Migration of EZ-USB™ FX2LP to EZ-USB™ FX2G3

Not recommended for new design and will be discontinued soon

EZ-USB™ FX2LP belongs to C8 process technology operating at Foundry. We have been experiencing challenges in obtaining timely manufacturing support for these products. Therefore, as a first step, we have decided to not accept any new design opportunities for this product family. Furthermore, to ensure that all customer orders are fulfilled on time and to avoid future manufacturing risks, we have decided to discontinue the products soon. The discontinuation will be announced by end of September 2024 as per JEDEC standards. This means, last order date (LOD) will be by March 2025 and last delivery date (LDD) will be by September 2025. Kindly note that we would be able to commit to supply only for orders that are placed respecting last order date. In case of changes in the discontinuation plan/timeline, we will keep you posted. To transition from EZ-USB™ FX2LP family of products, we are also in the process of developing new products under the family of EZ-USB™ FX2G3. These products can be considered as replacement to EZ-USB™ FX2LP. Below table helps to identify the replacement products as a suggestion for your reference. In case of any specific queries, please feel free to reach out to your sales counterpart.

Please refer to the table below, which lists alternative products for the NRND (not recommended for new design) products.

Replacement table

Product family	Sales product name	Product status info	Package	Replacement product family	Replacement order product name	Sample availability (date)	Mass production date
FX2LP	CY7C64713-100AXC	discontinued	PG-TQFP-100	FX2G3	CYUSB2316-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CY7C68013A-100AXC	not for new design	PG-TQFP-100	FX2G3	CYUSB2316-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CY7C68013A-100AXCKA	on request	PG-TQFP-100	FX2G3	CYUSB2316-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CY7C68013A-100AXI	not for new design	PG-TQFP-100	FX2G3	CYUSB2316-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CY7C68013A-128AXC	not for new design	PG-TQFP-128	FX2G3	CYUSB2316-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CY7C68013A-128AXI	not for new design	PG-TQFP-128	FX2G3	CYUSB2316-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CY7C68013A-56BAXC	not for new design	PG-VFBGA-56	FX2G3	DVK	Sep, 2024	Q3, 2025
FX2LP	CY7C68013A-56BAXCT	not for new design	PG-VFBGA-56	FX2G3	DVK	Sep, 2024	Q3, 2025
FX2LP	CG7243AMT	discontinued	PG-VQFN-56	FX2G3	CYUSB2315-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CG7973AA	not for new design	PG-VQFN-56	FX2G3	CYUSB2315-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CG7973AAT	not for new design	PG-VQFN-56	FX2G3	CYUSB2315-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CG9022AM	not for new design	PG-VQFN-56	FX2G3	CYUSB2315-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CG9022AMT	not for new design	PG-VQFN-56	FX2G3	CYUSB2315-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CY7C68013A-56LTXC	not for new design	PG-VQFN-56	FX2G3	CYUSB2315-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CY7C68013A-56LTXCKA	on request	PG-VQFN-56	FX2G3	CYUSB2315-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CY7C68013A-56LTXCT	not for new design	PG-VQFN-56	FX2G3	CYUSB2315-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CY7C68013A-56LTXI	not for new design	PG-VQFN-56	FX2G3	CYUSB2315-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CY7C68013A-56LTXIT	not for new design	PG-VQFN-56	FX2G3	CYUSB2315-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CY7C68013A-56PVXC	not for new design	PG-SSOP-56	FX2G3	CYUSB2315-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CY7C68013A-56PVXCT	not for new design	PG-SSOP-56	FX2G3	CYUSB2315-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CY7C68013A-56PVXI	not for new design	PG-SSOP-56	FX2G3	CYUSB2315-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CY7C68014A-100AXC	not for new design	PG-TQFP-100	FX2G3	CYUSB2316-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CY7C68014A-128AXC	not for new design	PG-TQFP-128	FX2G3	CYUSB2316-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CY7C68014A-56LTXC	not for new design	PG-VQFN-56	FX2G3	CYUSB2315-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CY7C68014A-56PVXC	not for new design	PG-SSOP-56	FX2G3	CYUSB2315-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CY7C68015A-56LTXC	not for new design	PG-VQFN-56	FX2G3	CYUSB2315-BF104AXI	Sep, 2024	Q3, 2025
FX2LP	CY7C68016A-56LTXC	not for new design	PG-VQFN-56	FX2G3	CYUSB2315-BF104AXI	Sep, 2024	Q3, 2025

EZ-USB™ FX2G3 is an upcoming USB 2.0 peripheral controller with dual-core CPU, integrated flash and Quad-SPI subsystems, combining a USB 2.0 interface, microprocessor, and programmable logic. In the manufacturing process, the eFuse will be used to configure the base silicon of the EZ-USB™ FX2G3, leading to the production of different variants, as outlined in the table below.

Ordering information

Part number	Package	Temp (°C)	GPIF/ FIFO	SRAM (KB)	MCU	Flash (KB)	I²C	SPI UART CAN	QSPI	Crypto
CYUSB2315-BF104AXI	104 LGA	-45 to 85	16-bit	256	M0+	256	Yes			
CYUSB2316-BF104AXI	104 LGA	-45 to 85	16-bit	256	M0+	256	Yes	Yes		
CYUSB2317-BF104AXI	104 LGA	-45 to 85	16-bit	512	M0+	512	Yes	Yes	Yes	
CYUSB2318-BF104AXI	104 LGA	-45 to 85	16-bit	1024	M4/M0+	512	Yes	Yes	Yes	Yes
CYUSB2315A-BF104AXI	104 LGA	-45 to 85	16-bit	256	M0+	256	Yes			

Points to be taken care while migrating from EZ-USB™ FX2LP to EZ-USB™ FX2G3

– The 104 pins of EZ-USB™ FX2G3 are arranged in two rows. The outer ring is pin compatible to 56-pin QFN package of EZ-USB™ FX2LP. However, two additional pins namely RESREF and VCCD that are present in the inner ring need to be used to connect external passives. For further details, please consult Table 8 in the advanced FX2G3 datasheet.

– In order to enable existing EZ-USB™ FX2LP customers to use EZ-USB™ FX2G3 as drop in the existing designs using SSOP or TQFP packages of EZ-USB™ FX2LP, the KIT_FX2G3_104LGA will come with EZ-USB™ FX2G3 based adapter boards. These boards will allow users to replace EZ-USB™ FX2LP SSOP and TQFP packages on their boards, enable to migrate the firmware, and plan for hardware change.

– EZ-USB™ FX2LP is 8051 controller-based architecture whereas EZ-USB™ FX2G3 is ARM® Cortex® M0+, M4 core-based architecture. Hence, the firmware needs to be rewritten for EZ-USB™ FX2G3.