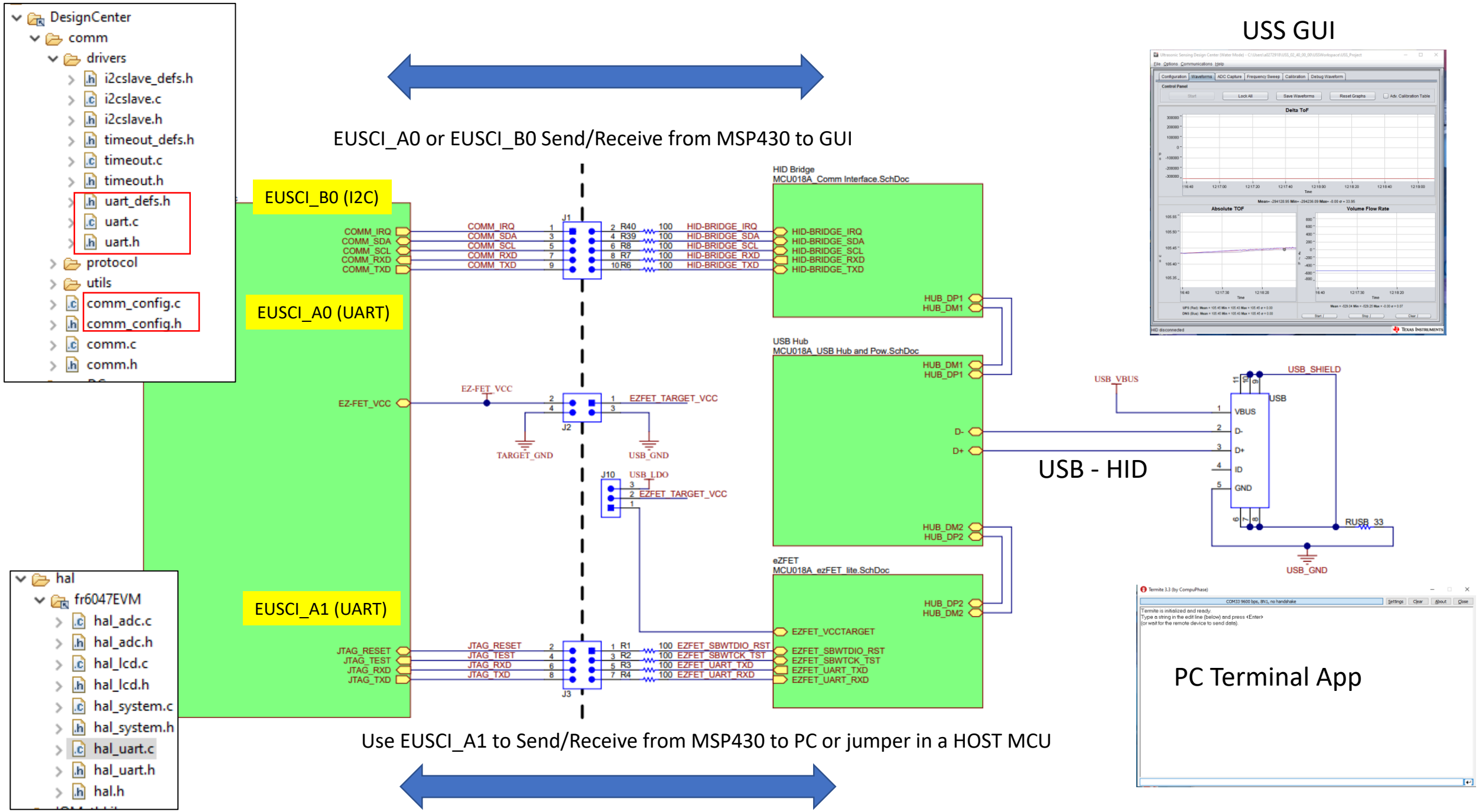
EVM430-FR6047

Communications


DesignCenter
comm
drivers
i2cslave_defs.h
i2cslave.c
i2cslave.h
timeout_defs.h
timeout.c
timeout.h
uart_defs.h
uart.c
uart.h
protocol
utils
comm_config.c
comm_config.h
comm.c
comm.h
hal
fr6047EVM
hal_adc.c
hal_adc.h
hal_lcd.c
hal_lcd.h
hal_system.c
hal_system.h
hal_uart.c
hal_uart.h
hal.h
USS GUI
EUSCI_A0 or EUSCI_B0 Send/Receive from MSP430 to GUI
EUSCI_B0 (I2C)
EUSCI_A0 (UART)
EUSCI_A1 (UART)
HID Bridge
MCU018A_Comm Interface.SchDoc
USB Hub
MCU018A_USB Hub and Pow.SchDoc
eZFET
MCU018A_ezFET_lite.SchDoc
COMM_IRQ
COMM_SDA
COMM_SCL
COMM_RXD
COMM_TXD
HID-BRIDGE_IRQ
HID-BRIDGE_SDA
HID-BRIDGE_SCL
HID-BRIDGE_RXD
HID-BRIDGE_TXD
HUB_DP1
HUB_DM1
HUB_DM2
HUB_DP2
D-
D+
USB - HID
USB_VBUS
USB_SHIELD
VBUS
ID
GND
RUSB_33
EZ-FET_VCC
EZFET_TARGET_VCC
TARGET_GND
USB_GND
USB_LDO
JTAG_RESET
JTAG_TEST
JTAG_RXD
JTAG_TXD
EZFET_SBWTDIO_RST
EZFET_SBWTCK_TST
EZFET_UART_TXD
EZFET_UART_RXD
EZFET_VCCTARGET
Use EUSCI_A1 to Send/Receive from MSP430 to PC or jumper in a HOST MCU
PC Terminal App

How to use EUSCI_A1 as backchannel UART

- HAL_UART.C
- Configure EUSCI_A1 parameters
  - Adjust clocks and set baud rates

```
#if ((HAL_SYS_SMCLK_FREQ_HZ ==8000000) && (HAL_UART_BAUDRATE == 57600))
    param.selectClockSource = EUSCI_A_UART_CLOCKSOURCE_SMCLK;
    param.clockPrescalar = 8;           // 8000000/16/57600 = 8.68
    param.firstModReg = 10;              // UCOS16=1, BRFx = 10, BRSx = 0xF7
    param.secondModReg = 0xF7;
    param.overSampling = EUSCI_A_UART_OVERSAMPLING_BAUDRATE_GENERATION;
#elif ((HAL_SYS_SMCLK_FREQ_HZ==8000000) && (HAL_UART_BAUDRATE == 115200))
    param.selectClockSource = EUSCI_A_UART_CLOCKSOURCE_SMCLK;
    param.clockPrescalar = 4;           // 8000000/16/115200 = 4.34
    param.firstModReg = 5;              // UCOS16=1, BRFx = 5, BRSx = 0x55
    param.secondModReg = 0x55;
    param.overSampling = EUSCI_A_UART_OVERSAMPLING_BAUDRATE_GENERATION;
#elif ((HAL_UART_BAUDRATE == 9600) && (HAL_SYS_ACLK_FREQ_HZ==32768))
    param.selectClockSource = EUSCI_A_UART_CLOCKSOURCE_ACLK;
    param.clockPrescalar = 3;           // 32768/9600 = 3.41
    param.firstModReg = 0;              // UCOS16=0 BRFx = 0, BRSx = 0x92
```

- Initialize EUSCI_A1
  - Call hal_uart_Init()
- To send a byte
  - Call hal_uart_TxByte()