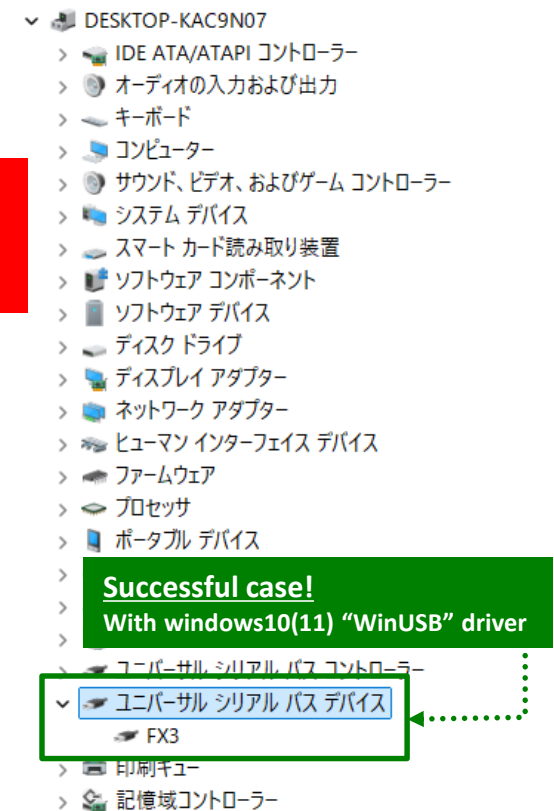
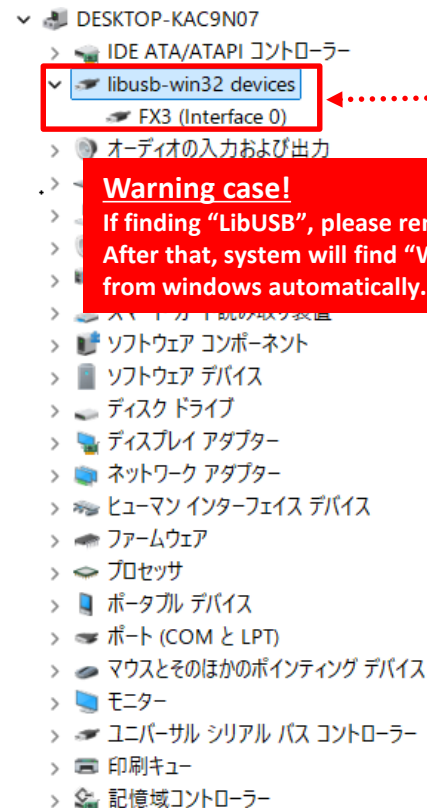
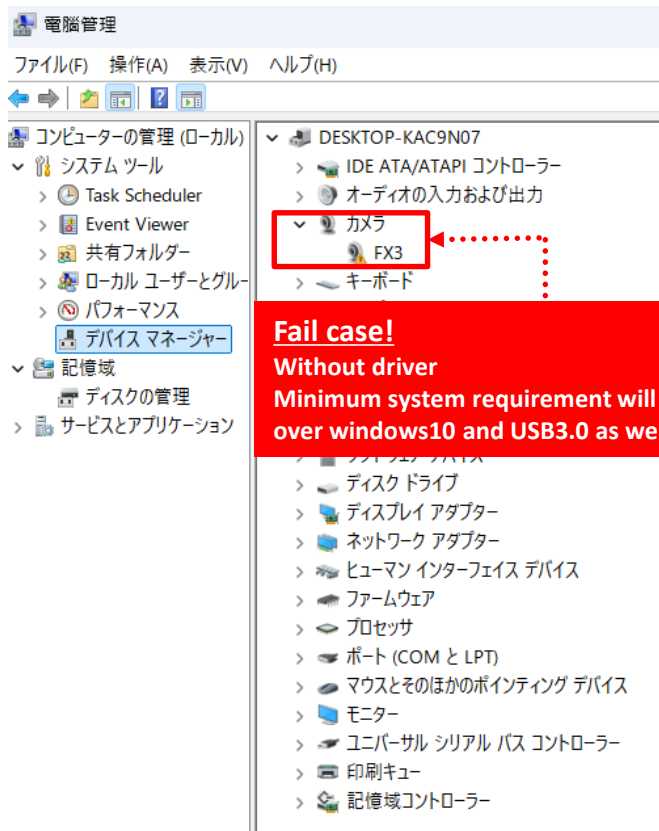


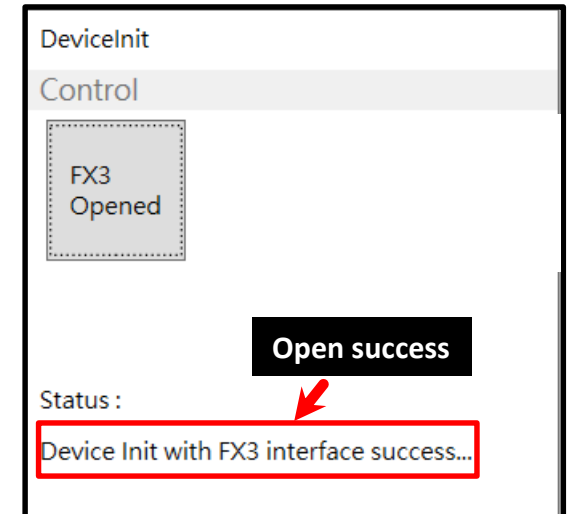
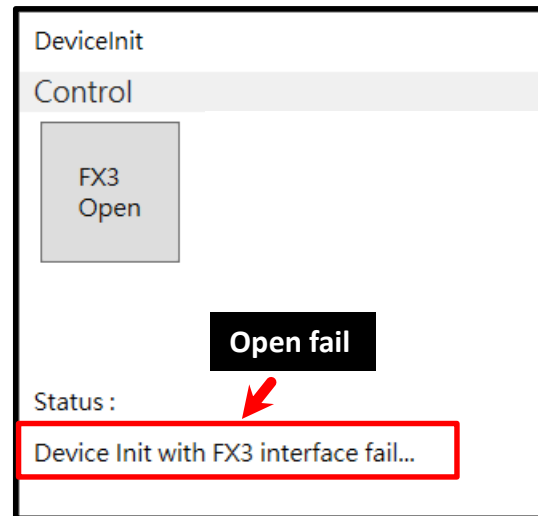
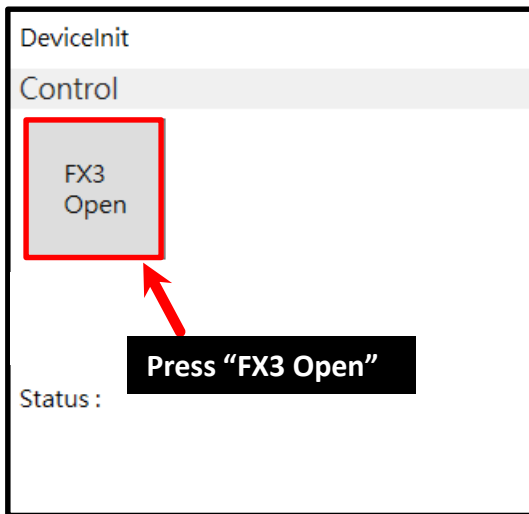
Driver Installation

- Please use windows system over **Windows10 OS**. Default system has “**WinUSB**” driver.
- Unzip “**PAG7685 Verification Tool AP.7z**”. The folder should contain following items:
 - (1) “**PAG7685 Verification.exe**” with related dll files.
 - (2) “**driver**” folder included driver files.
- Install “**General Module.exe**”.



Tool AP UI Introduction

- When start tool ap, there will be a sub page for control status. Press “FX3 Open” button to start.
- If system loss FX3 driver or cannot detect, status will show: Device init with FX3 interface fail. At this time, if system installed driver already, *user can press FX3 or CX3’s RESET “real” button to reset*. And then, press tool AP’s “FX3 Open” button again.
- When system connect with FX3 successfully, status will show “Device init with FX3 interface success”.



(Need to press FX3/CX3’s real reset button)

Tool AP UI Introduction

The screenshot shows the PAG7685 Tool AP_20250516 (USB3.0) interface. At the top, a black box labeled "Tool AP's information" points to the title bar. Below the title bar is a horizontal menu with options: MCUFuncOFF, Image, DetectionPlus, SkeletonPlus (original 12p) 00, Face KeyPoint, Hand KeyPoint, and Segmentation. A red box highlights the first six options, with a black box labeled "Press here first for start" pointing to the left arrow of the menu. A black box labeled "Main function icon" points to the "Image" option. To the right of the menu is a "Flash" button, highlighted by a red box and a black box labeled "Flash programming". Below the menu is a scroll bar. On the right side, there are two sections: "ISP Register (Decimal)" and "Sensor Register (Decimal)". The "ISP Register" section has fields for Bank, Address, and Data, each with a value of 0 and a hex value of 0x0, and buttons for "Read" and "Write". A black box labeled "PAG7685 DSP register R/W" points to this section. The "Sensor Register" section has similar fields and buttons for "Sensor Read", "Sensor Write", and "LoadAsc". A black box labeled "PAG7982 Sensor register R/W" points to this section. In the bottom left, a dashed box contains "Tool AP's information:" followed by two bullet points: "FW suggest: suggest latest FW version" and "USB: please plug in 'USB3.0' connector for this tool AP. There will be no image when plug in 'USB2.0' connector."

Tool AP's information:

- FW suggest: suggest latest FW version
- USB: please plug in "USB3.0" connector for this tool AP. There will be no image when plug in "USB2.0" connector.

Tool AP's information

Flash programming

Press here first for start

Main function icon

PAG7685 DSP register R/W

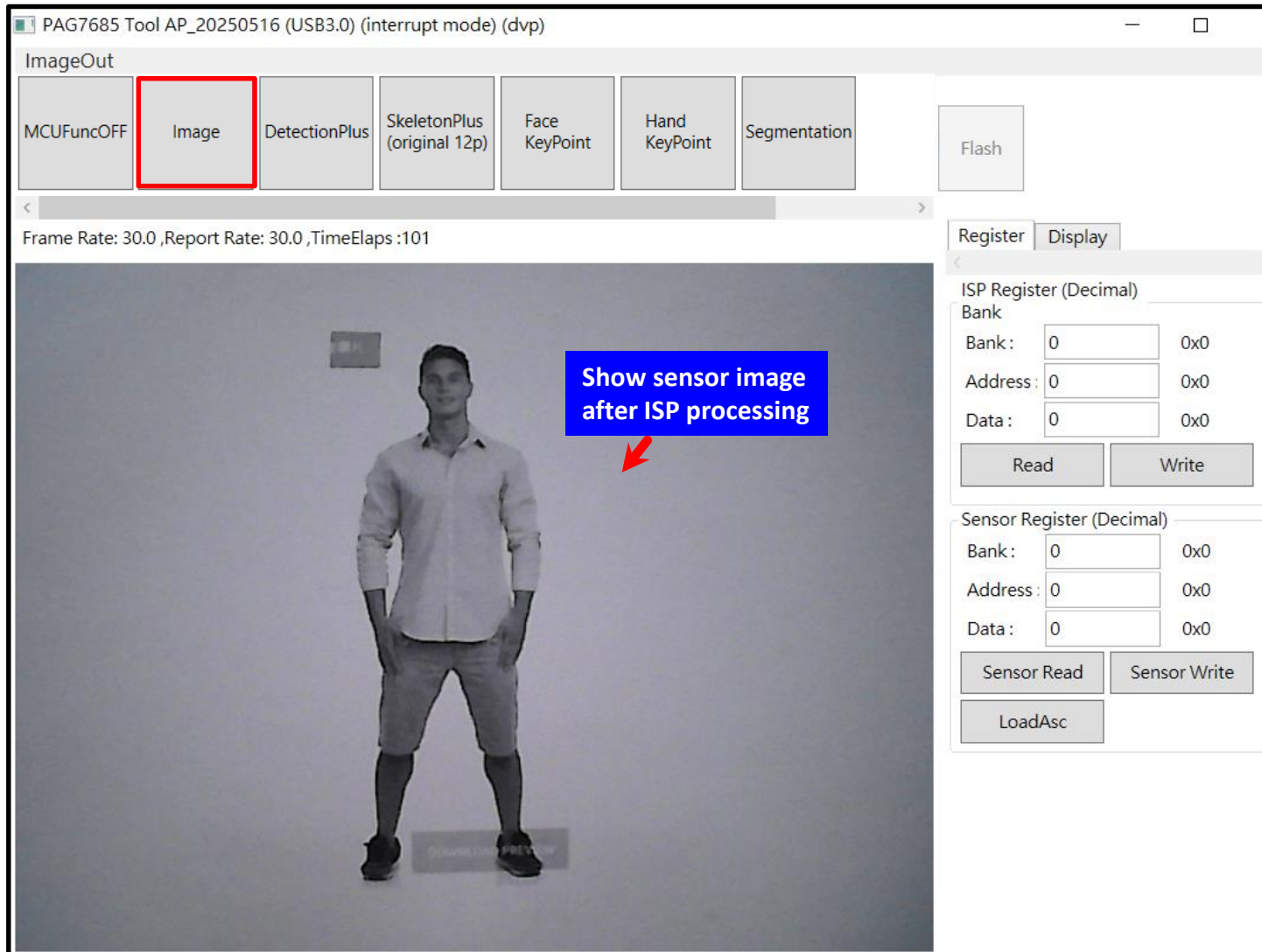
PAG7982 Sensor register R/W

PartIII: Function Introduction

❑ PAG7685 main function Introduction:

- ◆ Detection
 - Detection Plus
- ◆ Skeleton
 - Skeleton Plus (original skeleton-12p)
- ◆ Keypoint
 - Facial keypoint
 - Hand keypoint
- ◆ Segmentation

PAG7685 AP UI-Image Mode



PAG7685 AP UI- Detection Plus

PAG7685 Tool AP_20250516 (USB3.0) (interrupt mode) (dvp)

ImageOut

MCUFuncOFF Image **DetectionPlus** SkeletonPlus (original 12p) Face KeyPoint Hand KeyPoint Segmentation Flash

Frame Rate: 30.0 ,Report Rate: 30.0 ,TimeElaps :16

Human

Face

roll:-12
yaw:15
pitch:-40

Hand

Hand

Add roll, yaw, pitch information

ISP Register (Decimal)

Bank: 0 0x0

Address: 0 0x0

Data: 0 0x0

Read Write

Sensor Register (Decimal)

Bank: 0 0x0

Address: 0 0x0

Data: 0 0x0

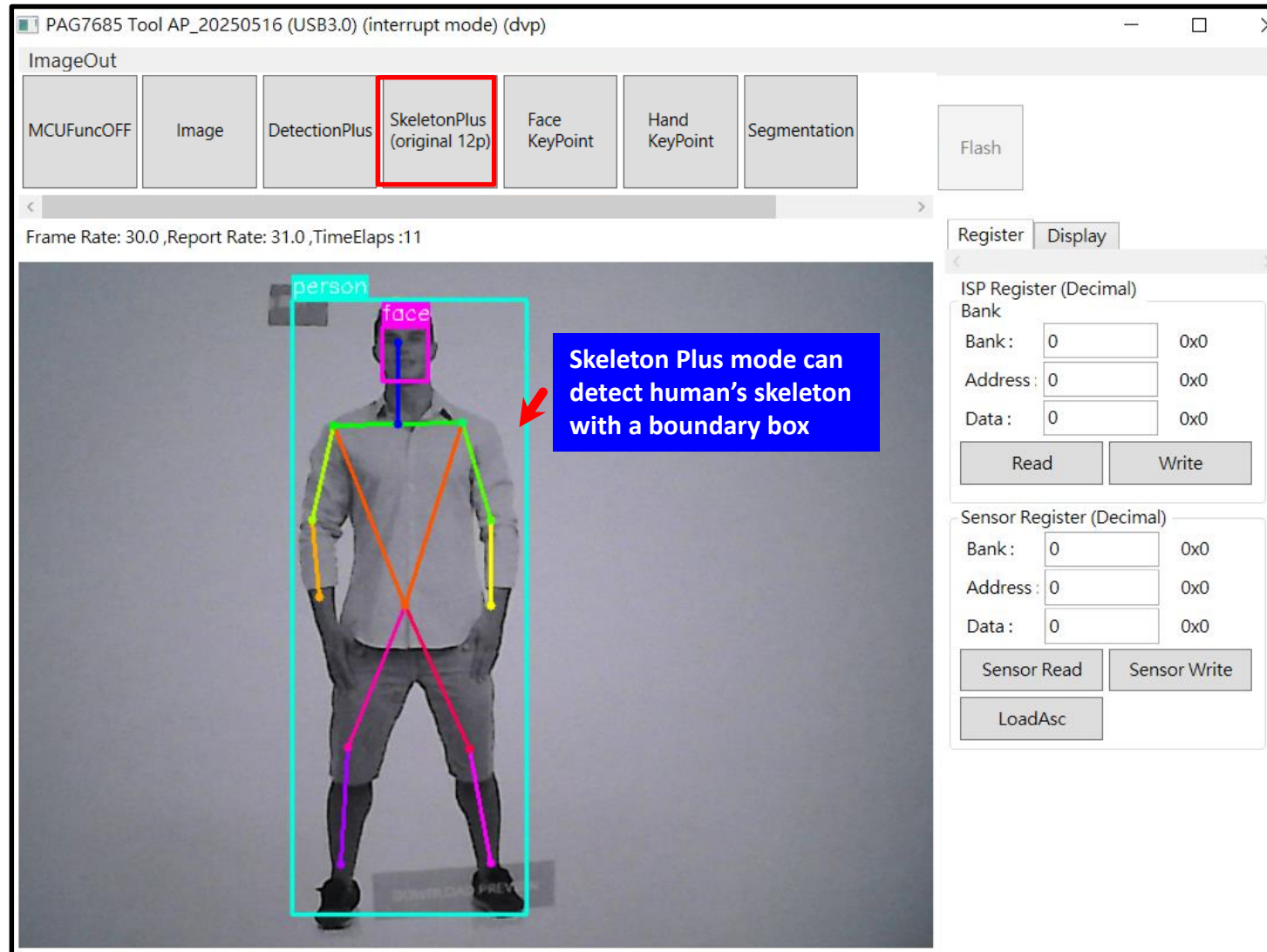
Sensor Read Sensor Write

LoadAsc

Human presence Attention

Human presence: light will turn on when human detected
Attention: light will turn on when face yaw angle under 45 degree.

PAG7685 AP UI- Skeleton Plus (original 12p)



PAG7685 AP UI- Facial Keypoint

PAG7685 Tool AP_20250516 (USB3.0) (interrupt mode) (dvp)

ImageOut

MCUFuncOFF Image DetectionPlus SkeletonPlus (original 12p) **Face Keypoint** Hand Keypoint Segmentation Flash

Frame Rate: 30.0 ,Report Rate: 30.0 ,TimeElaps:12

Face

Crop area for calculation

Crop image

Facial keypoint

Face 3-axis angle

roll 4.1
yaw 3.4
pitch 6.2

ISP Register (Decimal)

Bank : 0 0x0
Address : 0 0x0
Data : 0 0x0
Read Write

Sensor Register (Decimal)

Bank : 0 0x0
Address : 0 0x0
Data : 0 0x0
Sensor Read Sensor Write
LoadAsc

TOUCH.

PAG7685 AP UI- Hand Keypoint

PAG7685 Tool AP_20250516 (USB3.0) (interrupt mode) (dvp)

ImageOut

MCUFuncOFF Image DetectionPlus SkeletonPlus (original 12p) Face KeyPoint **Hand KeyPoint** Segmentation Flash

Frame Rate: 60.0 ,Report Rate: 60.0 ,TimeElaps :26

Hand

Crop area for calculation

Crop image

Hand keypoint

Right Hand
Pistol

Could detect "right" or "left" hand and "Gesture" types

ISP Register (Decimal)

Bank	Address	Data
0	0	0

Read Write

Sensor Register (Decimal)

Bank	Address	Data
0	0	0

Sensor Read Sensor Write LoadAsc

PAG7685 AP UI-Segmentation

PAG7685 Tool AP_20250521 (USB3.0) (interrupt mode) (dvp)

ImageOut

MCUFuncOFF Image DetectionPlus SkeletonPlus (original 12p) Face KeyPoint Hand KeyPoint **Segmentation** Flash

Frame Rate: 31.0 ,Report Rate: 30.0 ,TimeElaps :30

Real data format will has no image like this

Segmentation Mode can detect human object's area (this picture draw by tool ap)

ISP Register (Decimal)

Bank: 0 0x0

Address: 0 0x0

Data: 0 0x0

Read Write

Sensor Register (Decimal)

Bank: 0 0x0

Address: 0 0x0

Data: 0 0x0

Sensor Read Sensor Write

LoadAsc