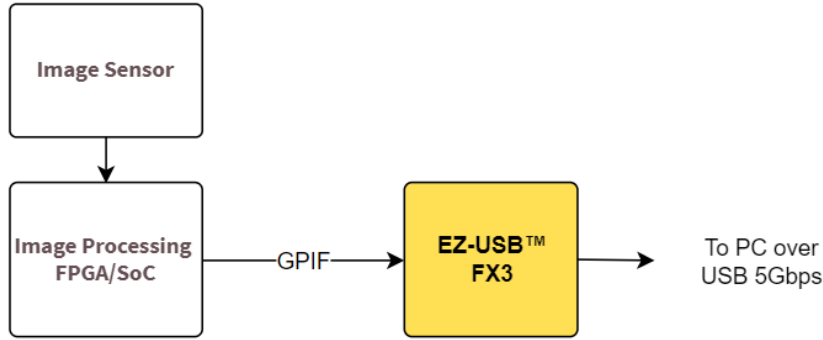
- Adds USB 5Gbps capability to any system
- Quick time-to-market with low development costs
- Turnkey solutions on industrial standards
- Easy code development and integration
- Easy connectivity to peripherals



PRODUCT BRIEF

Application example

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



EZ-USB™ FX3 HD Video / 3D imaging

Product table

Product table	USB standard	USB speed [Gbit/s]	I/O type	Operating temperature range [°C]	Operating voltage min [V]	Operating voltage max [V]
CYUSB3013-BZXC	USB 3.0	5	8/16-bit GPIF, DMA, GPIO, I2C, UART, I2S, SPI	0 to 70	1,7	3,6
CYUSB3014-BZXIT	USB 3.0	5	8/16/32-bit GPIF, DMA, GPIO, I2C, UART, I2S, SPI	-40 to 85	1,7	3,6
CYUSB3011-BZXC	USB 3.0	5	8/16-bit GPIF, DMA, GPIO, I2C, UART, I2S, SPI	0 to 70	1,7	3,6
CYUSB3014-BZXCT	USB 3.0	5	8/16/32-bit GPIF, DMA, GPIO, I2C, UART, I2S, SPI	0 to 70	1,7	3,6
CYUSB3014-BZXC	USB 3.0	5	8/16/32-bit GPIF, DMA, GPIO, I2C, UART, I2S, SPI	0 to 70	1,7	3,6
CYUSB3012-BZXC	USB 3.0	5	8/16/32-bit GPIF, DMA, GPIO, I2C, UART, I2S, SPI	0 to 70	1,7	3,6
CYUSB3014-BZXI	USB 3.0	5	8/16/32-bit GPIF, DMA, GPIO, I2C, UART, I2S, SPI	-40 to 85	1,7	3,6



www.infineon.com

Published by
Infineon Technologies AG
Am Campeon 1-15, 85579 Neubiberg
Germany

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Public

Date: 09/2023

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