EZ-USB™ FX2G3 DVK (KIT_FX2G3_104LGA) kit guide

About this document

Scope and purpose

The EZ-USB™ FX2G3 Development Kit (DVK) KIT_FX2G3_104LGA enables the development of applications based on the EZ-USB™ FX2G3 USB 2.0 device controller (CYUSB2315/CYUSB2316/CYUSB2317/CYUSB2318) for streaming video and audio seamlessly to the USB host using the provided FPGA add-on board and off-the-shelf camera modules. Infineon's CYUSB2315/CYUSB2316/CYUSB2317/CYUSB2318devices are referred as FX2G3 in this document.

Intended audience

This document is intended for the EZ-USB™ FX2G3 DVK (KIT_FX2G3_104LGA) kit users.

About this product group

Target applications

- Biometric devices
- Scanners
- Medical devices
- Video streaming cameras
- Audio devices
- Industrial automation
- Gaming controllers and AR/VR
- Data acquisition systems
- USB logic and protocol analysers, JTAG debuggers
- USB smartphone add-on accessories

Product family

EZ-USB™ FX2G3 is a family of USB 2.0 device controllers targeting the established USB 2.0 applications in biometrics, scanner, camera, video, and imaging markets. It is based on the MXS40-LP platform with Cortex®-M4 and M0+ MCUs, 512 KB Flash, 128 KB SRAM, 128 KB ROM, Serial Communication Blocks (SCB) and a crypto engine to support various security features. A high bandwidth data subsystem provides DMA data transfers from LVCMOS input to USB output at speeds up to 480 Mbps, USB High-Speed based host systems. A 1024 KB SRAM is included in the high bandwidth data subsystem to provide buffering for data.

Safety precautions

Note: *Please note the following warnings regarding the hazards associated with development systems.*

Table 1 Safety precautions

	**Caution:** *The evaluation or reference board contains parts and assemblies sensitive to electrostatic discharge (ESD). Electrostatic control precautions are required when installing, testing, servicing or repairing the assembly. Component damage may result if ESD control procedures are not followed. If you are not familiar with electrostatic control procedures, refer to the applicable ESD protection handbooks and guidelines.*

Table of contents

About this document **1**
About this product group **1**
Safety precautions **2**
Table of contents **3**
1 Introduction **5**
1.1 DVK contents 5
1.2 Download kit documents and hardware design files 6
2 Installing the kit software **7**
3 KIT_FX2G3_104LGA system design **8**
3.1 Top-level hardware design 8
3.2 KIT_FX2G3_104LGA EZ-USB™ FX2G3 DVK design details 9
3.2.1 FX2G3 baseboard 9
3.2.1.1 FX2G3 base board features 10
3.2.1.2 USB-C HS connector (J2) 10
3.2.1.3 USB-C Full-Speed connector (J7) 10
3.2.1.4 Self or bus power mode selection header (J3) 10
3.2.1.5 Mode selection switch (SW1) 11
3.2.1.6 Power supply 11
3.2.1.7 EZ-USB™ FX2G3 (U1) 11
3.2.1.8 FPGA add-on board connector (J8 and J9) 11
3.2.1.9 SWD header (J1) 11
3.2.1.10 Crystal (Y4) 12
3.2.1.11 LED (USER_LED, PWRON) 12
3.2.1.12 Microphone interface (U3 and U4) 12
3.2.1.13 CAN interface (J5) 12
3.2.2 FPGA add-on board 13
3.2.2.1 FPGA add-on board features 14
3.2.2.2 Efinix T20 FPGA (U2) 14
3.2.2.3 2 GB DDR3 RAM (U3) 14
3.2.2.4 SPI flash (U8) 14
3.2.2.5 MIPI camera connector (J1 and J2) 14
3.2.2.6 SPI thermal camera connector (J3) 14
3.2.2.7 Power supplies (U1, U5, and U7) 14
3.2.2.8 FPGA I/O header (J5) 15
3.2.2.9 FX2G3 base board header (J6 and J7) 15
3.2.2.10 JTAG header (J4) 15
3.2.2.11 Mode selection switch (SW2) 15
4 Programming the kit **16**
4.1 Program the external flash 17
4.2 Program the user application in internal flash 19
5 Run the application **22**
5.1 Viewing the UVC output (camera streaming) using Windows Camera application 22
5.2 Viewing the UVC output (colorbar) using Windows Camera application 24
6 Low-speed interface **26**
6.1 MEMS PDM stereo microphone interface 26
7 Troubleshooting **27**

Table of contents

7.1 FX2G3 programming test 27
References 28
Glossary 29
Revision history 32
Disclaimer 33

1 Introduction

The EZ-USB™ FX2G3 DVK (KIT_FX2G3_104LGA) is based on the FX2G3 product family of Infineon's USB 2.0 device controller.

EZ-USB™ FX2G3 is a family of USB 2.0 device controllers targeting the established USB 2.0 applications in the biometric scanner, camera, video, and imaging markets. It is based on the MXS40-LP platform with Cortex®-M4 and M0+ MCUs, 512 KB flash, 128 KB SRAM, 128 KB ROM, Serial Communication Blocks (SCB), and a crypto engine to support various security features. A high-bandwidth data subsystem provides DMA data transfers from LVCMOS input to USB output at speeds up to 480 Mbps, USB Hi-Speed based host systems. A 1024 KB SRAM is included in the high-bandwidth data subsystem to provide buffering for data. FX2G3 will replace the FX2LP USB HS controllers by incorporating most of its features and adding new ones.

See the device datasheet to understand and compare the various features supported by EZ-USB™ FX2G3 controllers.

The EZ-USB™ FX2G3 DVK (KIT_FX2G3_104LGA) supports the following key features:

- Stream video from an external camera interface and audio from onboard stereo microphones to a USB 2.0 host
- USB bus-powered and self-powered operation
- CAN transceiver to interface with external CAN devices

For FX2G3 controller details, see the EZ-USB™ FX2G3 kit webpage.

1.1 DVK contents

Table 2 lists the EZ-USB™ FX2G3 DVK (KIT_FX2G3_104LGA) contents.

Table 2 DVK contents

Item	Type	Note
FX2G3 base board	Hardware	–
FPGA add-on board	Hardware	–
USB2.0 Type-C cable	Cable	–
Hard copy of the quick start guide (QSG)	Documentation	–
Kit casing	Package	–
Foam	Package	To protect and maintain proper placement in the kit container

1.2 Download kit documents and hardware design files

Download the KIT_FX2G3_104LGA kit documents and the hardware design files from the EZ-USB™ FX2G3 kit webpage. The documents include a QSG, kit user guide (this document), and release notes. The hardware design files include schematic, bill of materials (BOM), and layout files.

2 Installing the kit software

Install the necessary software before proceeding.

Note: The installation of the following software may require administrator privileges.

- Download and install the ModusToolbox™ software following the installation guide
- Download the latest version of the EZ-USB™ Control Center from the official Infineon website
- Download and install a serial terminal application Tera Term application for observing debug prints

3 KIT_FX2G3_104LGA system design

The FX2G3 baseboard is bus/self-powered and supports a USB-C 480 Mbps cable to connect to the PC. To demonstrate the full functionality of the kit, connect the provided FPGA add-on board to the FX2G3 baseboard.

3.1 Top-level hardware design

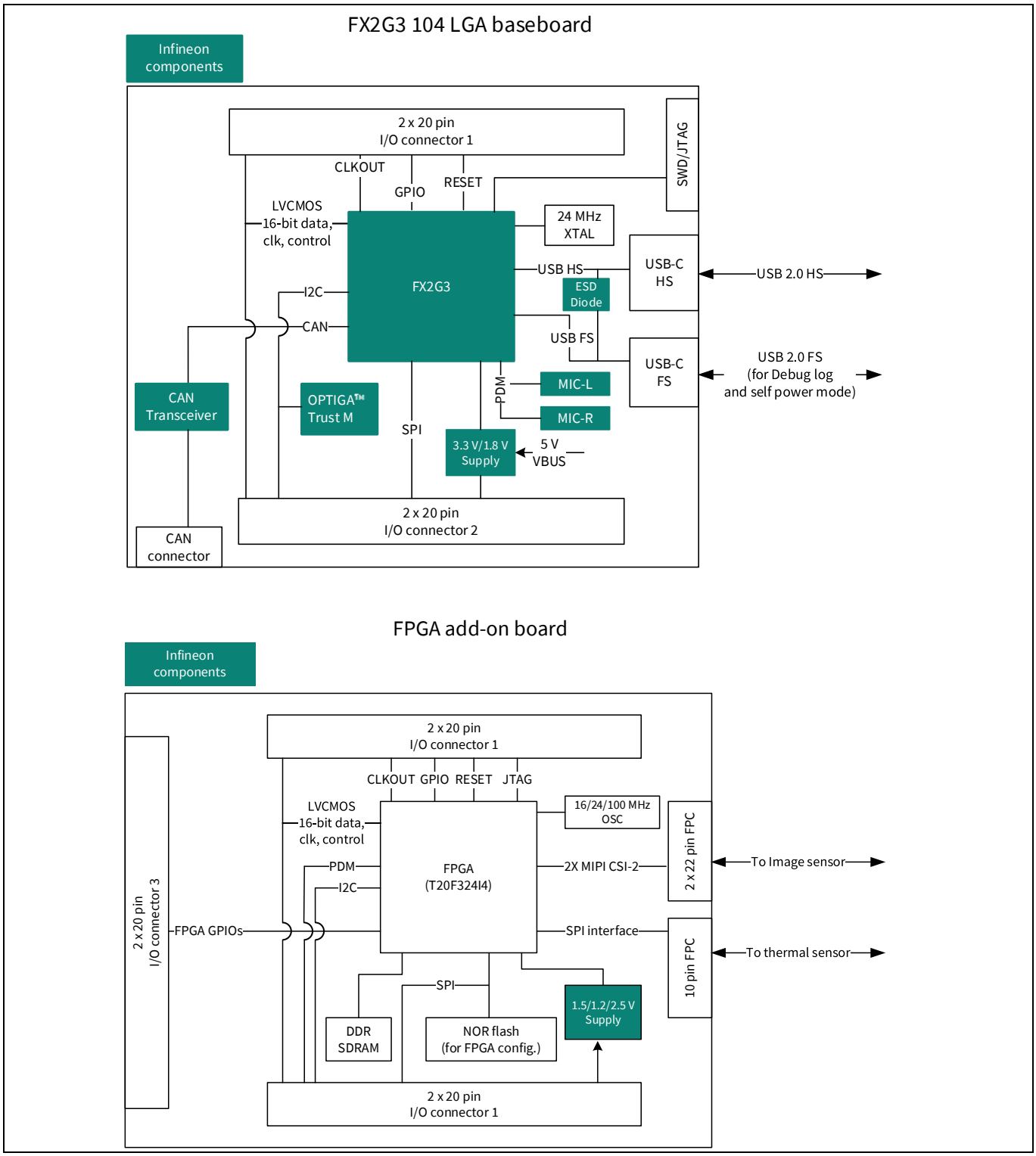

Figure 1 EZ-USB™ FX2G3 DVK block diagram

3.2 KIT_FX2G3_104LGA EZ-USB™ FX2G3 DVK design details

3.2.1 FX2G3 baseboard

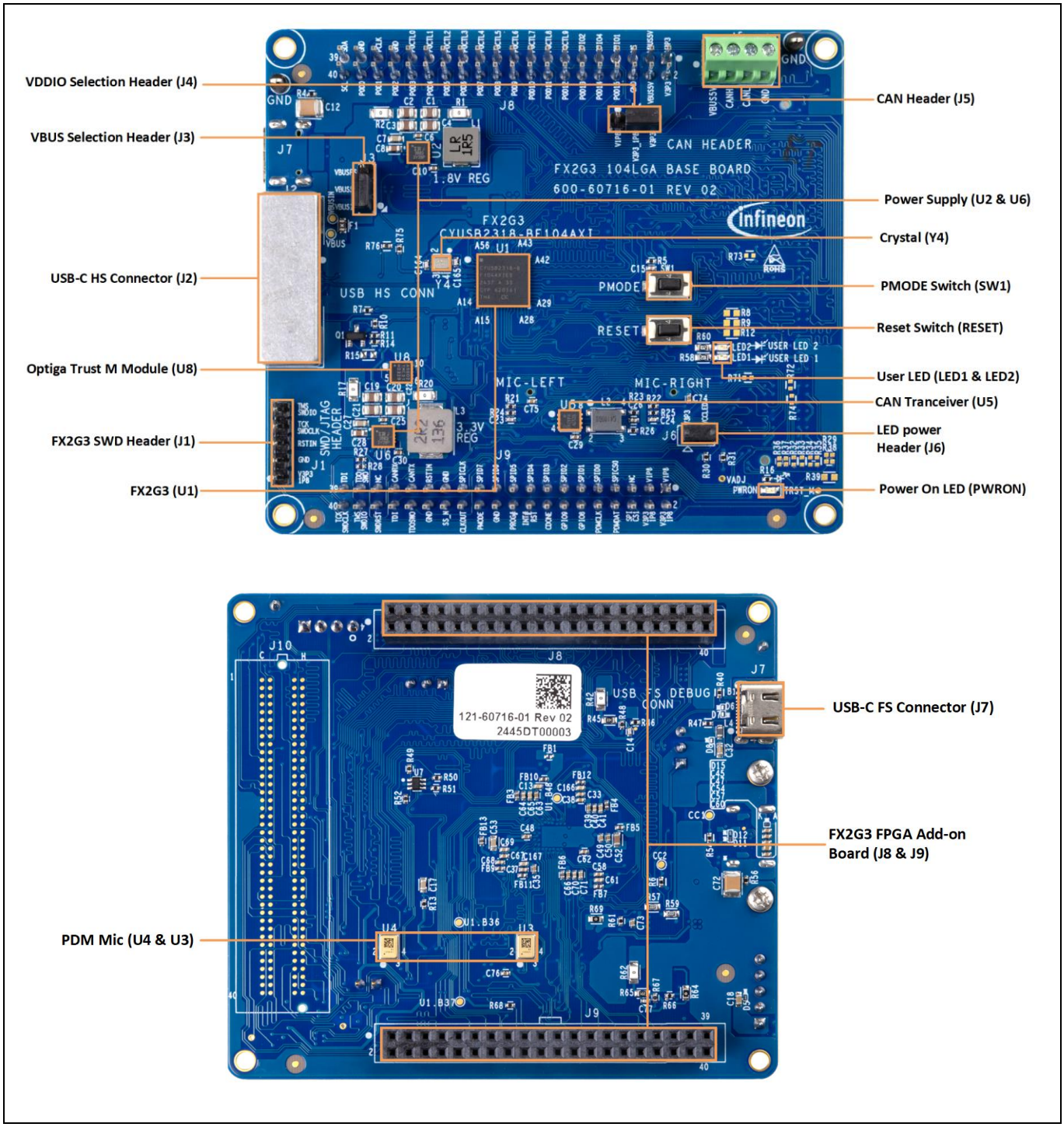

Figure 2 FX2G3 baseboard

3.2.1.1 FX2G3 base board features

The FX2G3 DVK base board has the following components/interfaces:

- FX2G3 controller
- One Power-on LED and two user LEDs
- Boot mode for selecting USB boot or SPI boot
- Reset switch to reset the device
- Two PDM microphones in stereo configuration
- CAN transceiver and connector
- HS USB port for data transfers at speeds up to 480 Mbps
- FS USB port for data logging
- Onboard regulators: 1.8 V and 3.3 V DC-DC switching regulators
- Jumper to select between 1.8 V and 3.3 V I/O voltage
- Jumper to select self-power or bus power mode
- 2x 40-pin GPIO header for interfacing FPGA add-on board
- SWD header

3.2.1.2 USB-C HS connector (J2)

The KIT_FX2G3_104LGA kit is bus/self-powered and uses a USB-C connector to interface with the PC through a USB-C 480 Mbps cable. The latter serves for both power and data transfer from the PC. The USB 2.0 port of the PC can source a maximum of 5 V at 3 A power through VBUS. This interface has TVS diodes for protection against ESD.

3.2.1.3 USB-C Full-Speed connector (J7)

EZ-USB™ FX2G3 has a debug access port (DAP) that acts as the interface for device programming and debugging. An external programmer or debugger (the “host”) communicates with the DAP through the device serial wire debug (SWD) or Joint Test Action Group (JTAG) interface pins through the USB-C Full-Speed connector. This port is used for message logging in the DVK.

3.2.1.4 Self or bus power mode selection header (J3)

Jumper J3 is a 3-pin header that can be used to switch the device power supply between self-power or bus power. Shorting the 1-2 pins in these jumpers will set the device to power from the USB-C HS connector (J2) thus enabling bus-powered mode. Shorting the 2-3 pins will set the device into self-power mode. In this mode, the user is expected to connect an external power supply adapter to the USB-C FS connector (J7) while connecting to the host via the USB-C HS connector (J2).

Table 3 DVK jumper settings

Name	Jumper	Short 1-2	Short 2-3
VBUS_5V	J3	Bus power (powered from USB-C HS connector)	Self-power (powered from USB-C FS connector)

3.2.1.5 Mode selection switch (SW1)

This switch selects the mode in which FX2G3 must boot upon power-on. The kit can boot in two modes based on the position of this switch.

Table 4 Boot modes

Boot mode	SW1	Description
USB	Pressed	Hold the push button (SW1) and power cycle the kit either by press and release of the RESET button or removing and reconnecting the USB-C cable from J2.
Internal flash memory	Not pressed	Default mode

3.2.1.6 Power supply

The base board consists of two IR3883MTRPBF regulators. It is a DC-DC buck switching regulator rated for 3 A. With a 16 PQFN package, the regulator features the overvoltage protection, overcurrent protection, and overtemperature protection. The following voltages are generated from VBUS (i.e., 5 V ± 0.25 V) and the rating of each regulator is:

- U6: 3.3 V ±5% at 3 A
- U2: 1.8 V ± 5% at 3 A

Jumper J4 is a 3-pin header that can be used to switch the VDDIO supply between 1.8 V and 3.3 V. Shorting the pins 1-2 will set the voltage at the respective supply pin to 1.8 V. Shorting the pins 2-3 will set the voltage at the respective supply pin to 3.3 V.

Table 5 DVK jumper settings

Name	Jumper	Short 1-2	Short 2-3
V3P3_1P8	J4	1.8 V	3.3 V

3.2.1.7 EZ-USB™ FX2G3 (U1)

It is a 480 Mbps device controller with a bandwidth to support USB 2.0 based host systems. It supports UVC, UAC, and USB Vendor Class protocols. The EZ-USB™ FX2G3 DVK is designed to stream video and audio seamlessly to the USB host using provided FPGA add-on boards and off-the-shelf camera modules.
It is a 104-pin, 8×8×1 mm, 0.5 mm pitch LGA package.

3.2.1.8 FPGA add-on board connector (J8 and J9)

The baseboard has a 2x 40-pin connector to interface with the FPGA add-on board. All the signals required for interfacing FX2G3 with external camera modules such as LVCMOS, I2C, SPI, JTAG, and GPIOs devices are routed to this connector.

3.2.1.9 SWD header (J1)

This DVK provides an SWD header interface that can be used to program the FX2G3 device using an SWD programmer such as miniprog4 (not provided with the kit).

3.2.1.10 Crystal (Y4)

FX2G3 needs a 24 MHz crystal to generate the clock for its operation having tolerance ±10 ppm and drive level 100 µW.

3.2.1.11 LED (USER_LED, PWRON)

- LED1 and LED2 (user LED) are a green LED connected to GPIO2 and GPIO1 of FX2G3 respectively. It is an application/firmware-controlled LED used for the FW debug purpose.
- PWR ON LED is a green LED that turns ON when the kit is powered
- Mount J6 to enable power for the USER LEDs

3.2.1.12 Microphone interface (U3 and U4)

Two IM69D130 PDM microphones from Infineon are available onboard and interfaced to FX2G3 in stereo configuration using the PDM interface.

3.2.1.13 CAN interface (J5)

The interface uses the Infineon's TLE9251VLEXUMA1 CAN transceiver IC that terminates on a 4-pin DIN rail allowing users to connect external CAN devices.

3.2.2 FPGA add-on board

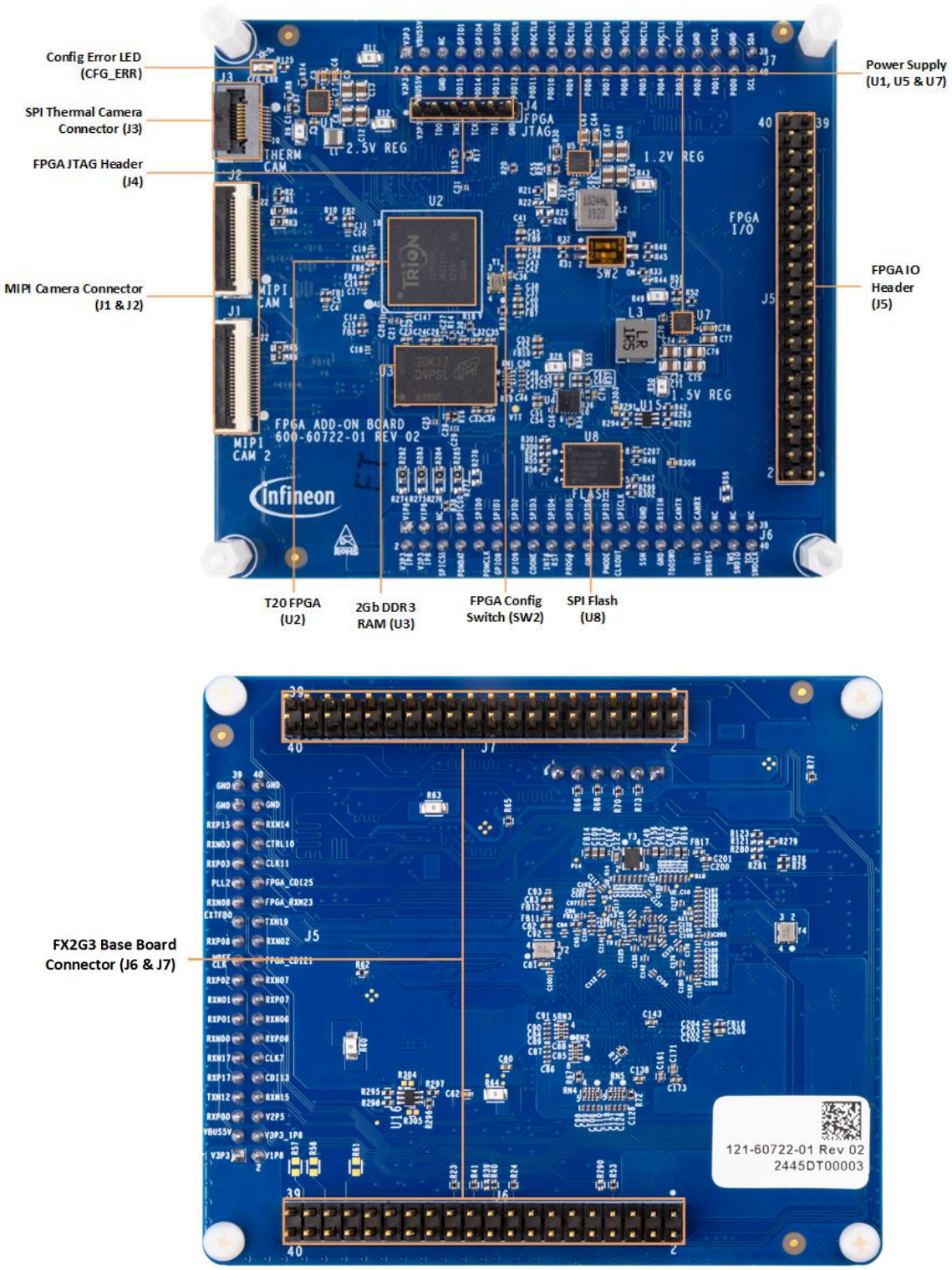

Figure 3 FPGA add-on board

3.2.2.1 FPGA add-on board features

The FPGA add-on board has the following components/interfaces:

- Efinix T20 FPGA
- 2 GB DDR3 RAM
- One FPGA config error LED
- Onboard regulators: 1.2 V, 1.5 V, and 2.5 V DC-DC switching regulators
- SPI flash
- Two MIPI camera connectors
- One thermal camera connector
- One FPGA I/O header
- One JTAG header to program the FPGA externally
- 2x 40-pin GPIO header for interfacing to FX2G3 base board

3.2.2.2 Efinix T20 FPGA (U2)

The Efinix T20 FPGA is used as a bridge between the camera and FX2G3. It is connected to the FX2G3 using the GPIF interface through which it sends the camera frames. FPGA is configured by FX2G3 over I2C, then the FPGA reads the bin file from the SPI flash and operates accordingly.

3.2.2.3 2 GB DDR3 RAM (U3)

One 2 GB DDR3 RAM MT41J128M16JT-125:K TR is available onboard that acts as frame buffer to store camera frames.

3.2.2.4 SPI flash (U8)

SPI flash is provided onboard to store the FPGA .bin file. Once FPGA is configured by FX2G3 over I2C, FPGA reads the bin file from the SPI flash and operates accordingly.

3.2.2.5 MIPI camera connector (J1 and J2)

The FPGA add-on board consists of two 22-pin FPC connector F305-1A7H1-21022-E100 to interface 4 lane MIPI cameras such as “Raspberry Pi Camera Module v2”.

3.2.2.6 SPI thermal camera connector (J3)

The FPGA add-on board consists of a 10-pin FPC connector FH28-10S-0.5SH to interface SPI thermal cameras.

3.2.2.7 Power supplies (U1, U5, and U7)

The FPGA add-on board consists of three IR3883MTRPBF regulators. It is a DC-DC buck switching regulator rated for 3 A. With a 16 PQFN package, the regulator features overvoltage protection, overcurrent protection, and overtemperature protection. The following voltages are generated from VBUS (i.e., 5 V ± 0.25 V) and the rating of each regulator is:

- U1: 2.5 V ± 5% at 3 A
- U5: 1.2 V ±5% at 3 A
- U7: 1.5 V ± 5% at 3 A

3.2.2.8 FPGA I/O header (J5)

The FPGA add-on board has a 40-pin connector to interface with the unused FPGA signals routed to it.

3.2.2.9 FX2G3 base board header (J6 and J7)

The FPGA add-on board has a 2x 40-pin connector to interface with the FX2G3 baseboard. All the signals required for interfacing FX2G3 with external camera modules such as LVCMOS, I2C, SPI, JTAG, and GPIOs devices are routed to this connector.

3.2.2.10 JTAG header (J4)

This header can be used to program the FPGA externally with the JTAG programmer.

3.2.2.11 Mode selection switch (SW2)

To select the SPI mode of the FPGA, the mode selection switch (SW2) is provided to place the switch as shown in Table 6 for configuration to select the required boot mode.

Table 6 SPI mode for selection switch

SPI mode	SW2	Description
X1	Pin 1 - OFF, Pin 2 - OFF	Single SPI mode is selected
X4 (default)	Pin 1 - ON, Pin 2 - OFF	Quad SPI mode is selected

4 Programming the kit

The KIT_FX2G3_104LGA kit is preprogrammed with the internal colorbar firmware to stream UVC colorbar video generated internally inside FPGA. Follow these steps to change the firmware:

1. Open ModusToolbox™ dashboard and click on **Launch Project Creator**

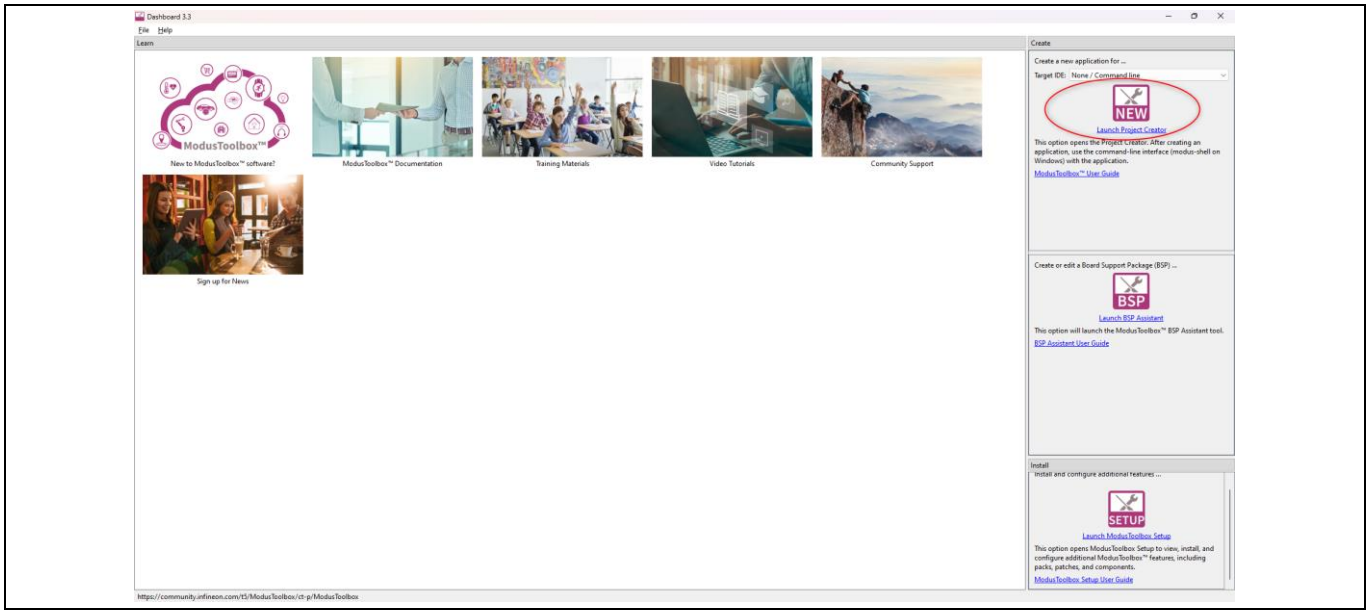

Figure 4 ModusToolbox™ dashboard view

2. Click on **USB BSPs** > **KIT_FX2G3_104LGA** and click **Next**

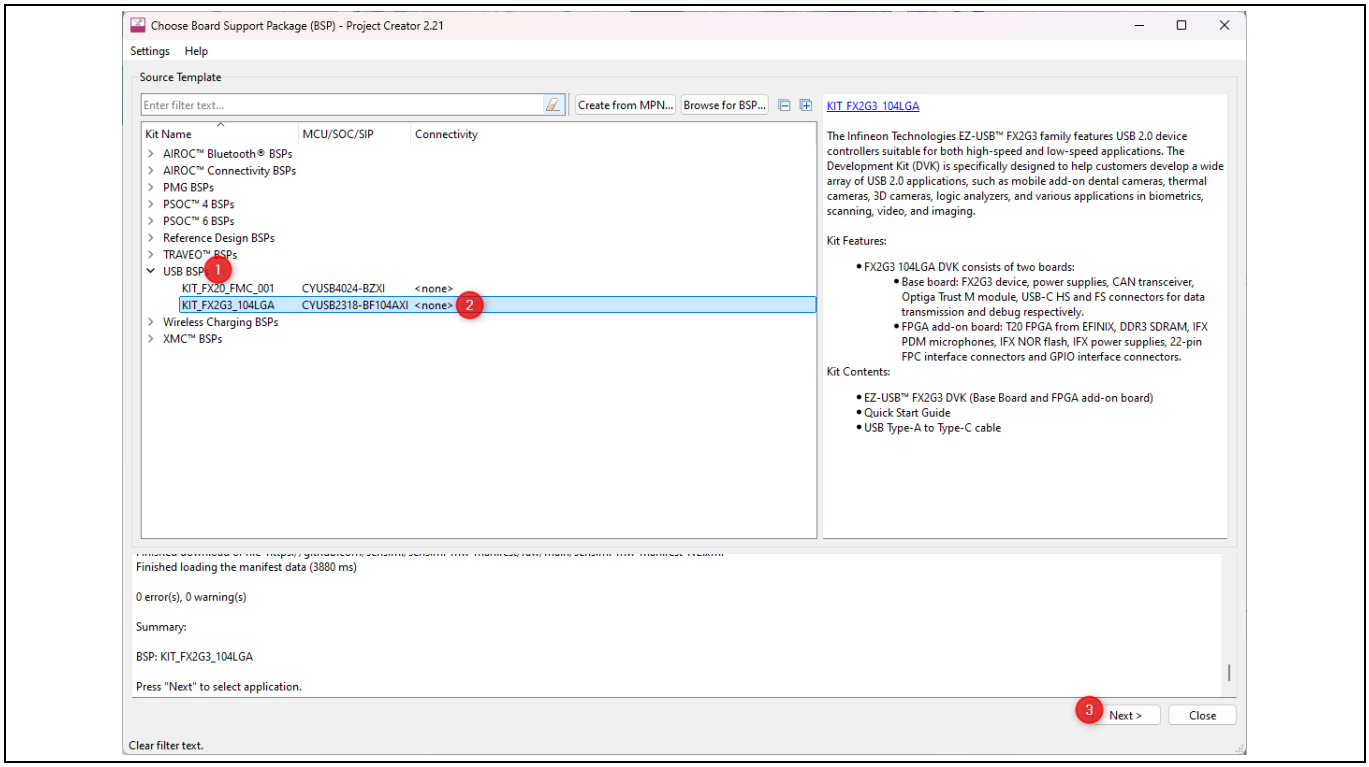

Figure 5 ModusToolbox™ dashboard view

3. Here, in the **Template Application** tab, under **Getting Started**, you can find the list of code examples. Select the code example you want to execute and click **Create**

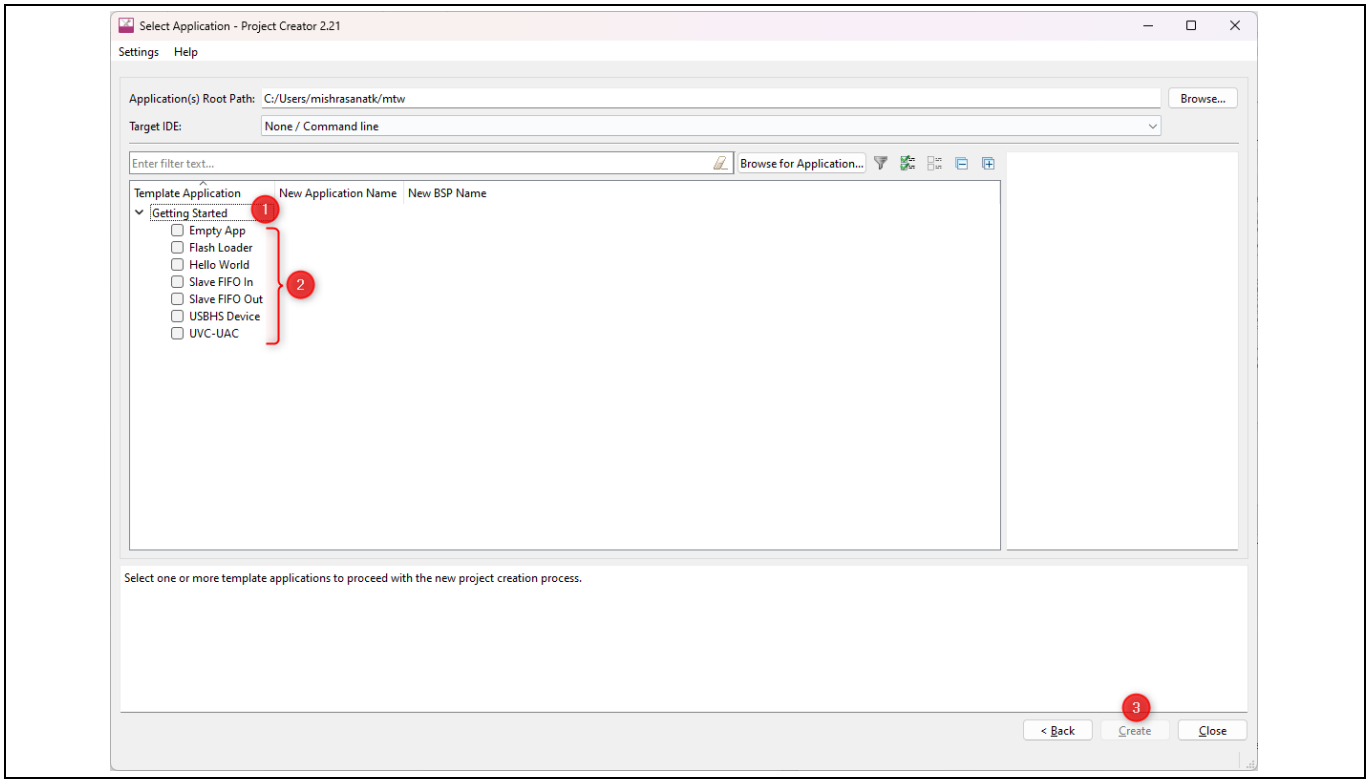

Figure 6 ModusToolbox™ dashboard view

This will create the respective code example folder in the Application(s) Root Path. Navigate to the Application(s) Root Path, where the code example is extracted, and then go to the 'documents' folder to access the EZ-USB™ FX2G3-SDK user guide. Follow the guide to build the code.

4.1 Program the external flash

4. Open the *ez-usb-fx-control-center.exe* application
5. Connect the FX2G3 DVK to the PC via a USB-C HS cable
6. Press and hold the PMODE switch (SW1) and reset the device by pressing the RESET switch. Release the PMODE switch (SW1)
7. Control Center utility tool detects the FX2G3 device
8. Do the following to program the external SPI flash device:

   a) Click **FX2G3**, **Program**, and **External SPI Flash F6** as shown in Figure 7

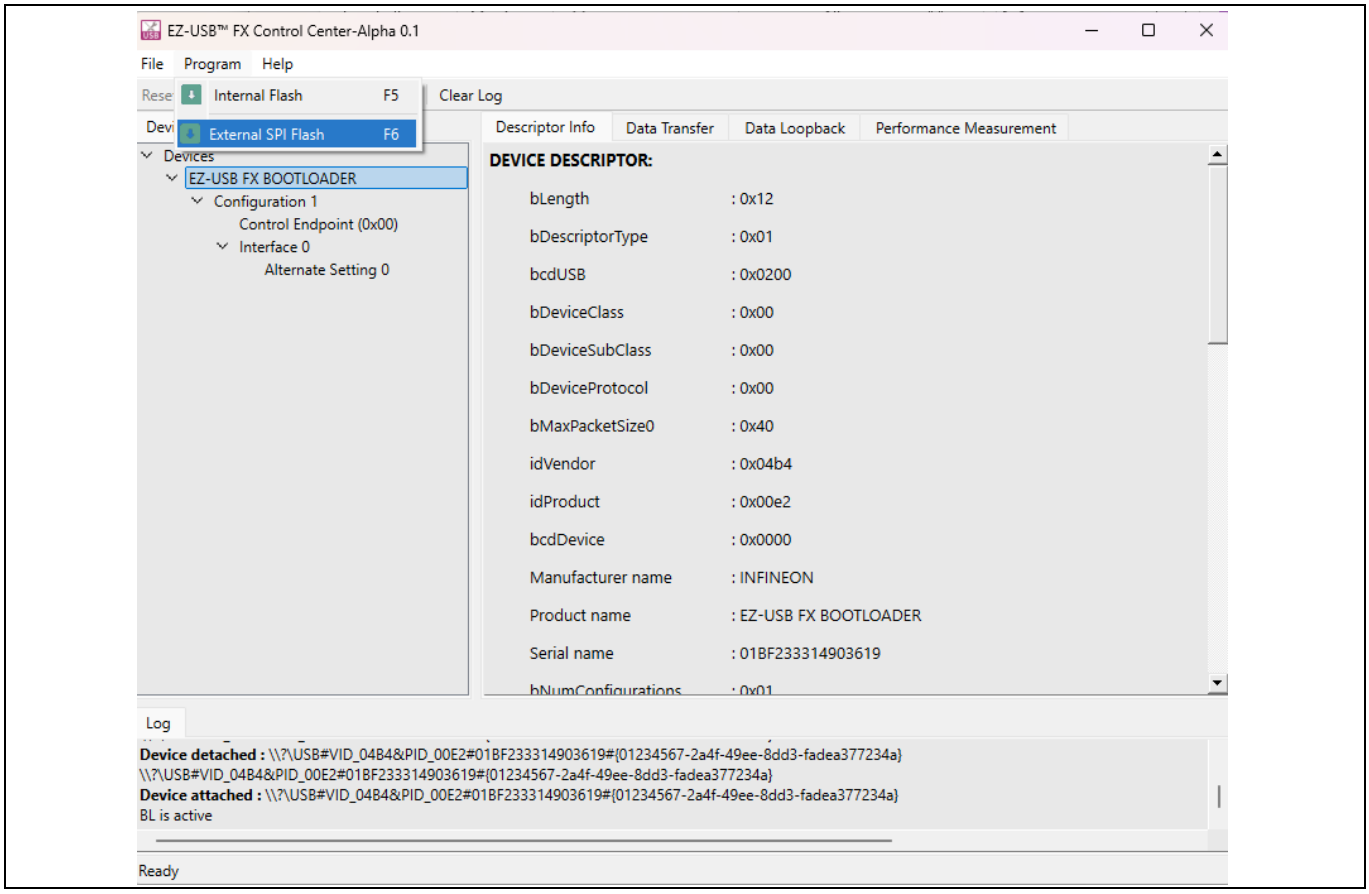

Figure 7 FX2G3 device enumeration in Control Center application

9. In the pop-up window, navigate to the *<Drive>\EZ-USB-FX2G3-SDK\FX2G3-Firmware\mtb-example-fx2g3-uvc-uac\Bitfile a*nd select the *FX2G3_Design_PassiveX4_16Bit_LVCMOS_RX.bin* file and click **Open** to program SPI flash

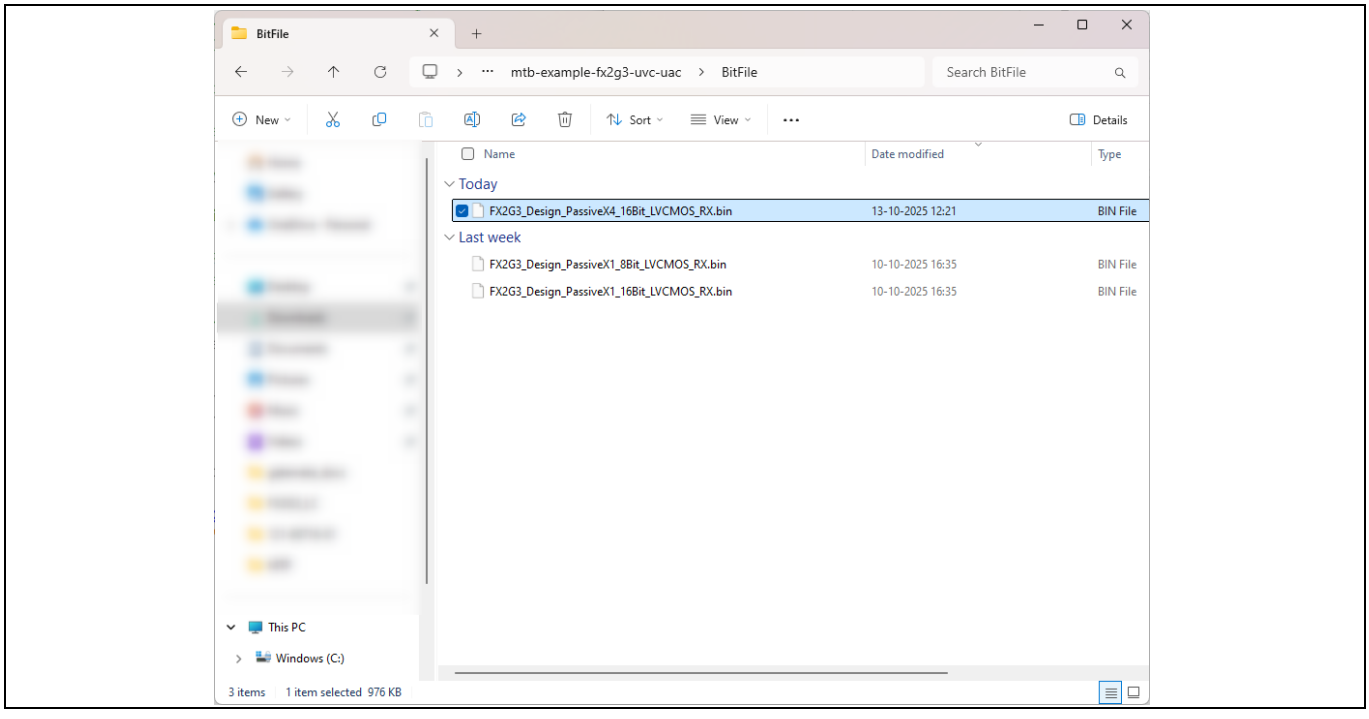

Figure 8 Programming External SPI flash

10. Wait for programming to complete, you will get a message stating the firmware download is completed.

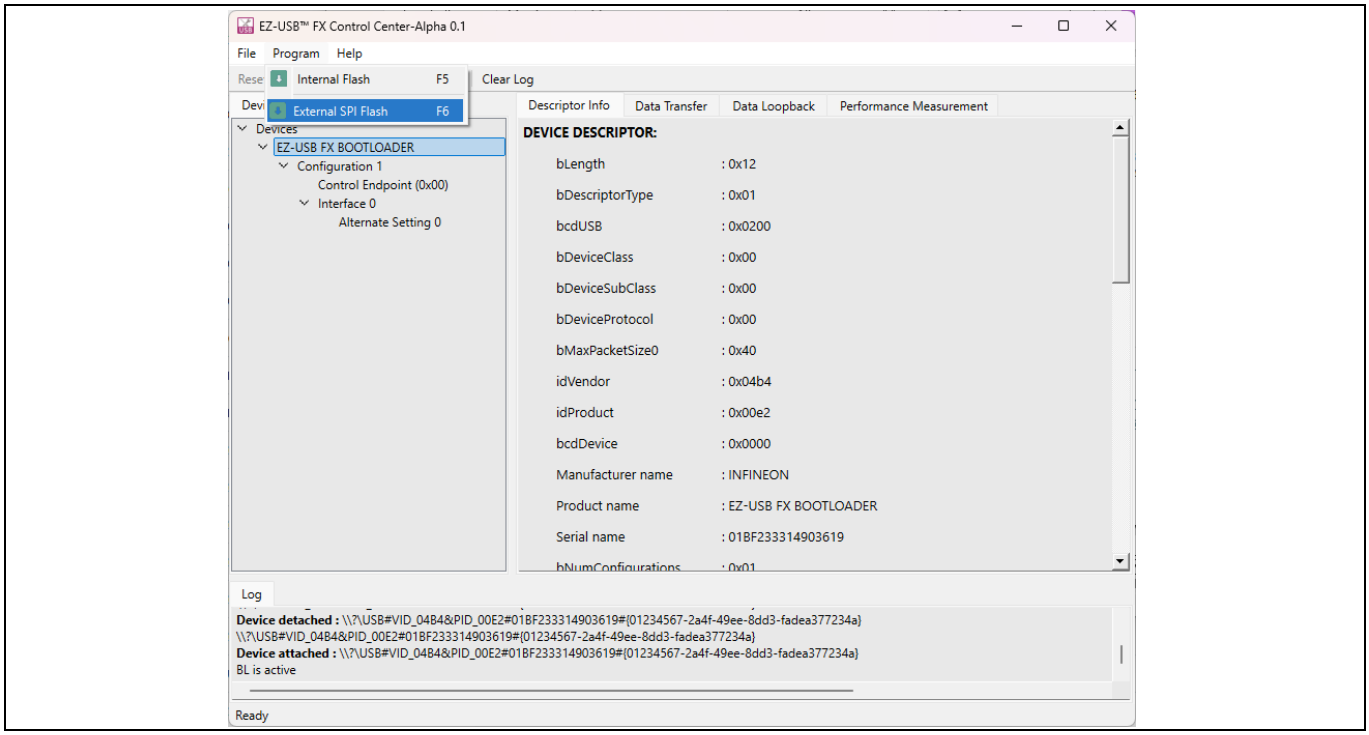

Figure 9 Programming successful Log window

4.2 Program the user application in internal flash

1. Open the *ez-usb-fx-control-center.exe* application
2. Connect the FX2G3 DVK to the PC via a USB-C HS cable
3. Press and hold the PMODE switch (SW1) and reset the device by pressing the RESET switch. Release the PMODE switch (SW1)
4. Control Center utility tool detects the FX2G3 device
5. Do the following to program the internal flash device:

   a) Click **EZ-USB FX BOOTLOADER**, **Program**, and **Internal Flash F5** as shown in Figure 10

Programming the kit

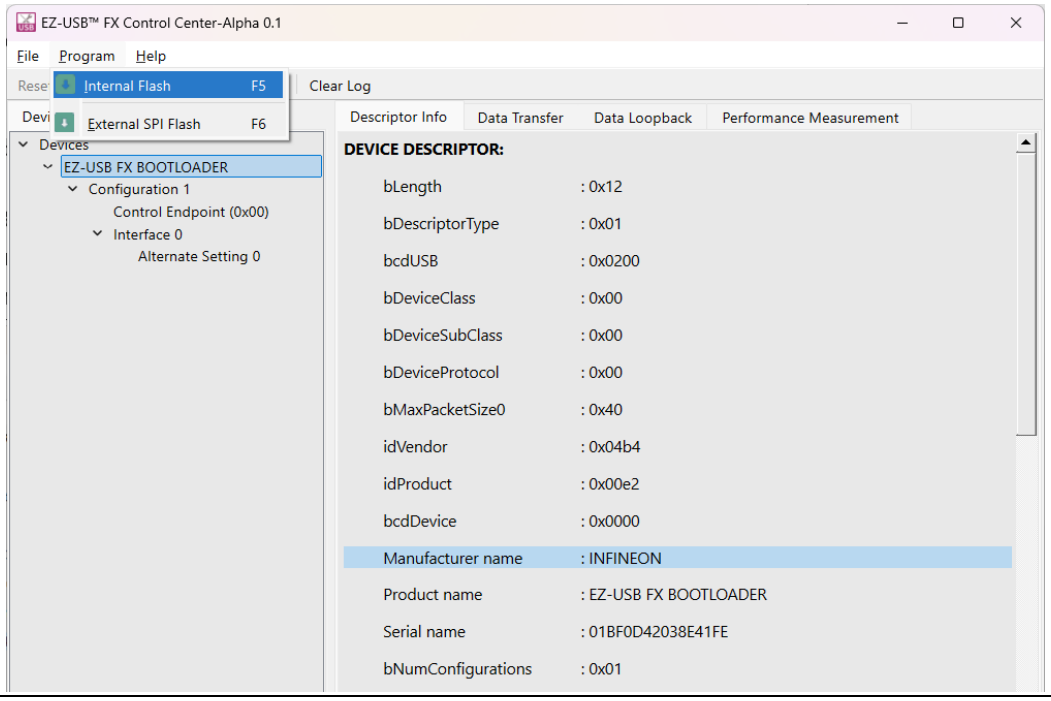

Figure 10 FX2G3 device enumeration in Control Center application

6. In the pop-up window, navigate to the *<Drive>\EZ-USB-FX2G3-SDK\FX2G3-Firmware\mtb-example-fx2g3-uvc-uac\bin folder a*nd select the *mtb-example-fx2g3-uvc-uac.hex* file of FX2G3 and click **Open** to program internal flash

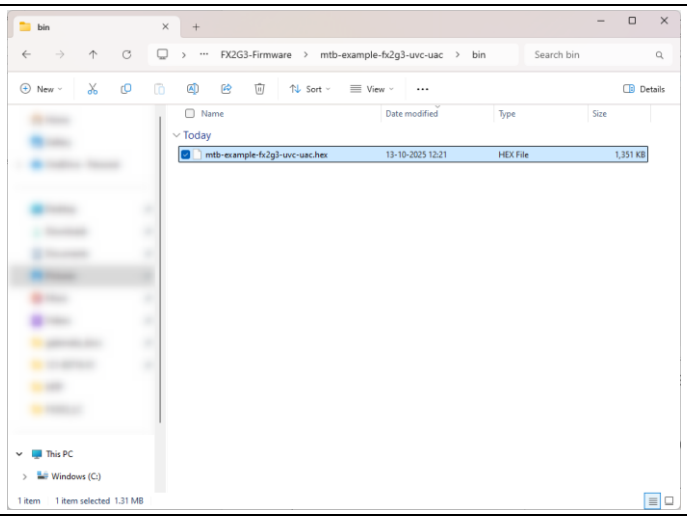

Figure 11 Programming internal SPI flash

7. Wait for programming to complete, you will get a message stating firmware download is successful and device detached

Programming the kit

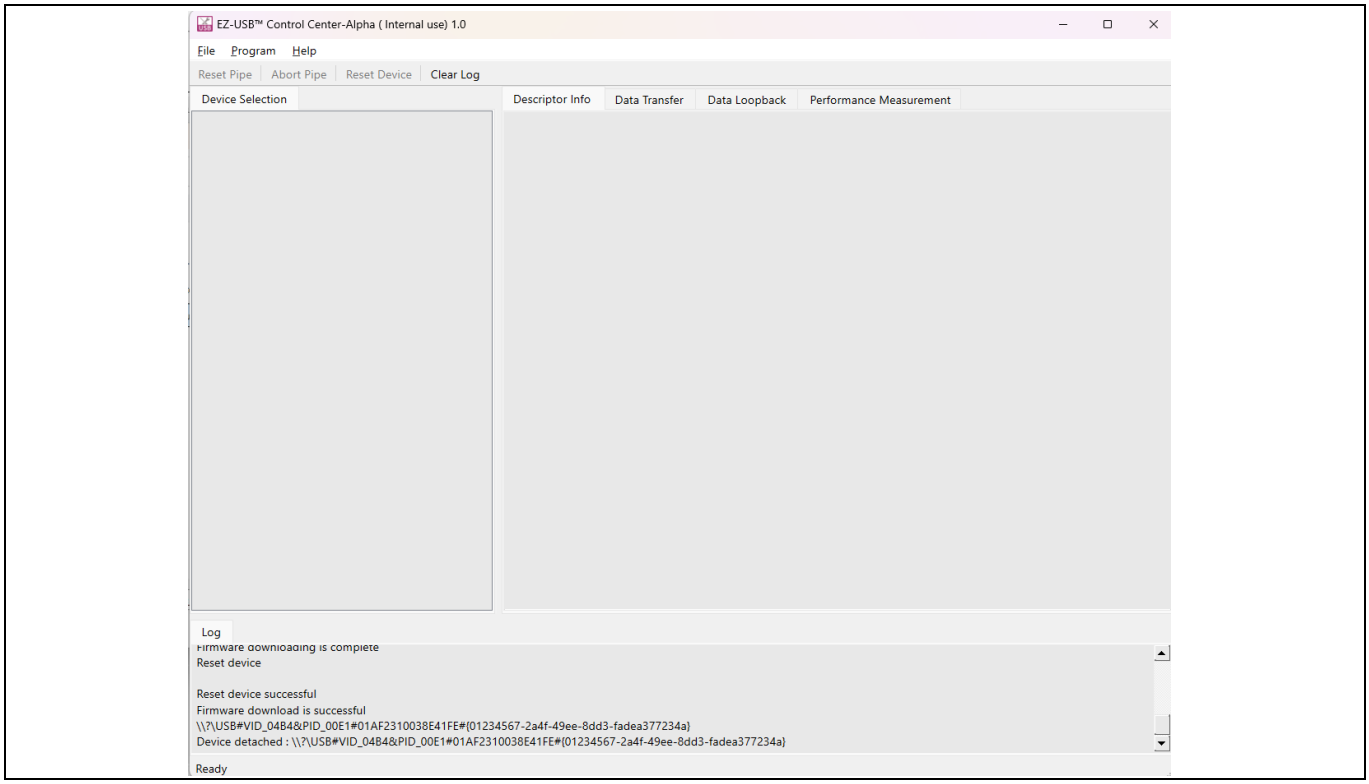

Figure 12 Programming successful Log window

5 Run the application

5.1 Viewing the UVC output (camera streaming) using Windows Camera application

1. Ensure that the FPGA is programmed with the FX2G3_Design_PassiveX4_16Bit_LVCMOS_RX.bin file by following the steps mentioned in the Program the external flash section and FX2G3 is programmed with the *mtb-example-fx2g3-uvc-uac.hex* file by following the steps mentioned in the Program the user application in internal flash section
2. To test the camera streaming, use the Raspberry Pi Camera Module V2 (not provided with the kit). Connect the camera module to the J2 connector on the FX2G3 FPGA add-on board

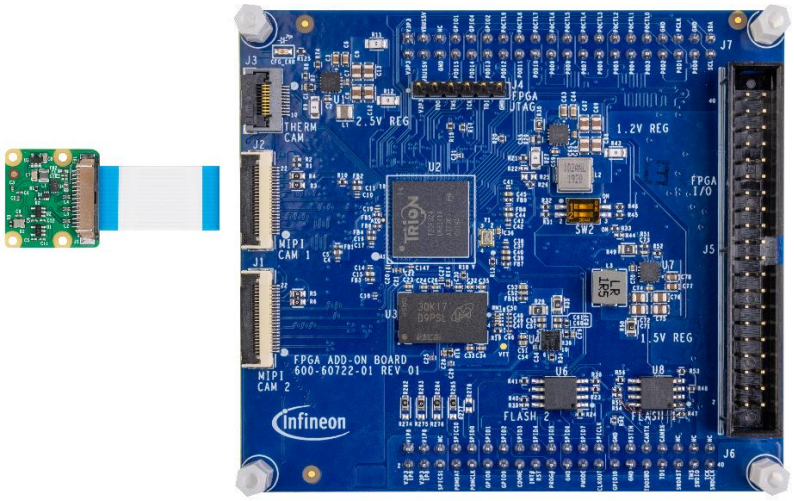

Figure 13 Connecting camera module to the FX2G3 FPGA add-on board

3. Connect the kit to the host PC. The camera should then be enumerated as FX2G3 in the **Device Manager**

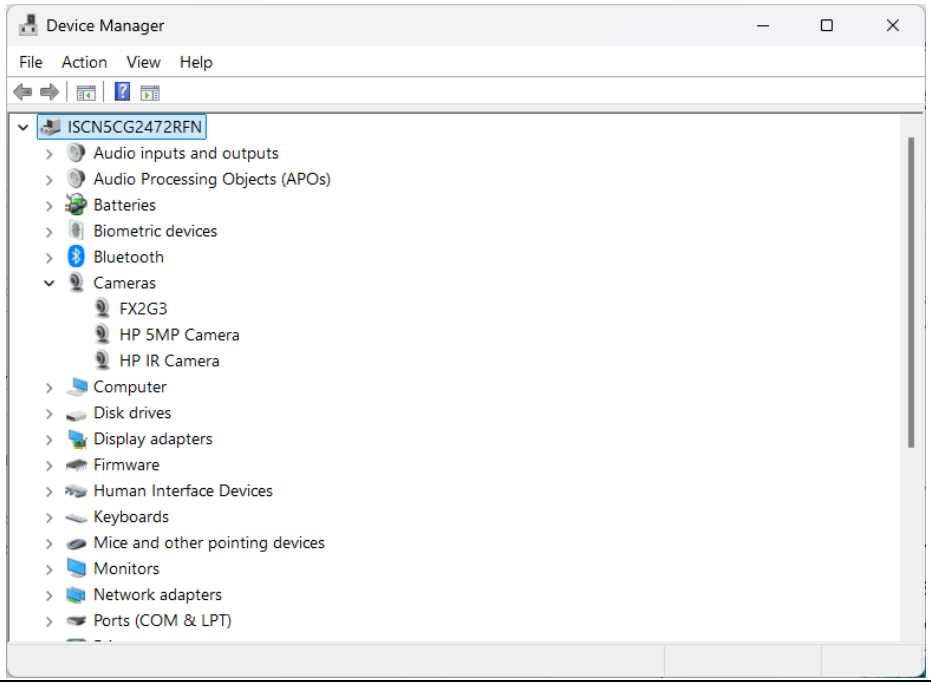

Figure 14 Board enumerated as FX2G3 in Windows Device Manager

Run the application

4. Open the Windows Camera application and then flip the camera
5. Set the resolution in the photo settings (marked as A) of the Camera application to 1920x1080 to see the camera streaming

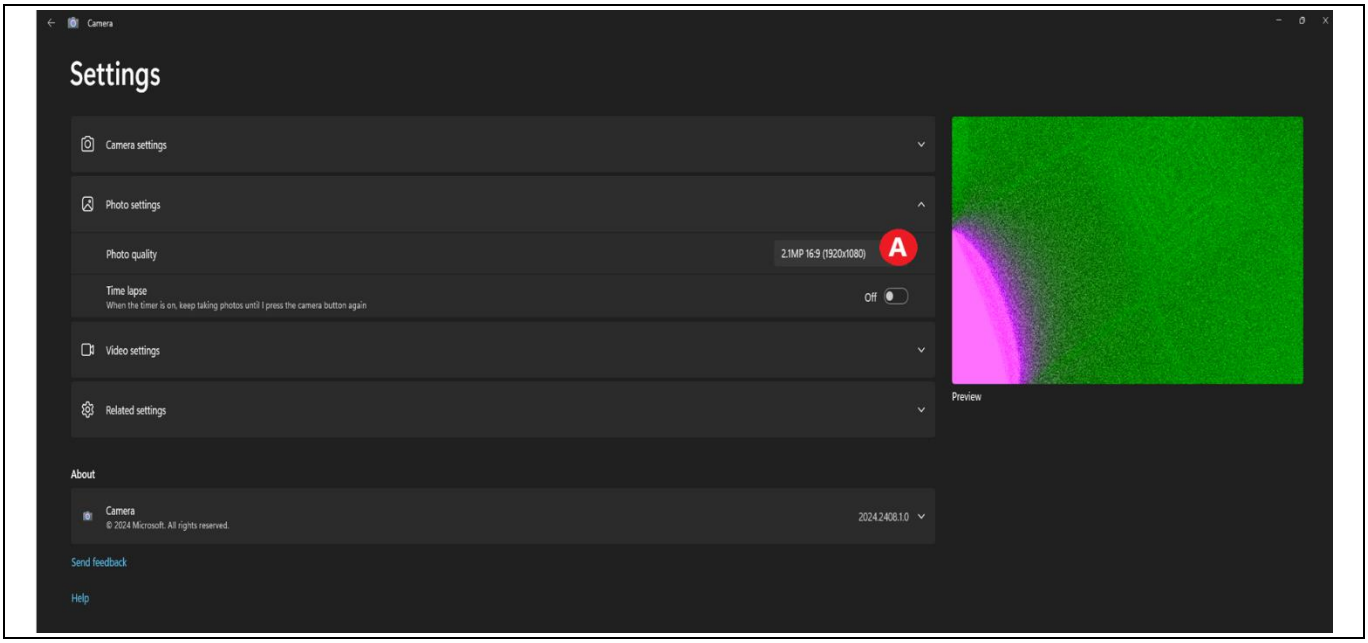

Figure 15 Board enumerated as FX2G3 in Windows Device Manager

6. Connect the DEBUG port J7 of FX2G3 to host PC using a USB-C cable
7. Open **Tera Term** > Go to **File** > **New Connection**
8. Select the respective COM port in serial tab to see the data logs

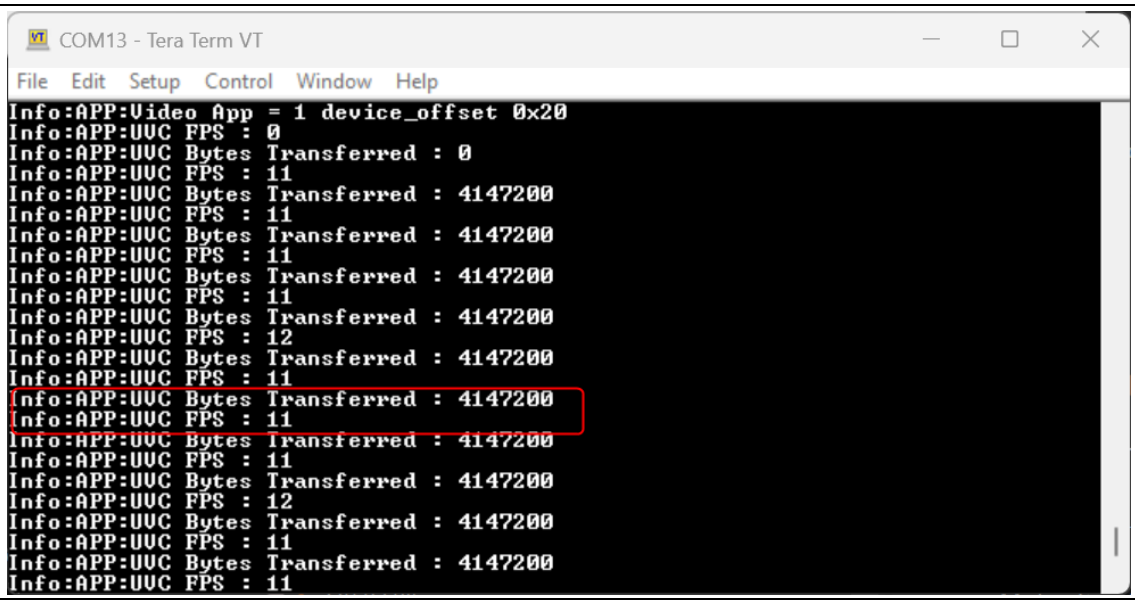

Figure 16 Tera Term log , VGA resolution at 1080x1920 , streaming at 11 FPS

Note: If the resolution is set to 640x480p the VGA will stream at 30 FPS.

5.2 Viewing the UVC output (colorbar) using Windows Camera application

1. Ensure that the camera is not connected to the kit and FPGA is programmed with the FX2G3_Design_PassiveX4_16Bit_LVCMOS_RX.bin file by following the steps mentioned in the Program the external flash section and FX2G3 is programmed with the *mtb-example-fx2g3-uvc-uac.hex* file by following the steps mentioned in the Program the user application in internal flash section
2. Open the Windows Camera application and then flip the camera
3. Set the resolution in the photo settings (marked as A) of the Camera application to 1920x1080 or 640x480 to see the colorbar streaming

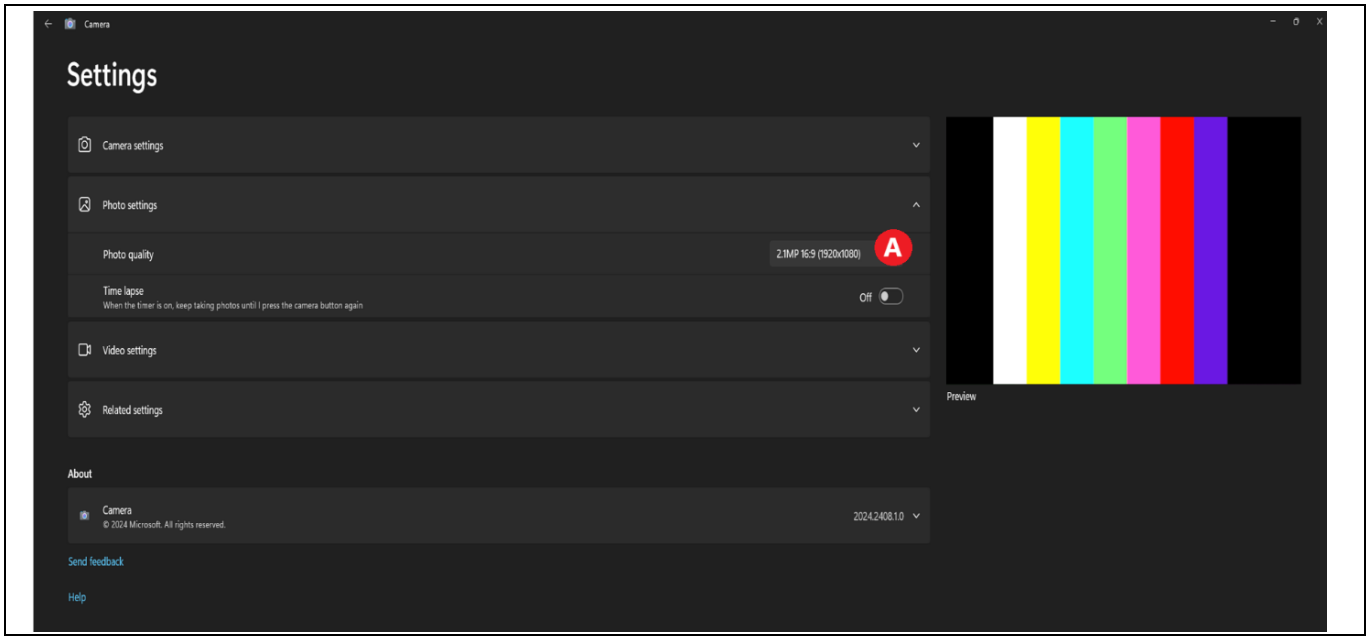

Figure 17 UVC colorbar streaming

4. Connect the DEBUG port J7 of FX2G3 to host PC using a USB-C cable
5. Open **Tera Term** > Go to **File** > **New Connection**
6. Select the respective COM port in serial tab to see the data logs

Run the application

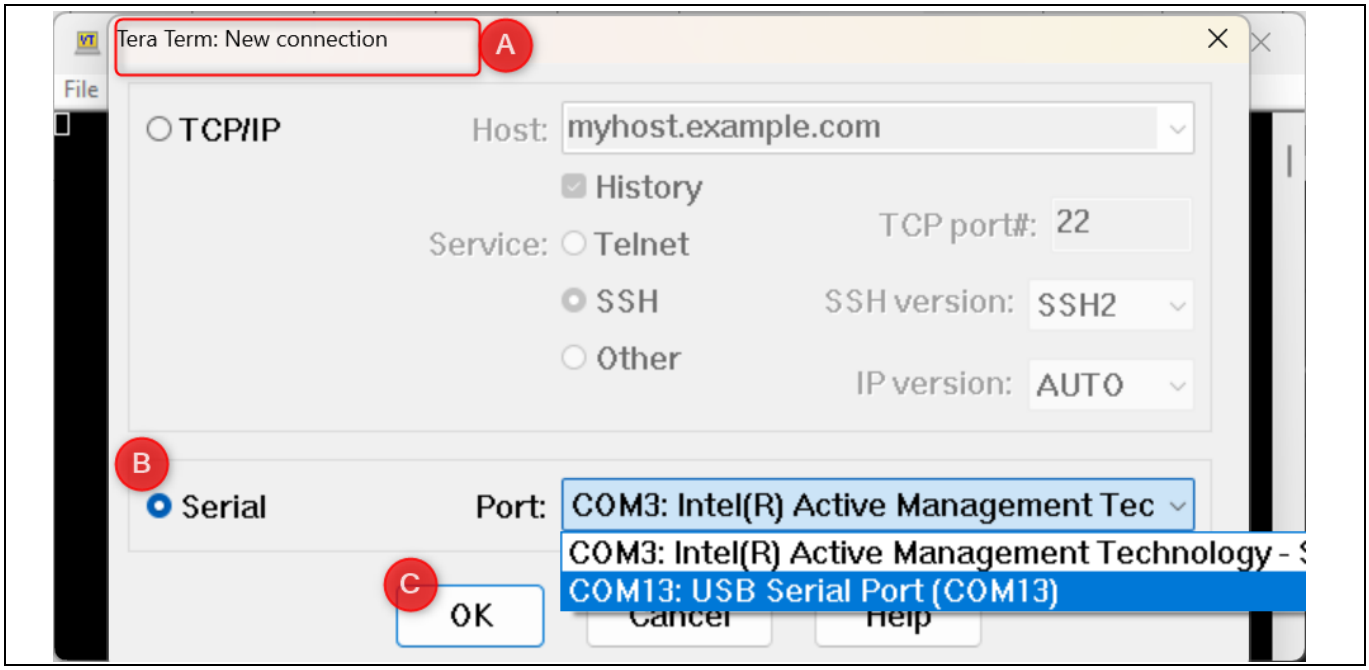

Figure 18 Tera Term initial setup

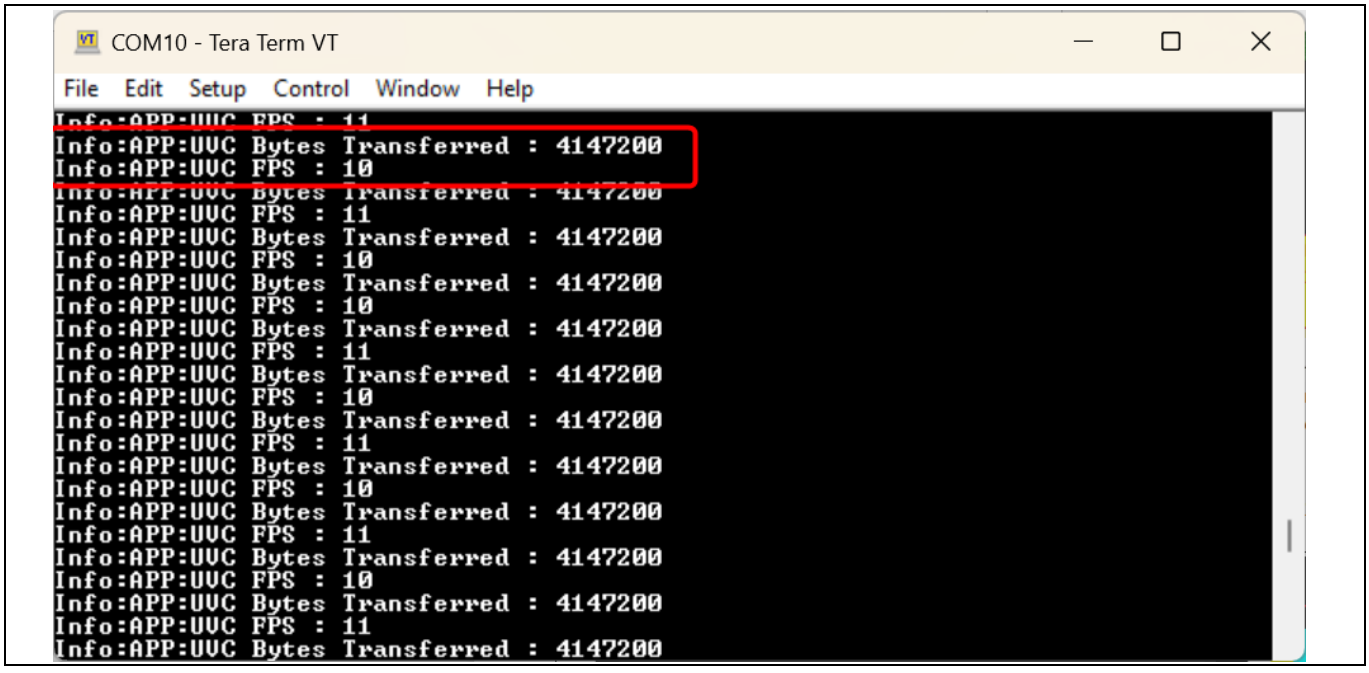

Figure 19 Tera Term log colorbar streaming at 1080x1920 ,streaming at 10 FPS

Note: If the resolution is set to 640x480p the colorbar will stream at 60 FPS.

6 Low-speed interface

6.1 MEMS PDM stereo microphone interface

The FX2G3 baseboard has two onboard PDM microphones connected in stereo configuration. Follow these steps to test the microphone:

1. Program FX2G3 with the *mtb-example-fx2g3-uvc-uac.hex* file by following the steps mentioned in the Program the user application in internal flash section
2. Open the Sound Recorder application in Windows
   a) Select Recording Device to **Microphone (FX2G3)**
   b) Play audio from an external device. Record it by pressing the **Record** button and press the **Stop** button to stop the recording
   c) Press the **Play** button to hear the recorded audio

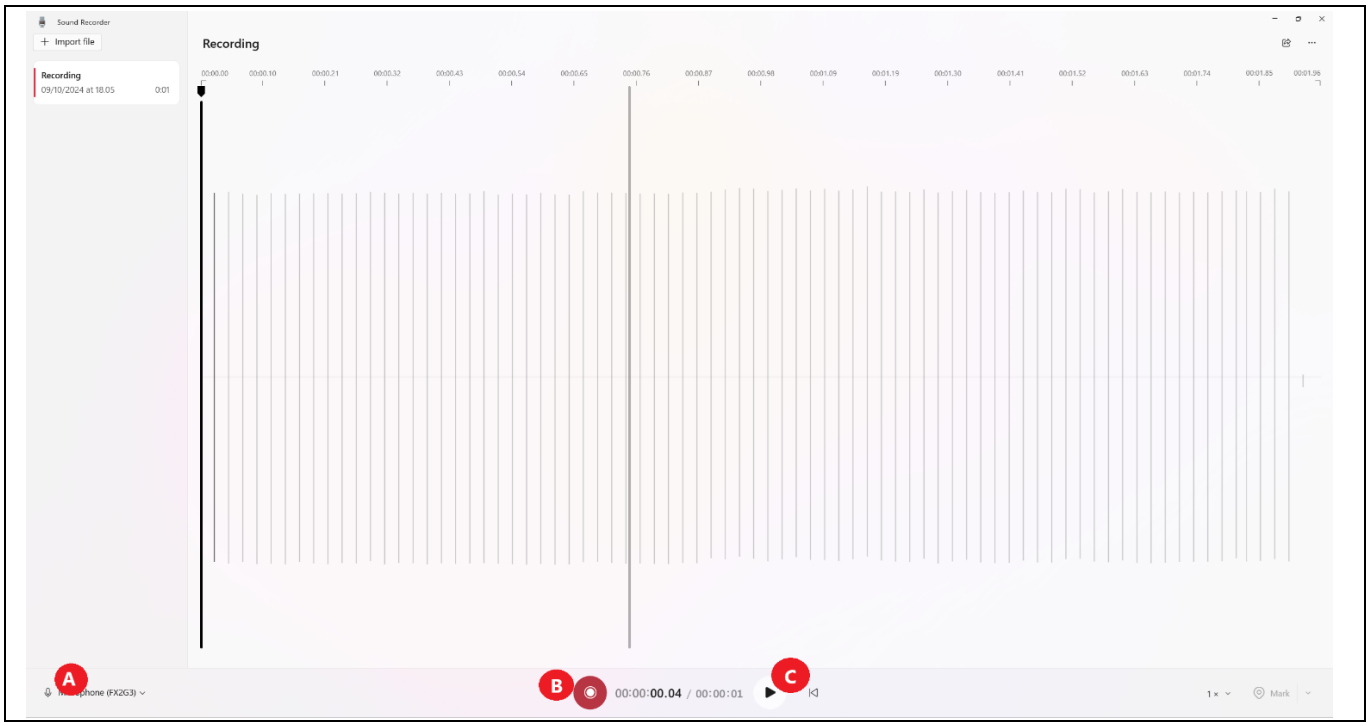

Figure 20 Recorder application setting

7 Troubleshooting

7.1 FX2G3 programming test

1. If the Control Center is not detecting the FX2G3 device:
   a) Press and hold the PMODE switch (SW1)
   b) RESET FX2G3: Either press the RESET switch and release or power cycle the kit
   c) Release the PMODE switch after a delay

If the step does not help and if you have any questions, create a support request on the Infineon Technical Support page.

References

[1] Product webpage: EZ-USB™ FX2G3 webpage

Glossary

CAN
controller area network

DAP
debug access port

DC-DC
direct current to direct current (power conversion)

DDR3
double data rate 3 (type of SDRAM)

DMA
direct memory access

DVK
development kit

EC
electromagnetic compatibility directive

EMC
electromagnetic compatibility

ESD
electrostatic discharge

FPGA
field programmable gate array

FS
full-speed (USB mode)

GPIO
general purpose input/output

HS
high-speed (USB mode)

IC
integrated circuit

I/O
input/output

I2C
inter-integrated circuit (serial communication protocol)

JTAG
joint test action group (debug interface)

KB
kilobyte

Glossary

LGA
land grid array (package type)

LVCMOS
low-voltage complementary metal-oxide semiconductor

MCU
microcontroller unit

MEMS
micro-electro-mechanical systems

MIPI
mobile industry processor interface

PCB
printed circuit board

PCN
process change notification

PD
product discontinuation

PDM
pulse density modulation (microphone interface)

PMODE
programming mode

PQFN
power quad flat no-lead (package type)

QSG
quick start guide

RAM
random access memory

RMA
returned material analysis

ROM
read-only memory

SCB
serial communication block

SDK
software development kit

SPI
serial peripheral interface

SRAM
static random access memory

Glossary

SWD
serial wire debug

TVS
transient voltage suppression (diode)

UAC
USB audio class

UVC
USB video class

USB
universal serial bus

VBUS
USB bus voltage

VDDIO
voltage for digital input/output

Revision history

Document revision	Date	Description of changes
**	2024-10-14	Initial release
*A	2024-10-18	Minor updates
*B	2024-12-06	Updated document as per Rev02 kit
*C	2025-12-19	Minor updates

Trademarks
All referenced product or service names and trademarks are the property of their respective owners.

Edition 2025-12-19
Published by

Infineon Technologies AG
81726 Munich, Germany

© 2025 Infineon Technologies AG. All Rights Reserved.

Do you have a question about this document?
Email: erratum@infineon.com

002-40694 Rev. *C

Important Notice

This evaluation board, demonstration board, reference board or kit and any related Board documentation (“Evaluation Board”) is sold or provided and delivered by Infineon Technologies AG and its affiliates (“Infineon”). Evaluation Boards are part of Infineon’s non-serial products. This Evaluation Board is delivered to customer "AS IS", without any warranty (whether express or implied) or liability of Infineon of any kind, including but without limitation any warranty of merchantability, fitness for a particular purpose or non-infringement. These limitations and exclusions shall not apply in case of Infineon's willful misconduct or in any other case where liability is mandatory at law.
This Evaluation Board shall only be used by customer for test purposes and not for series production. However, the Evaluation Board shall not to be used for reliability testing. The Evaluation Board is exclusively intended for technically qualified and skilled customer representatives. The Evaluation Board shall not be used in any way where a failure of the Evaluation Board, or any consequences of the use thereof, can reasonably be expected to result in personal injury.
Evaluation Boards may not comply with CE or similar standards (including without limitation the EMC Directive 2004/EC/108 and the EMC Act) and may not fulfill other requirements of the country in which they are operated by the customer. The customer shall ensure that each Evaluation Board will be handled in a way which is compliant with all relevant requirements and standards in the country in which it is operated. Software and associated documentation and materials included or referenced in the Evaluation Board (“Software”) is owned by Infineon and is protected by and subject to worldwide patent protection, worldwide copyright laws, and international treaty provisions. Therefore, you may use this Software only as provided in the license agreement accompanying the software package from which you obtained this Software. If no license agreement applies, then any use, reproduction, modification, translation, or compilation of this Software is prohibited without the express written permission of Infineon. Unless otherwise expressly agreed with Infineon, this Software is provided to customer "AS IS", without any warranty (whether express or implied) or liability of Infineon of any kind, including but without limitation any warranty of merchantability, fitness for a particular purpose or non-infringement. These limitations and exclusions shall not apply in case of Infineon's willful misconduct or in any other case where liability is mandatory at law.
Infineon reserves the right to make changes to the Software without notice. You are responsible for properly designing, programming, and testing the functionality and safety of your intended application of the Software, as well as complying with any legal requirements related to its use. Infineon does not guarantee that the Software will be free from intrusion, data theft or loss, or other breaches (“Security Breaches”), and Infineon shall have no liability arising out of any Security Breaches. The Software shall not be used in any way where a failure of the Evaluation Board, or any consequences of the use thereof, can reasonably be expected to result in personal injury.

Safety & Operating Instructions:
Customer shall check the Evaluation Board for any physical damage which may have occurred during transport. If customer detects any damages or defects in the Evaluation Board, customer shall not connect the Evaluation Board to a power source. Customer shall contact Infineon for further support. If customer observes unusual operating behavior during the evaluation process, customer shall immediately shut off the power supply to the Evaluation Board and consult Infineon for support.
Customer shall not touch the Evaluation Board during operation and keep a safe distance.
Customer shall not touch the Evaluation Board after disconnecting the power supply, several components may still store electrical voltage and can discharge through physical contact. Several parts, like heat sinks and transformers, may still be very hot. Allow the components to cool before touching or servicing.
The electrical installation must be completed in accordance with the appropriate safety requirements.