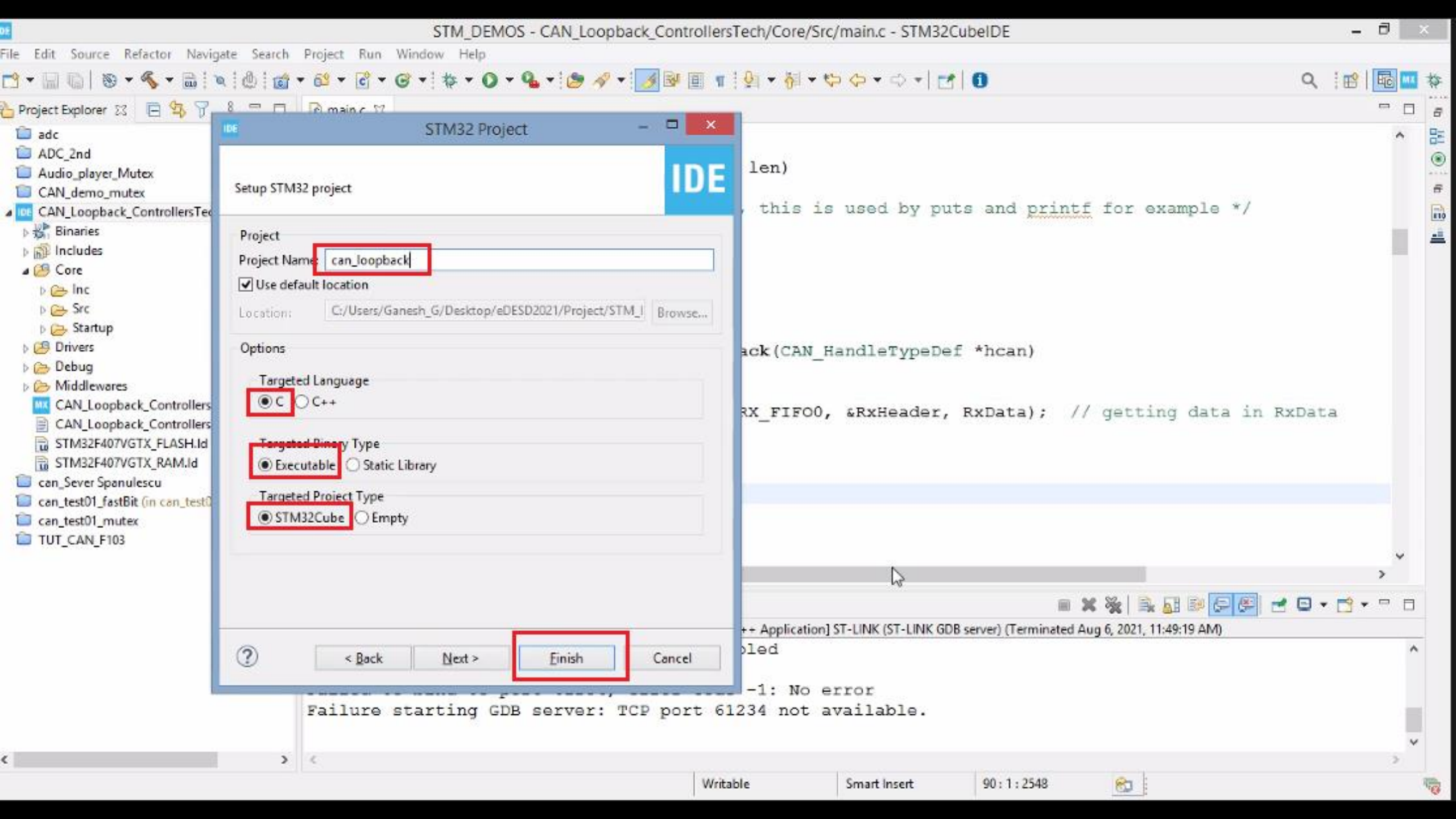


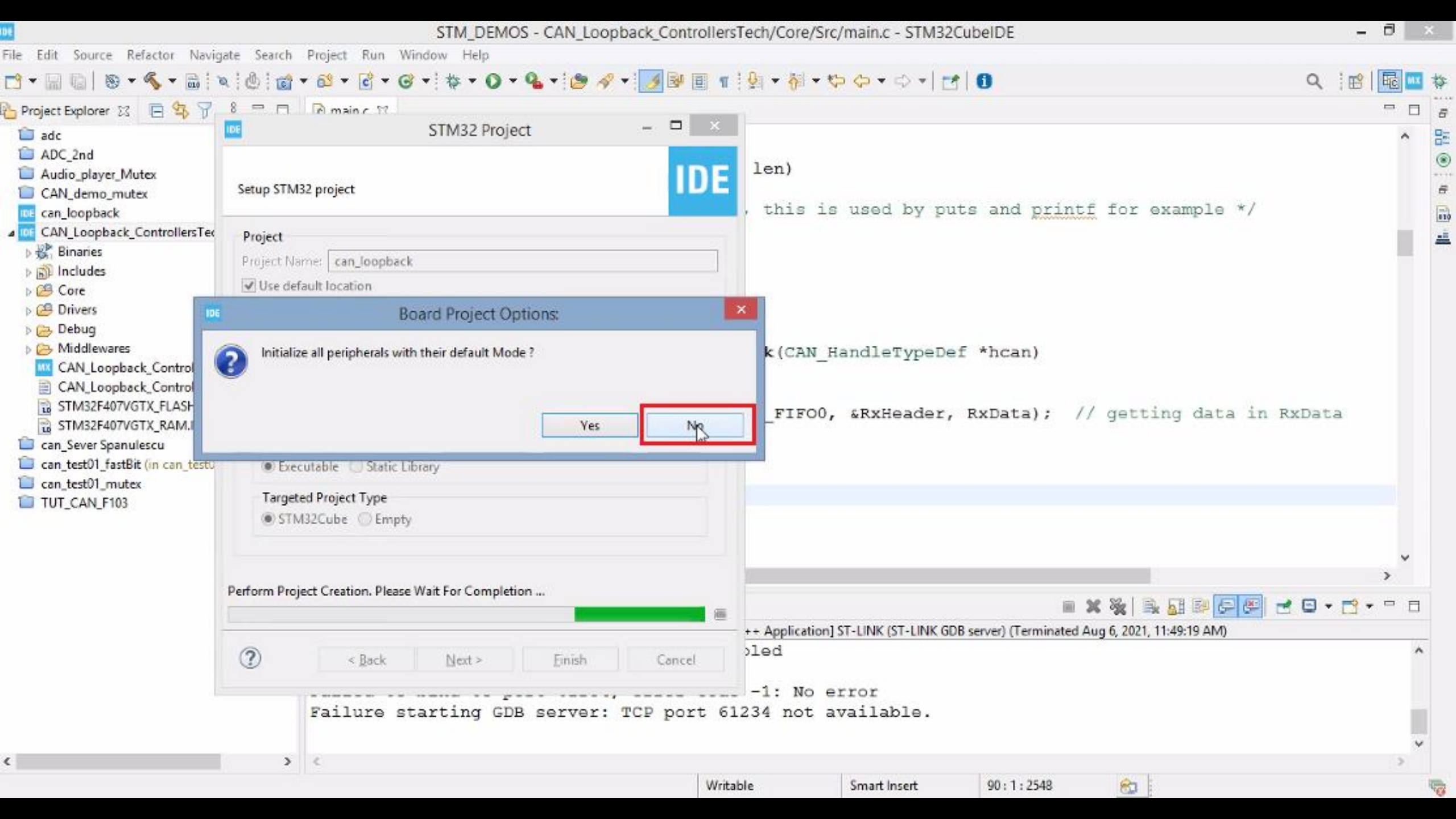
# CAN – Loopback Demo Steps

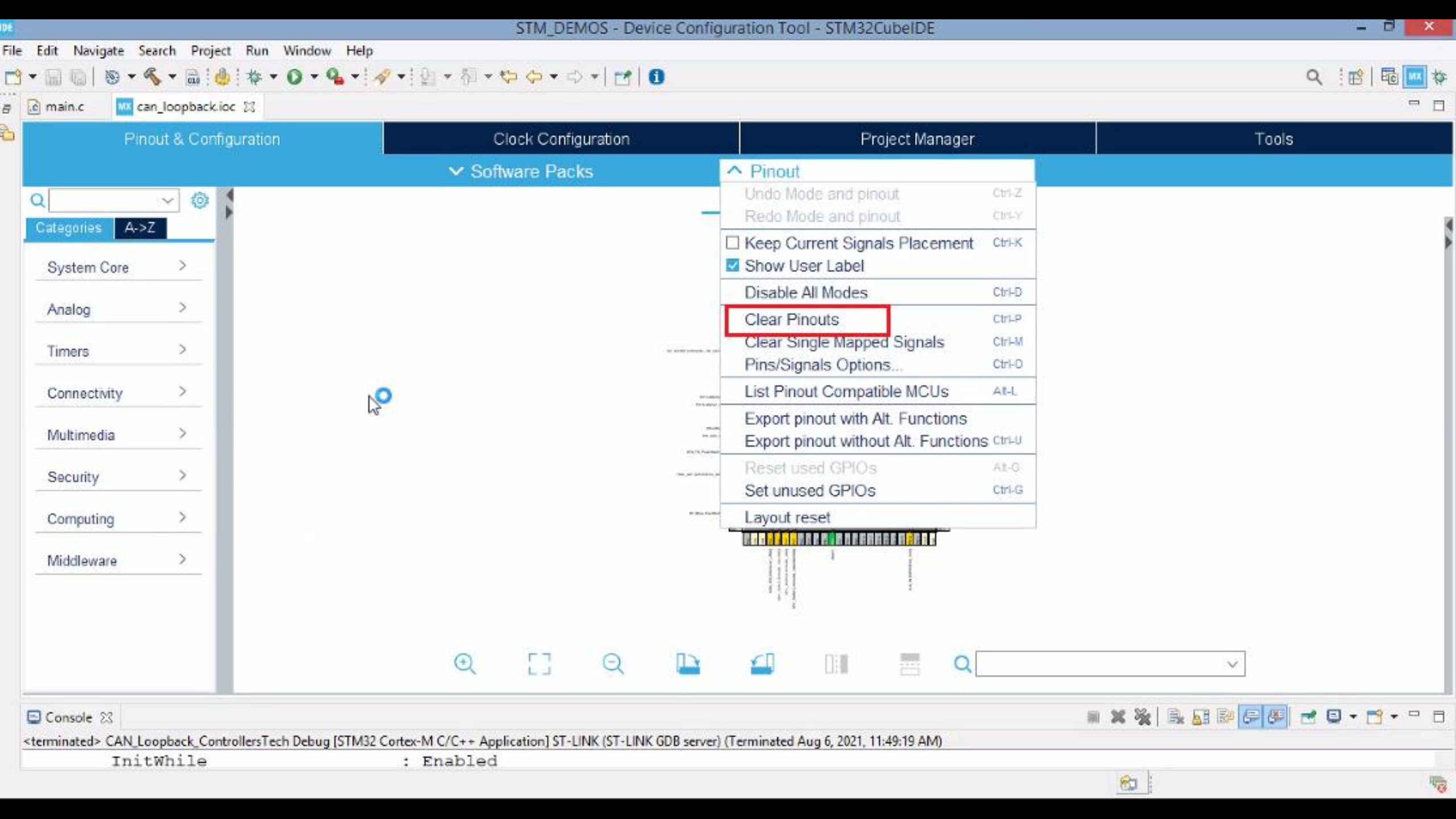
DESD May 2021

Sunbeam Institute of Information Technology

Pune and Karad

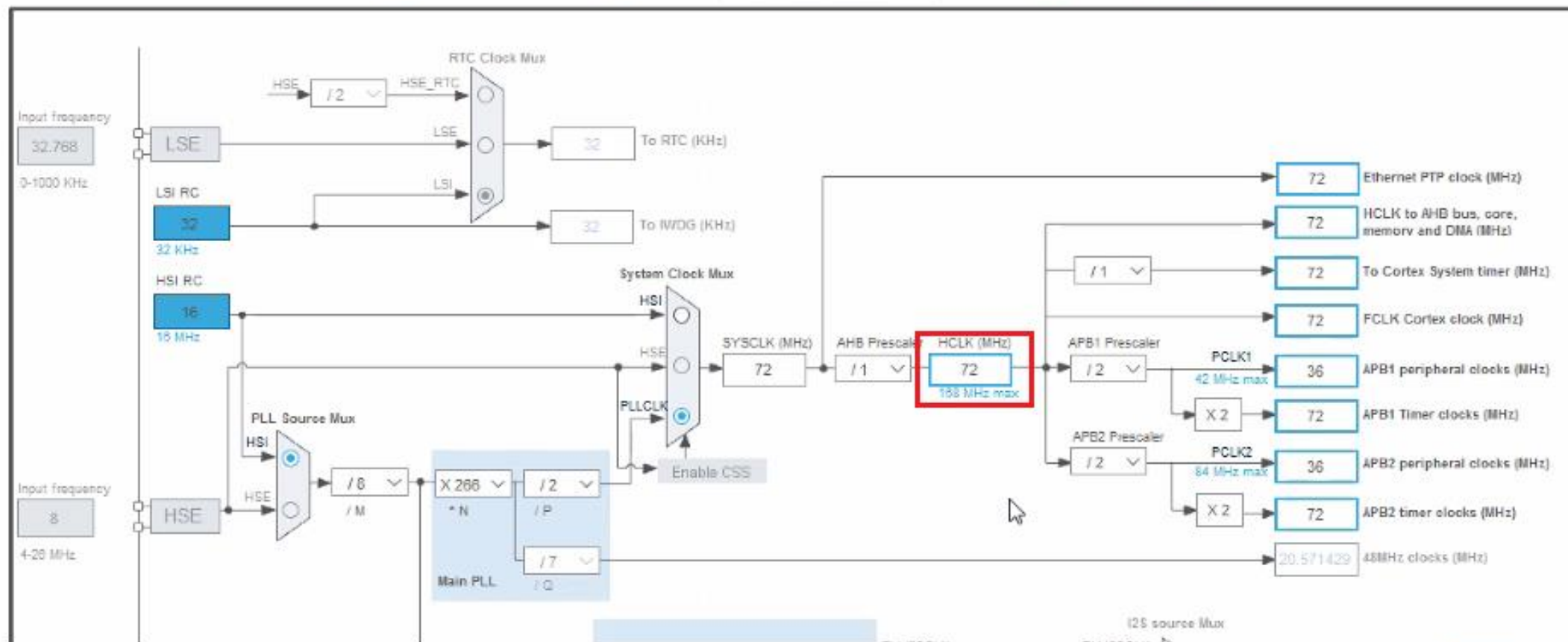


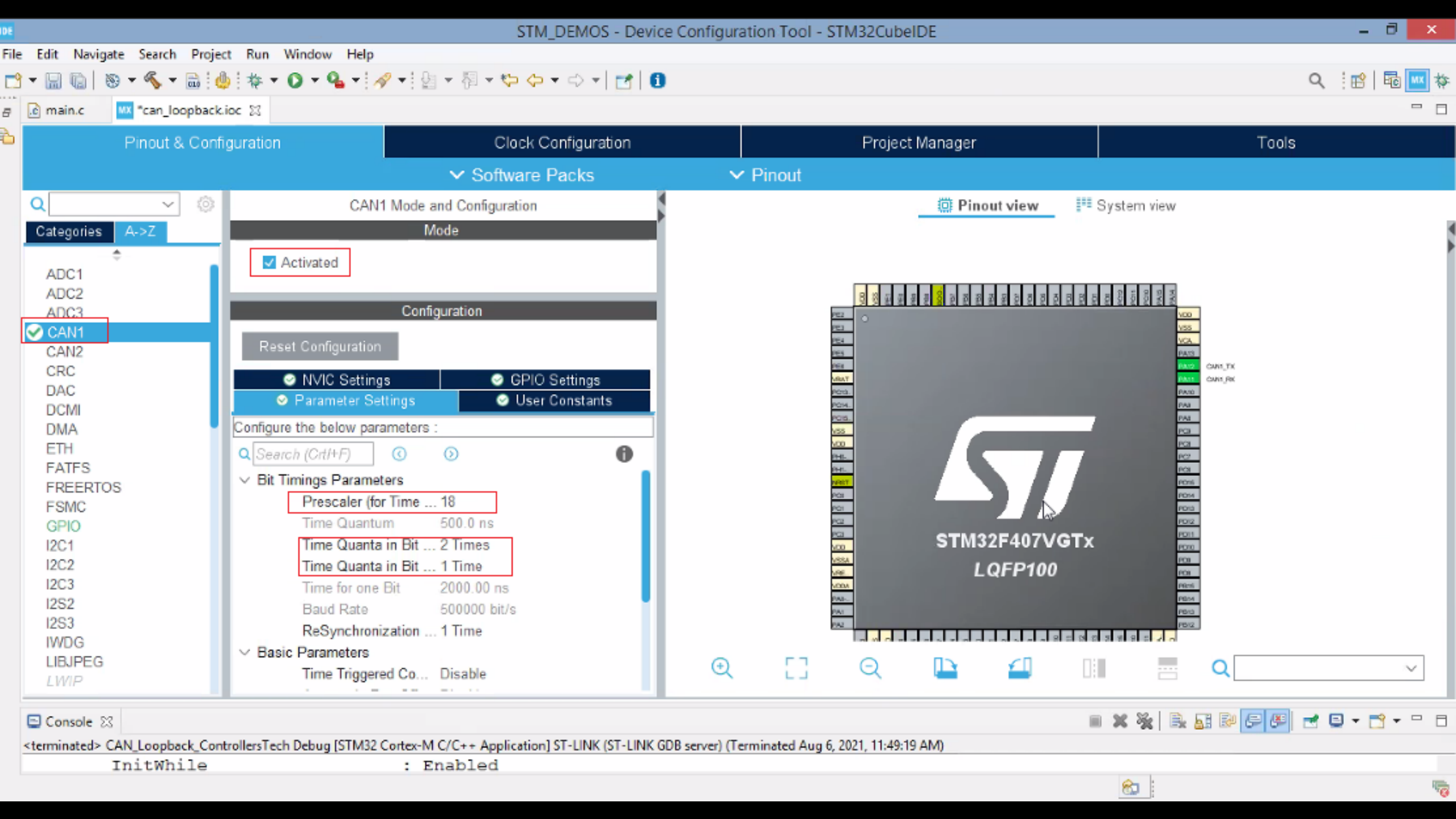


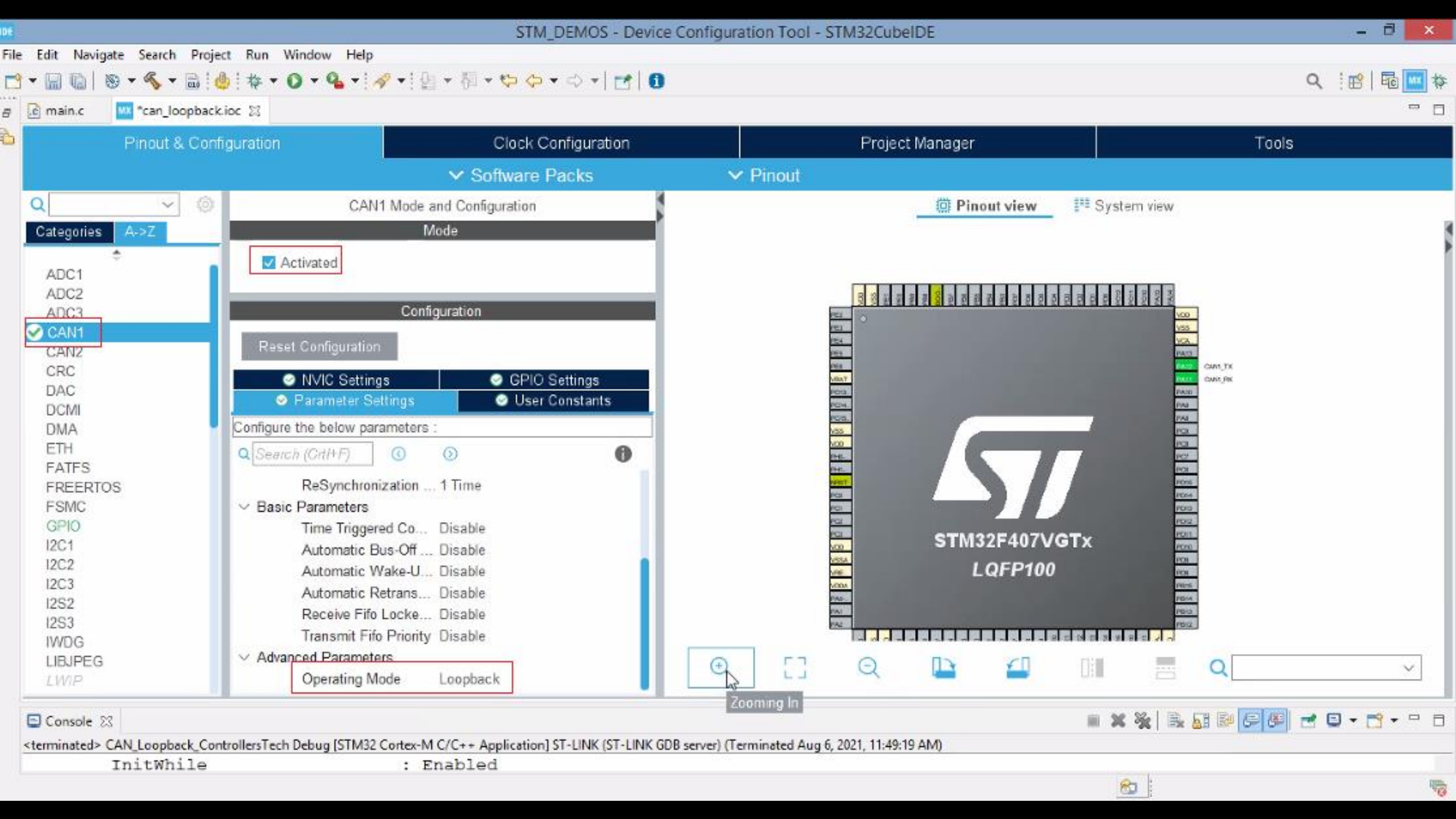




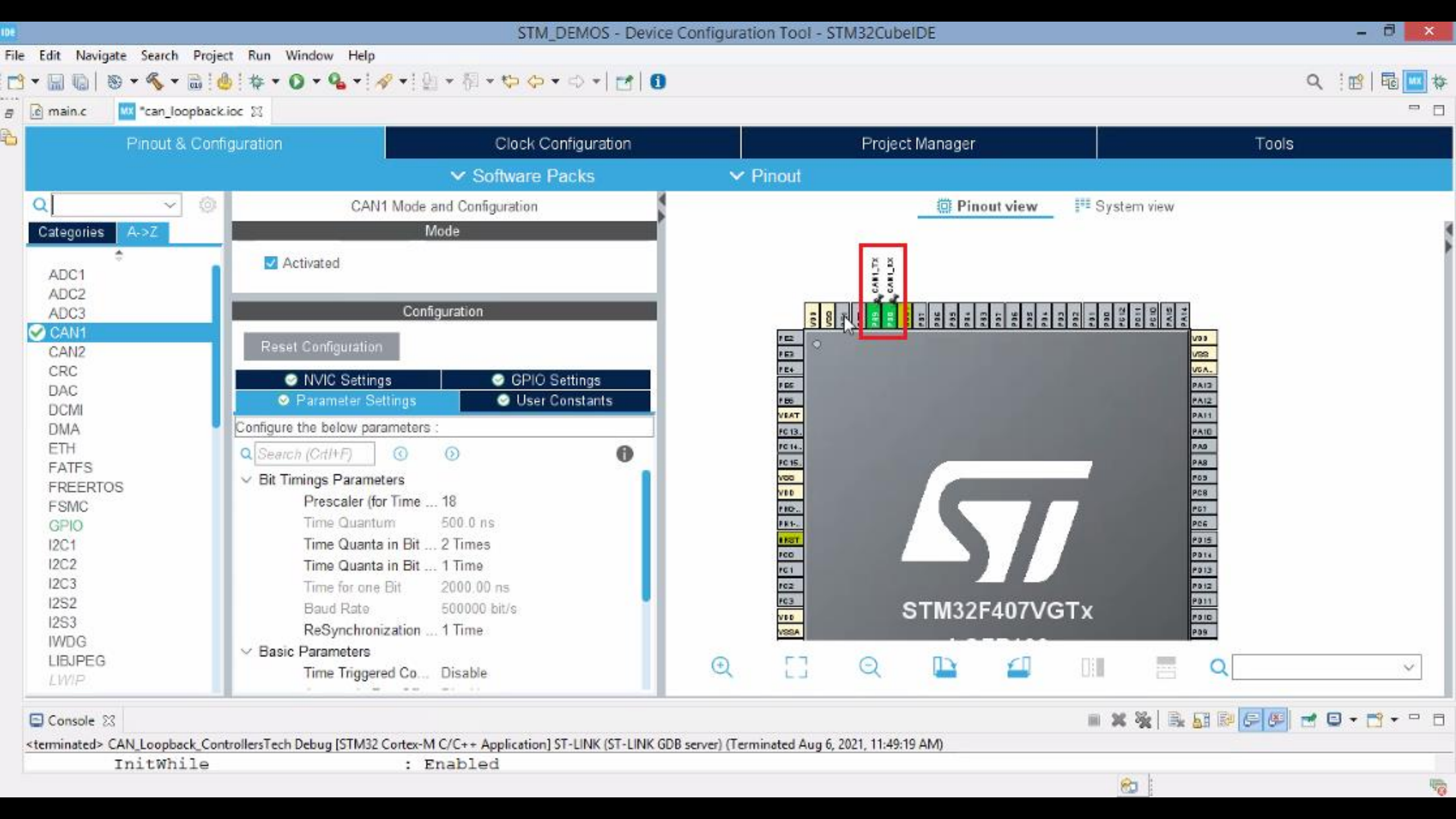
Resolve Clock Issues















main.c \*can\_loopback.ioc

Pinout &amp; Configuration

Clock Configuration

Project Manager

Tools

Software Packs

Pinout

Q



CAN1 Mode and Configuration

Categories A-&gt;Z

ADC1  
ADC2  
ADC3  
CAN1  
CAN2  
CRC  
DAC  
DCMI  
DMA  
ETH  
FATFS  
FREERTOS  
FSMC  
GPIO  
I2C1  
I2C2  
I2C3  
I2S2  
I2S3  
IWDG  
LIBJPEG  
LWIP

Mode

☒ Activated

Configuration

Reset Configuration

☒ NVIC Settings☒ GPIO Settings☒ Parameter Settings☒ User Constants

NVIC Interrupt Table

Enabled

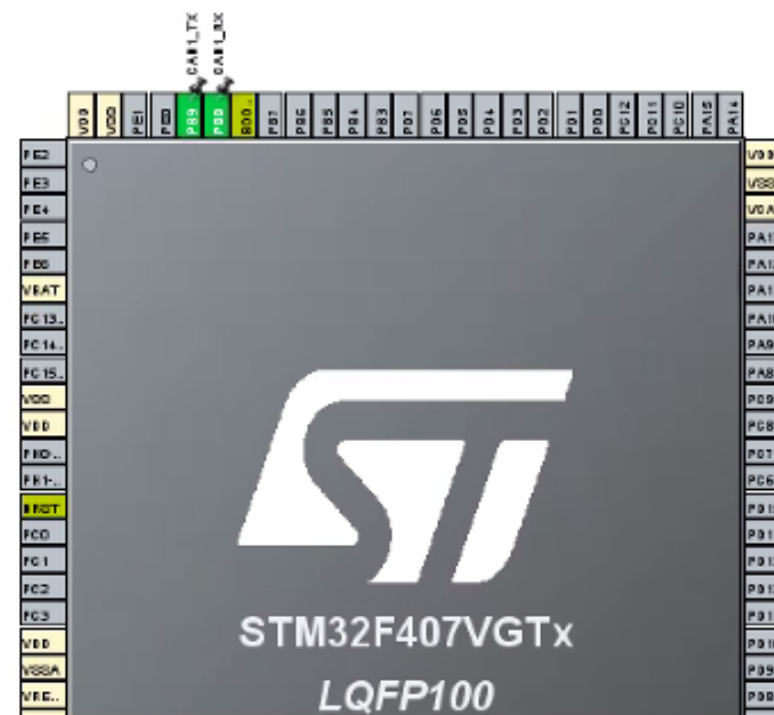
Preemption Priority

Su

CAN1 TX interrupts	<input type="checkbox"/>	0	0
CAN1 RX0 interrupts	<input checked="" type="checkbox"/>	0	0
CAN1 RX1 interrupt	<input type="checkbox"/>	0	0
CAN1 SCE interrupt	<input type="checkbox"/>	0	0

Pinout view

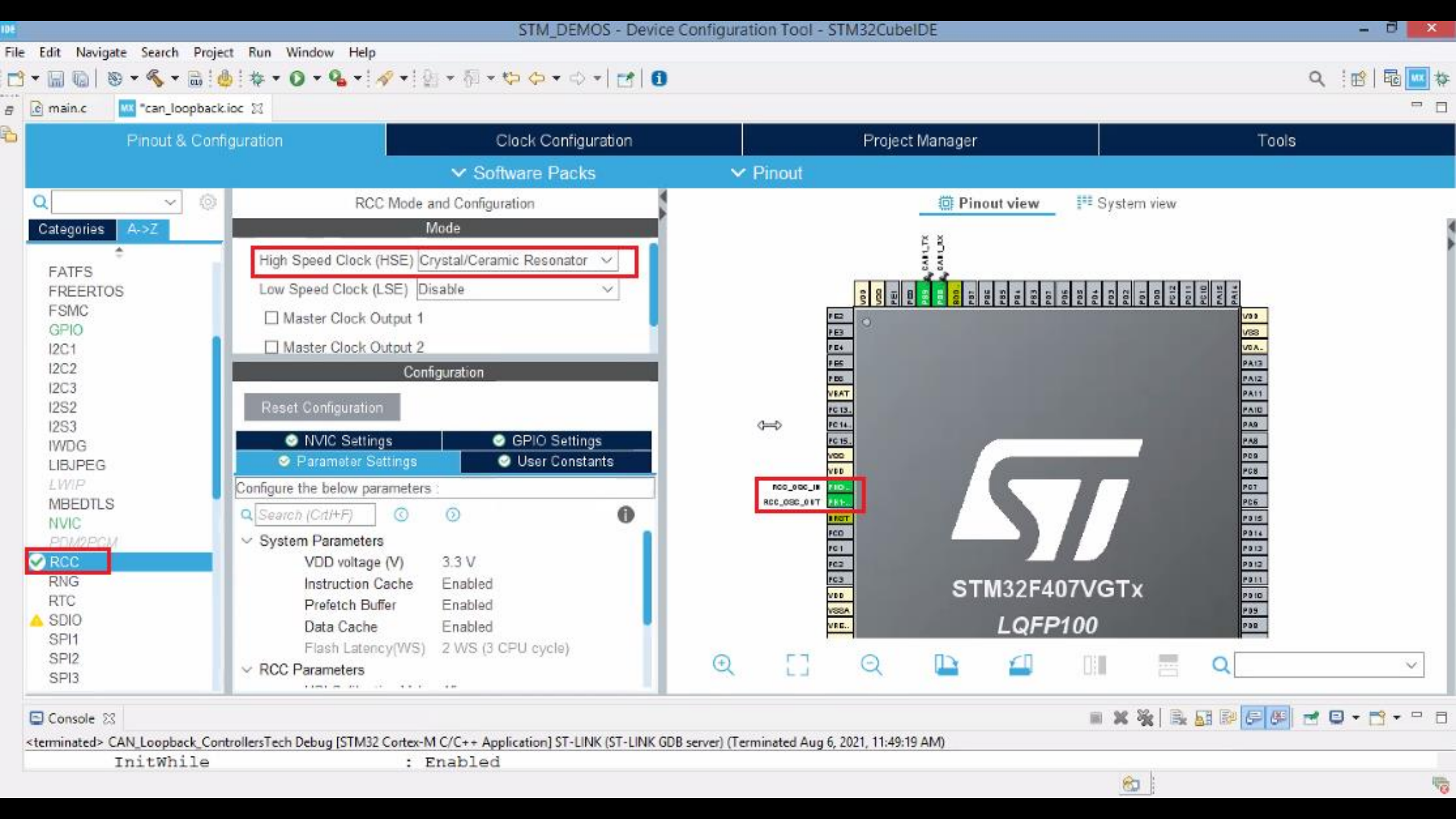
System view

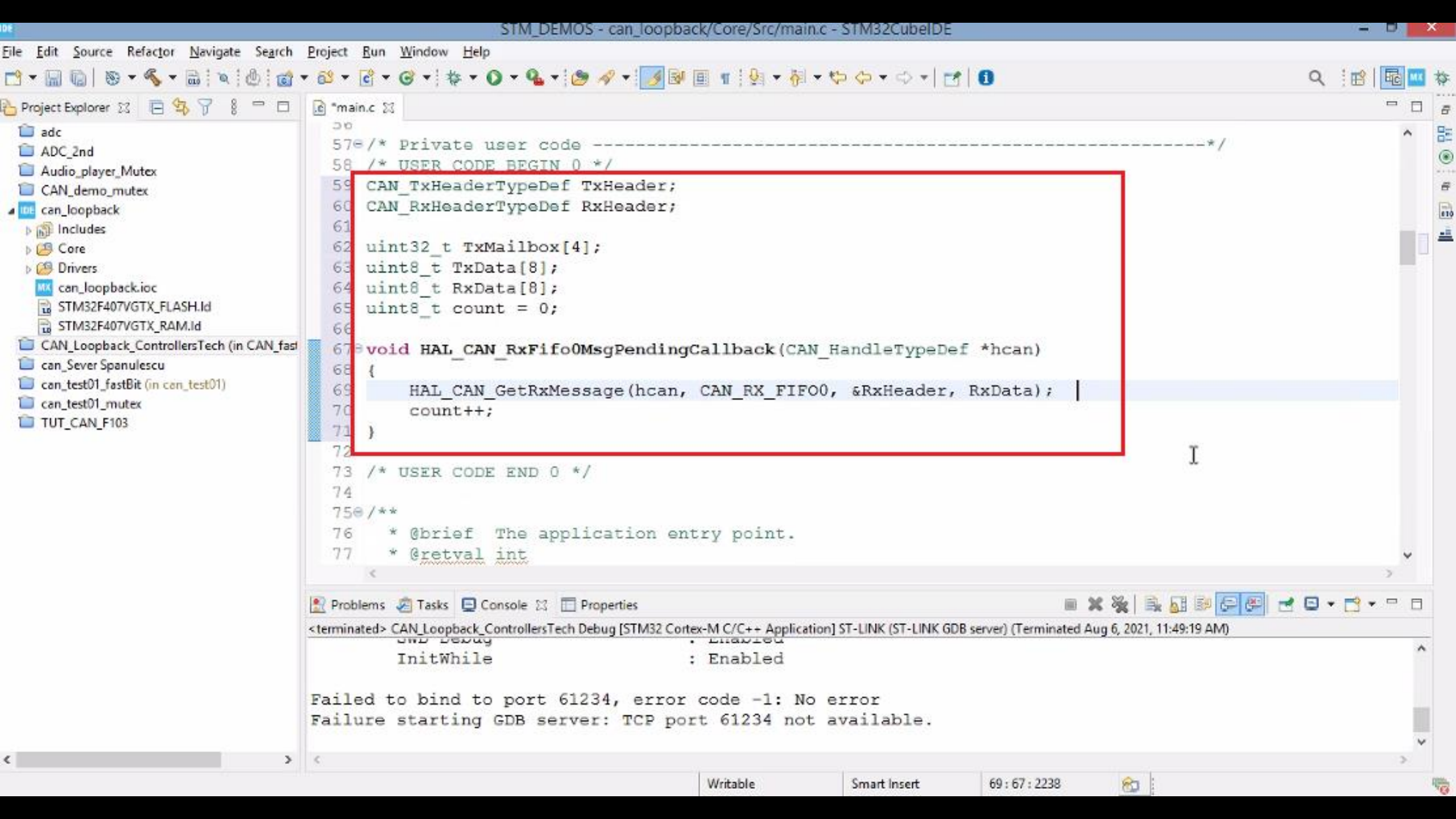


Console

&lt;terminated&gt; CAN\_Loopback\_ControllersTech Debug [STM32 Cortex-M C/C++ Application] ST-LINK (ST-LINK GDB server) (Terminated Aug 6, 2021, 11:49:19 AM)

InitWhile : Enabled





Project Explorer

- adc
- ADC\_2nd
- Audio\_player\_Mutex
- CAN\_demo\_mutex
- can\_loopback
  - Includes
  - Core
  - Drivers
    - can\_loopback.ioc
    - STM32F407VGTX\_FLASH.Id
    - STM32F407VGTX\_RAM.Id
  - CAN\_Loopback\_ControllersTech (in CAN\_fast)
  - can\_Sever Spanulescu
  - can\_test01\_fastBit (in can\_test01)
  - can\_test01\_mutex
  - TUT\_CAN\_F103

```
*main.c*
57 /* Private user code -----*/
58 /* USER CODE BEGIN 0 */
59 CAN_TxHeaderTypeDef TxHeader;
60 CAN_RxHeaderTypeDef RxHeader;
61
62 uint32_t TxMailbox[4];
63 uint8_t TxData[8];
64 uint8_t RxData[8];
65 uint8_t count = 0;
66
67 void HAL_CAN_RxFifo0MsgPendingCallback(CAN_HandleTypeDef *hcan)
68 {
69     HAL_CAN_GetRxMessage(hcan, CAN_RX_FIFO0, &RxHeader, RxData);
70     count++;
71 }
72
73 /* USER CODE END 0 */
74
75 /**
76  * @brief The application entry point.
77  * @retval int
```

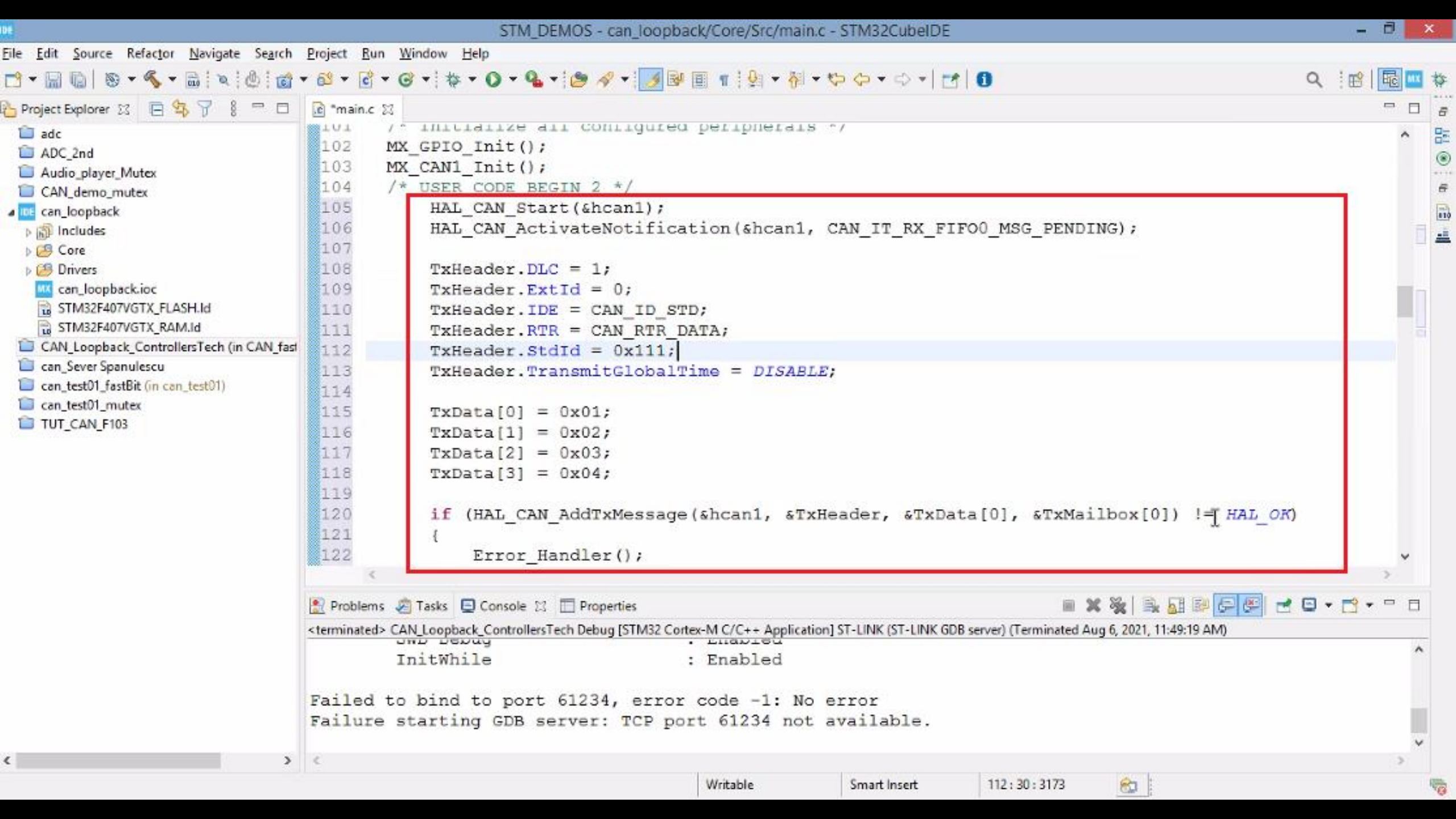
Problems Tasks Console Properties

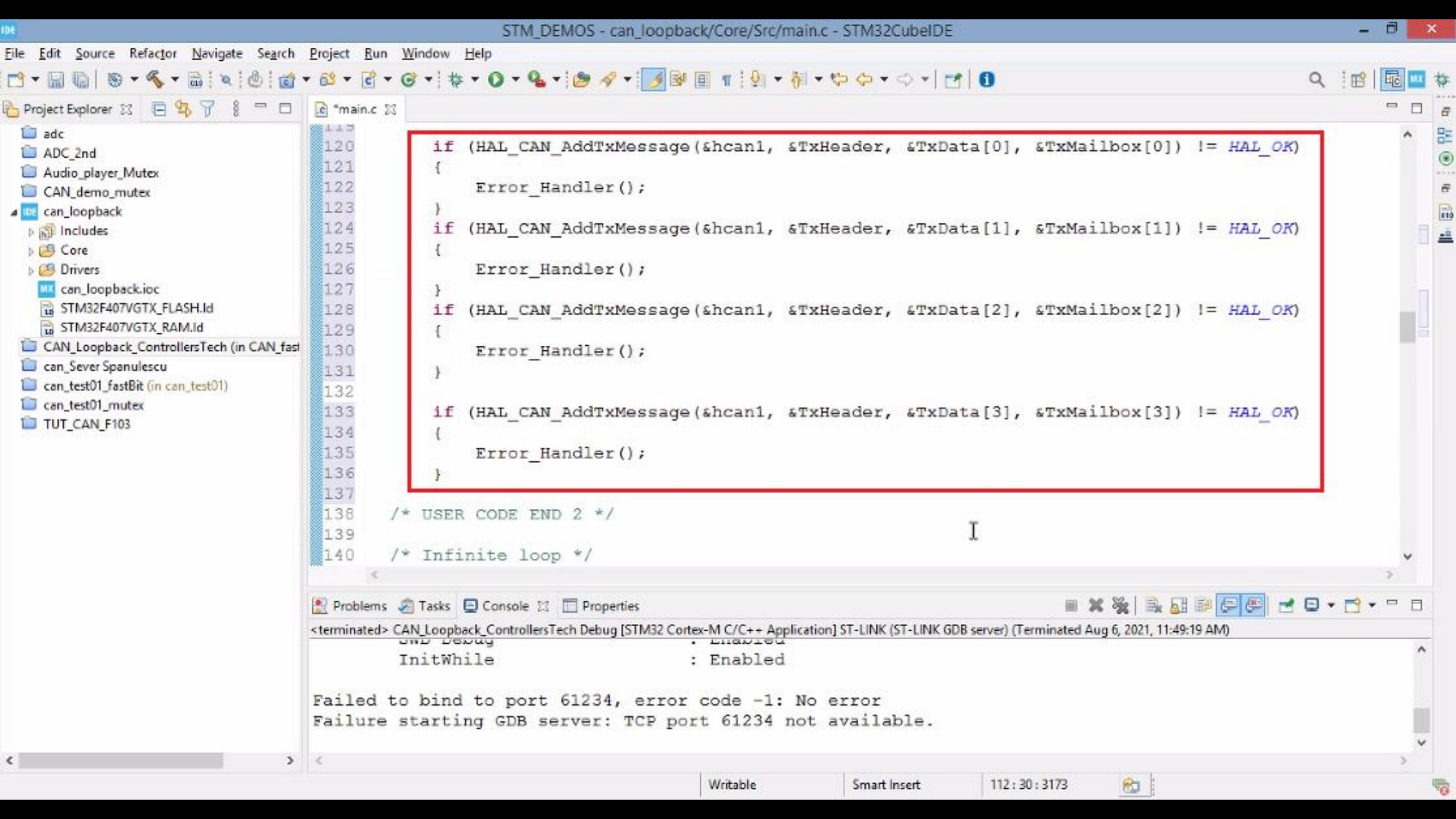
<terminated> CAN\_Loopback\_ControllersTech Debug [STM32 Cortex-M C/C++ Application] ST-LINK (ST-LINK GDB server) (Terminated Aug 6, 2021, 11:49:19 AM)

InitWhile : Enabled

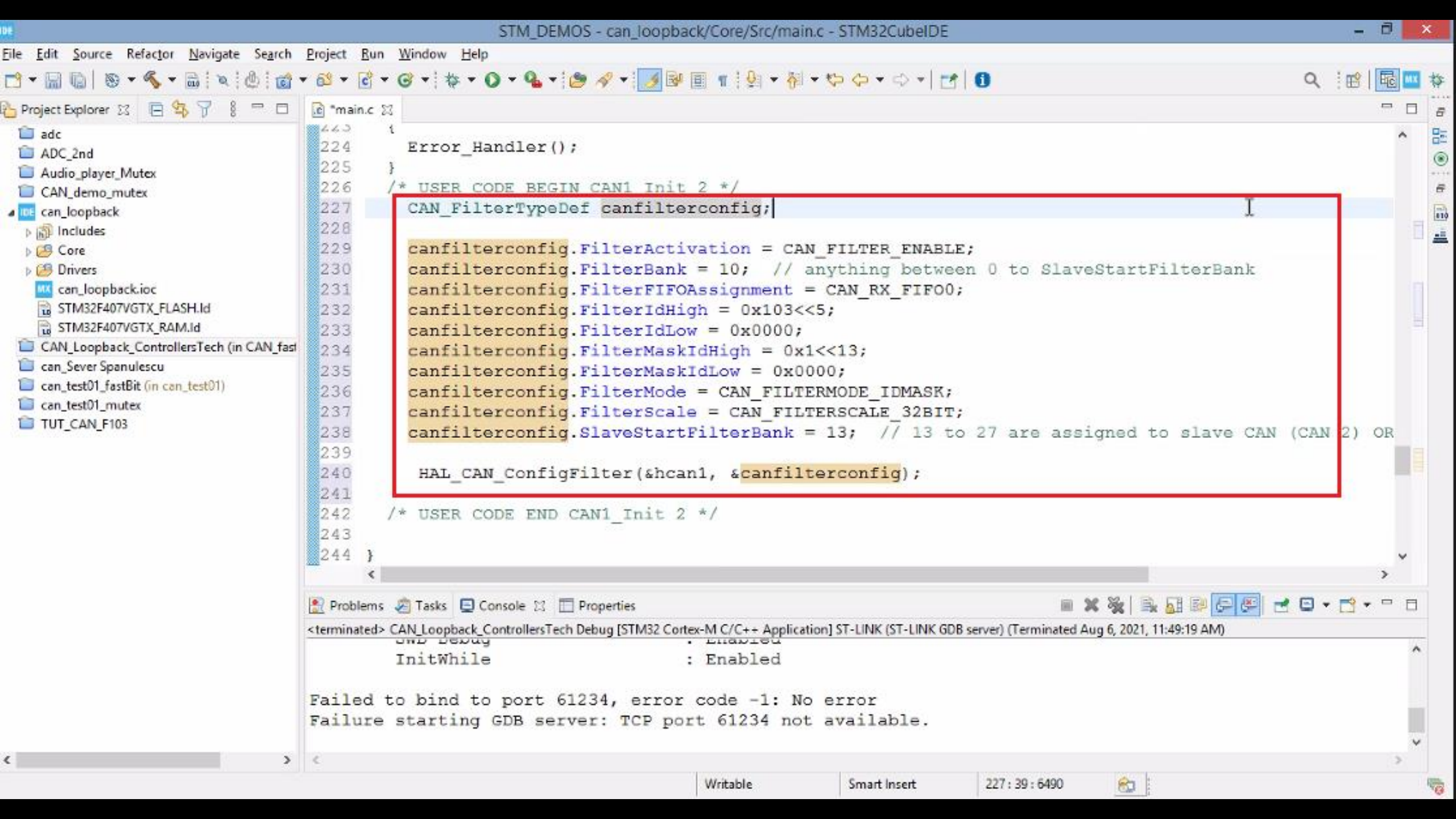
Failed to bind to port 61234, error code -1: No error  
Failure starting GDB server: TCP port 61234 not available.















File Edit Source Refactor

Project Explorer

- adc
- ADC\_2nd
- Audio\_player\_Mutex
- CAN\_demo\_mutex
- IDE can\_loopback
  - Binaries
  - Includes
  - Core
  - Drivers
  - Debug
  - can\_loopback.ioc
  - can\_loopback Debug
  - STM32F407VGTX\_FLASH
  - STM32F407VGTX\_RAM
  - CAN\_Loopback\_Control
  - can\_Sever Spanulescu
  - can\_test01\_fastBit (in can)
  - can\_test01\_mutex
  - TUT\_CAN\_F103

can\_loopback

### Debug Configurations

Create, manage, and run configurations

Name: can\_loopback Debug

type filter text

- C/C++ Application
- C/C++ Attach to Application
- C/C++ Postmortem Debugger
- C/C++ Remote Application
- GDB Hardware Debugging
- Launch Group
- Launch Group (Deprecated)
- STM32 Cortex-M C/C++ Application
- IDE can\_loopback Debug

Filter matched 9 of 9 items

Main Debugger Startup Source Common

C/C++ Application:

Debug\can\_loopback.elf Search Project... Browse...

Project:

can\_loopback Browse...

Build (if required) before launching

Build Configuration: Select Automatically

☐ Enable auto build ☐ Disable auto build

☒ Use workspace settings [Configure Workspace Settings...](#)

Revert Apply

Debug Close

