# USCD Embedded C Assignment 7

By
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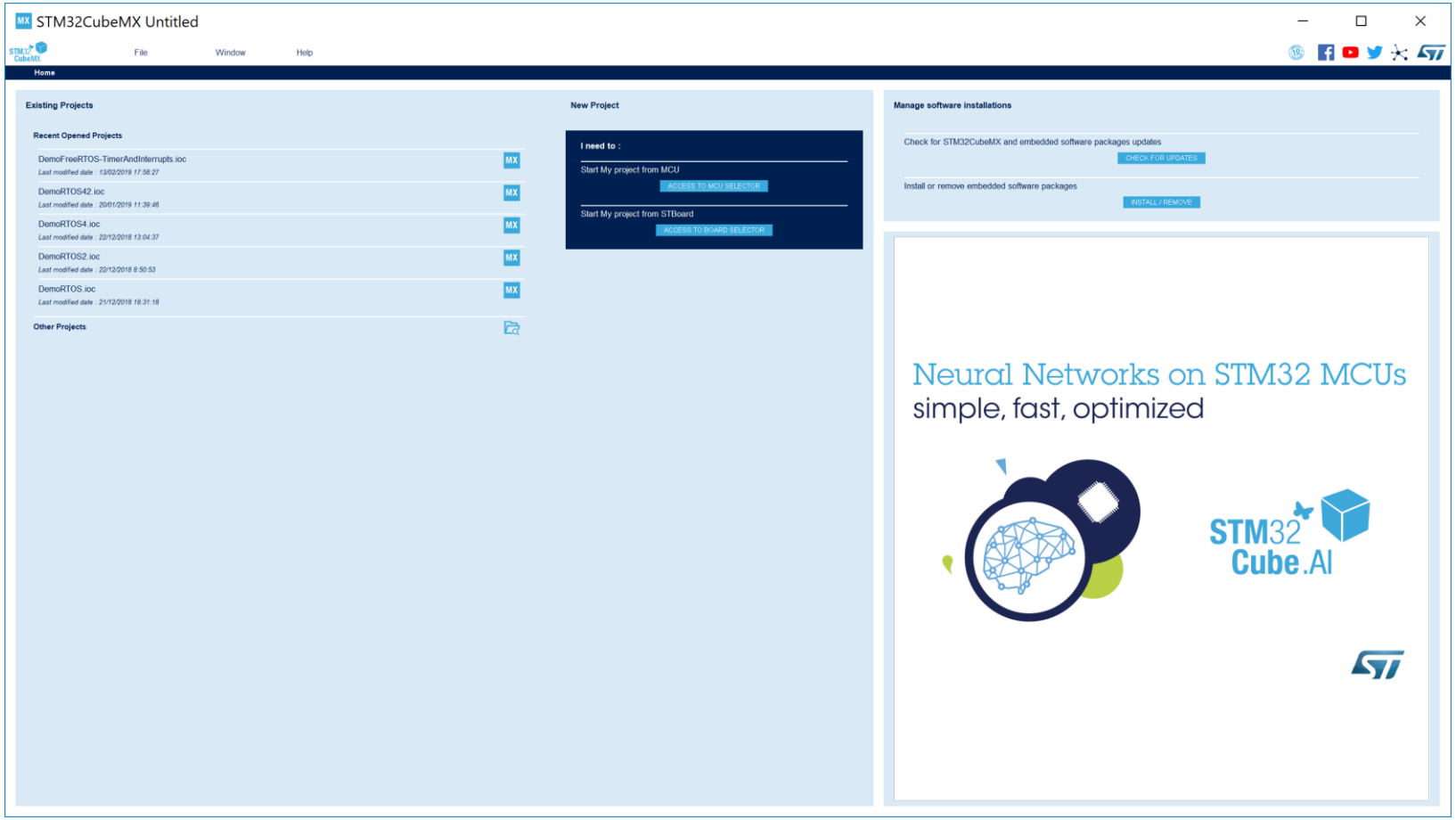
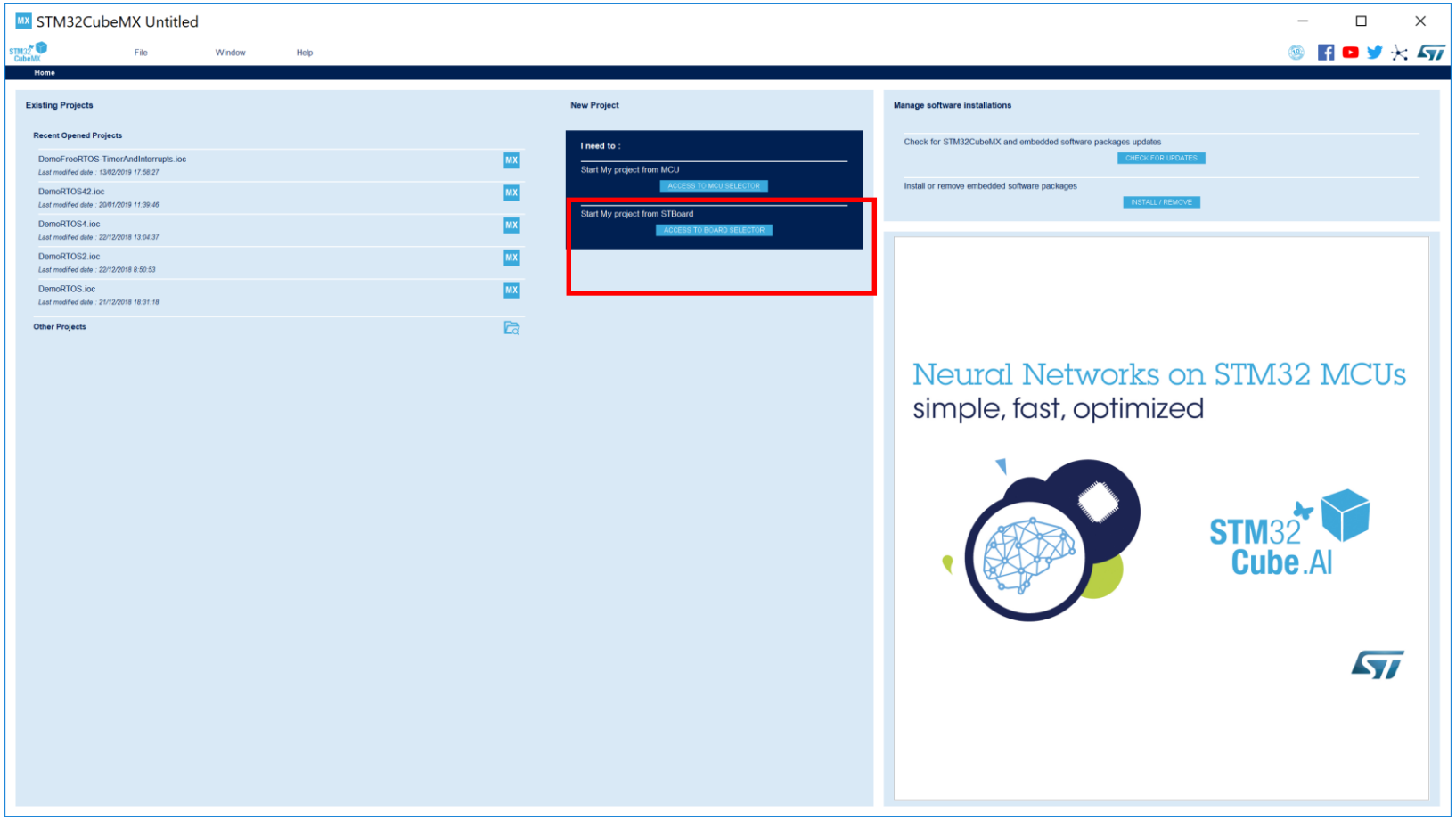
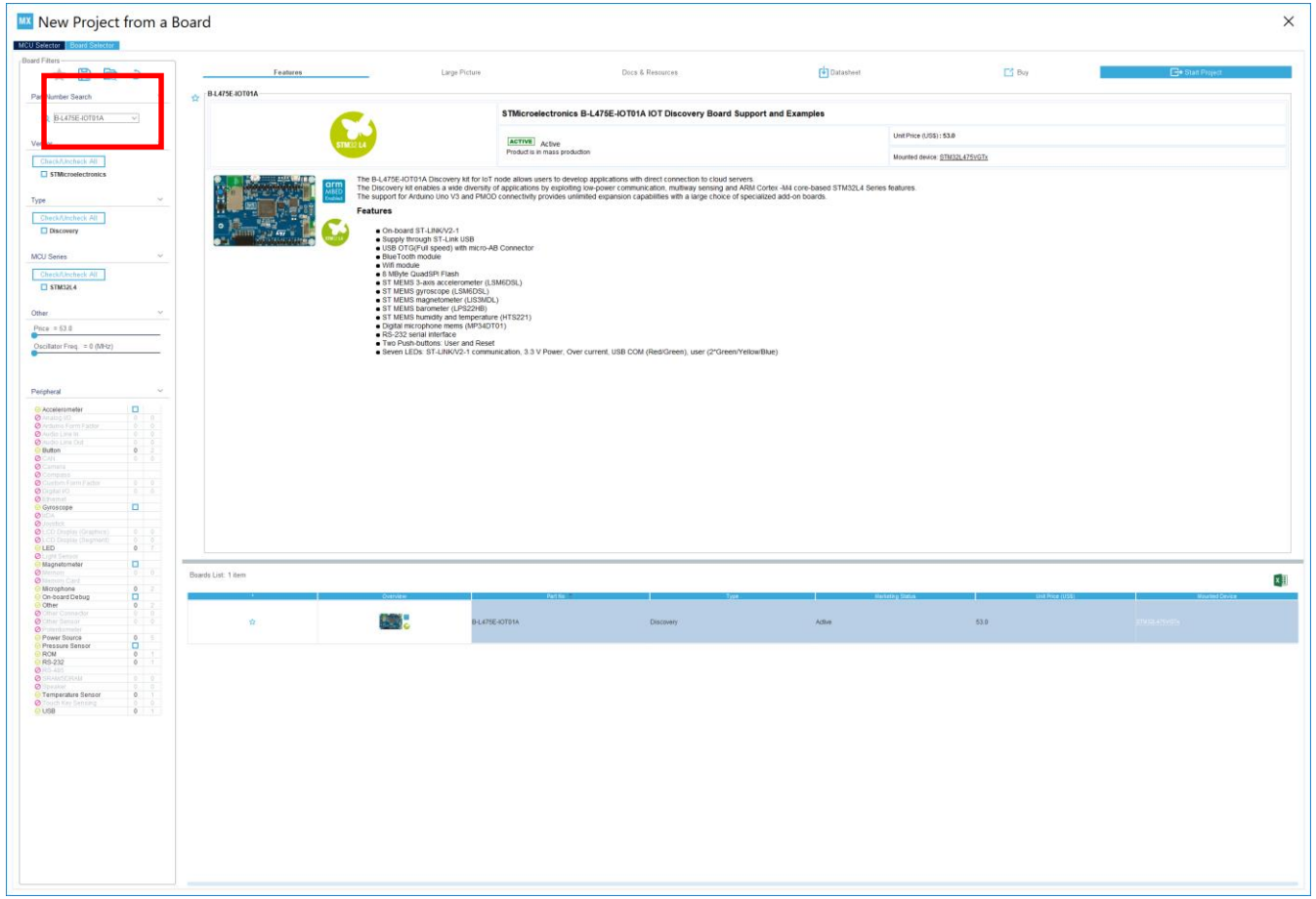
# Step 1. Startup STM32CubeMX



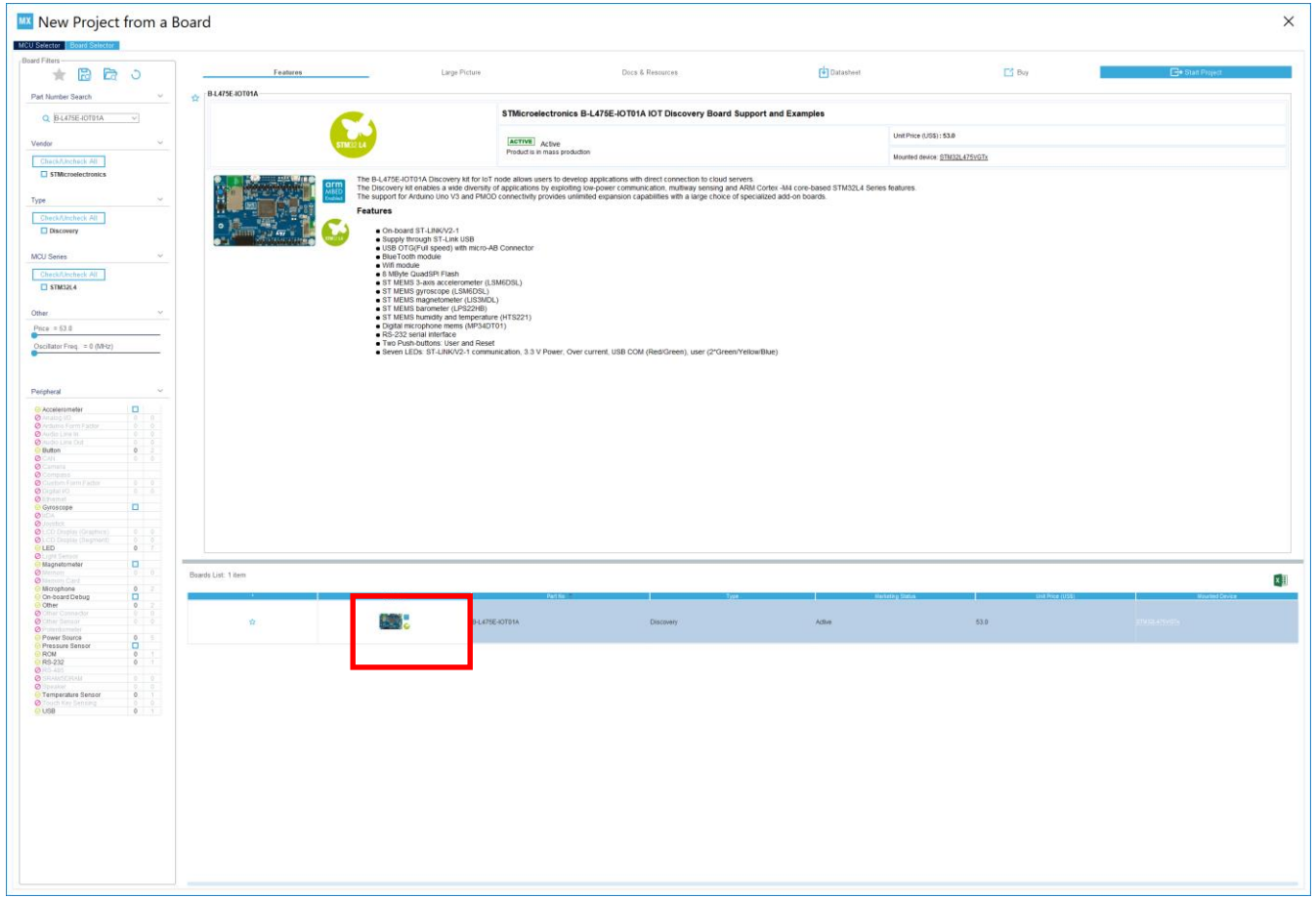
# Step 2. Access Board Selector



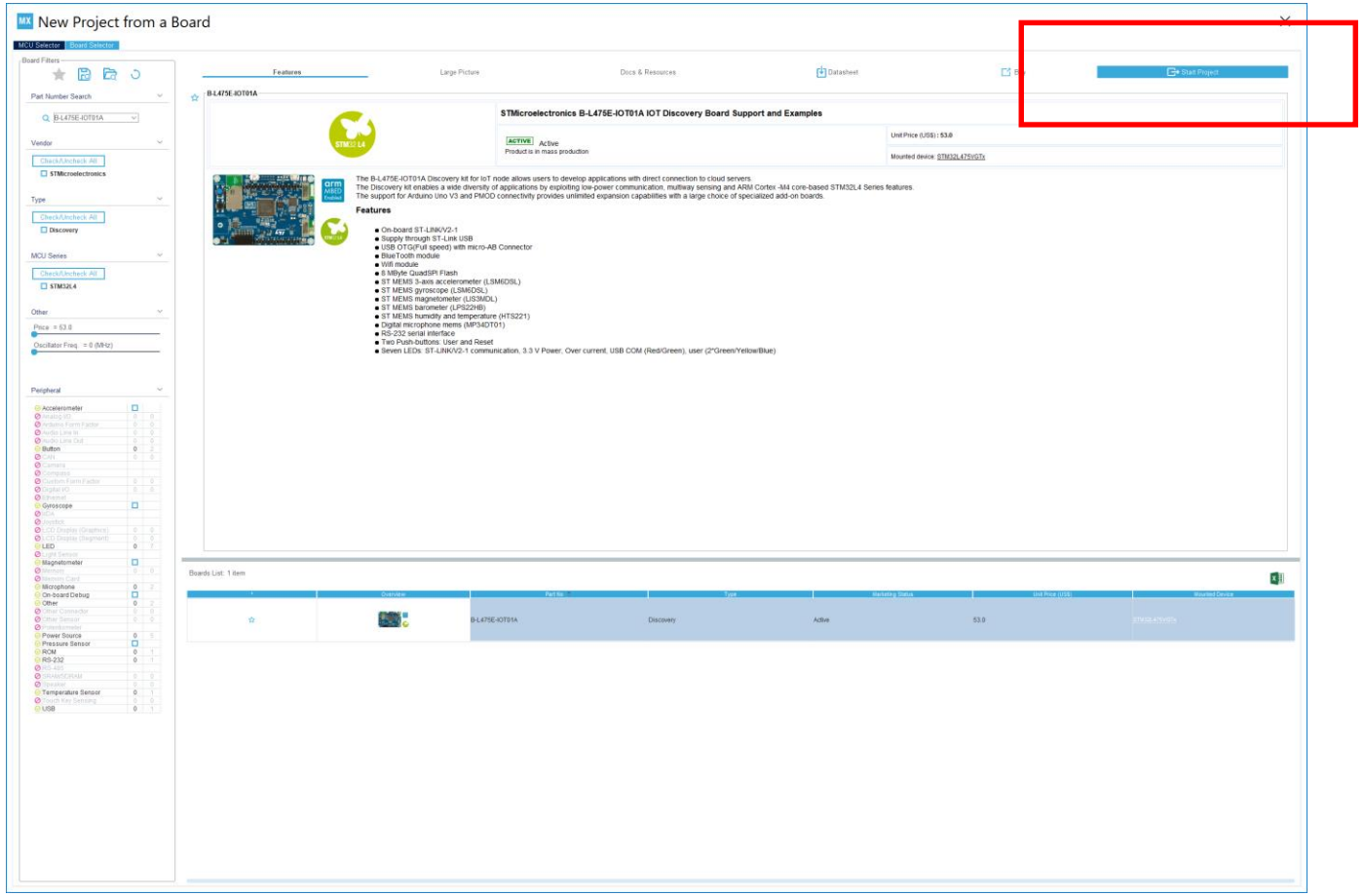
# Step 3. Enter “B-L475E-IOT01A” Board



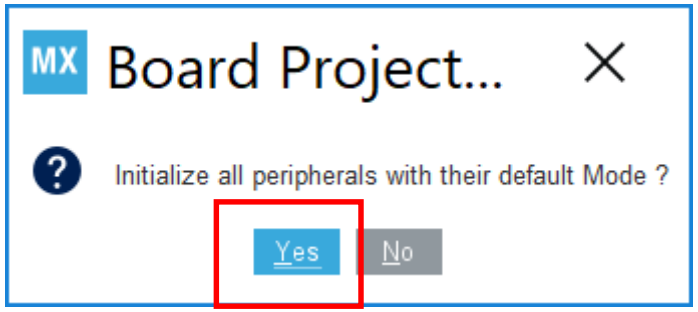
# Step 4. Select Board Photo



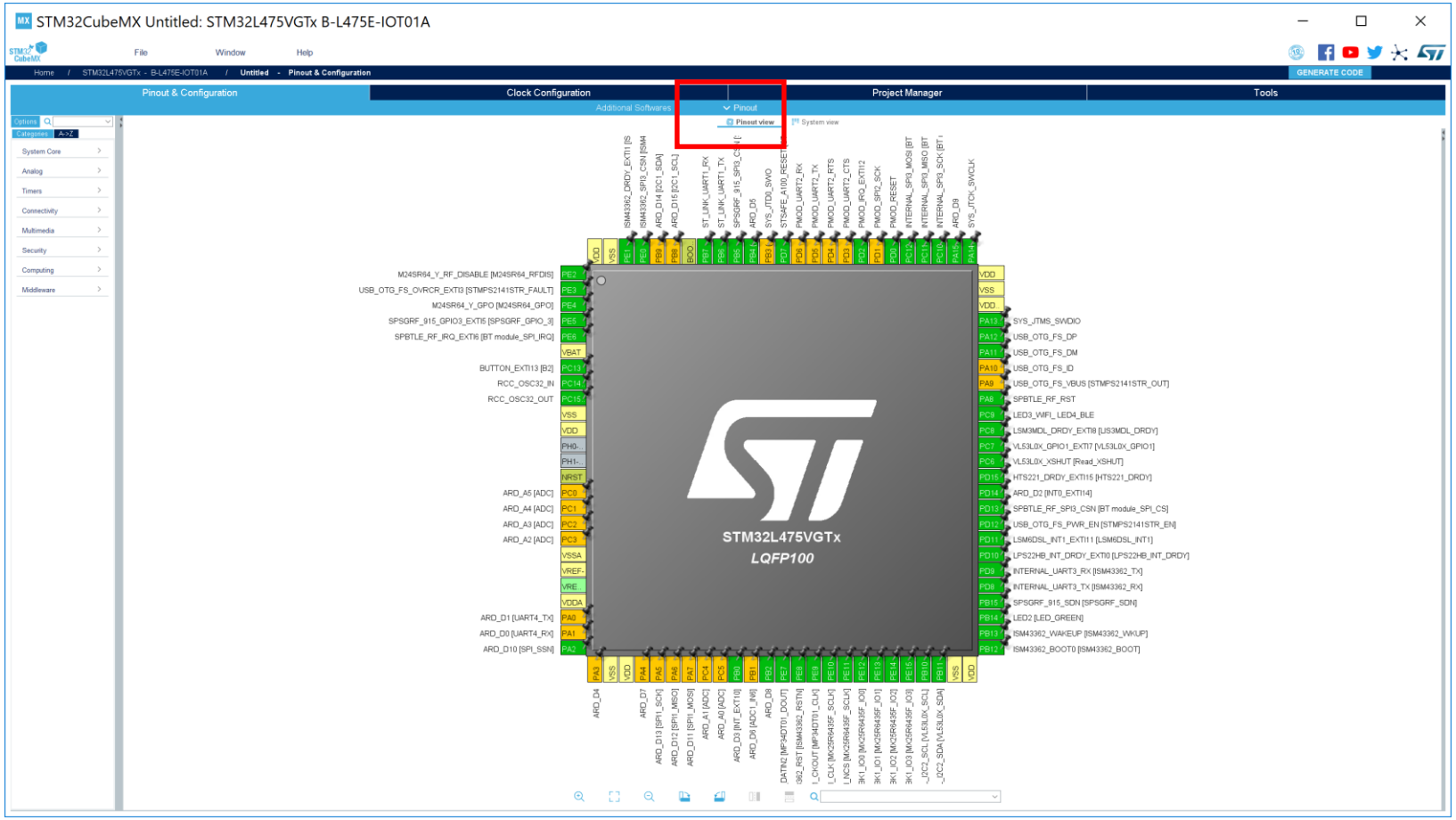
# Step 5. Select “Start Project”



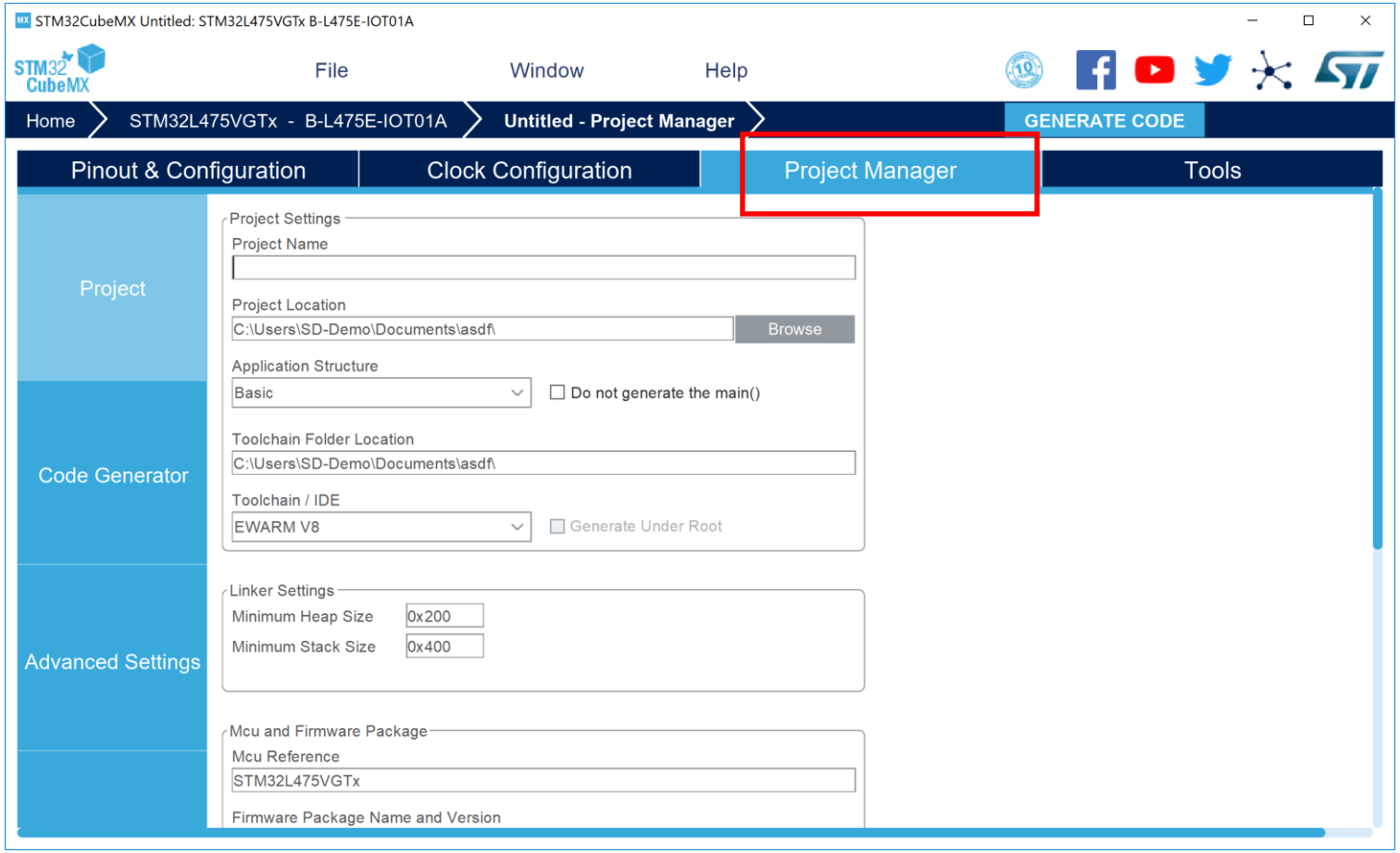
# Step 6. Select **YES** (initialize all peripherals with the default mode)



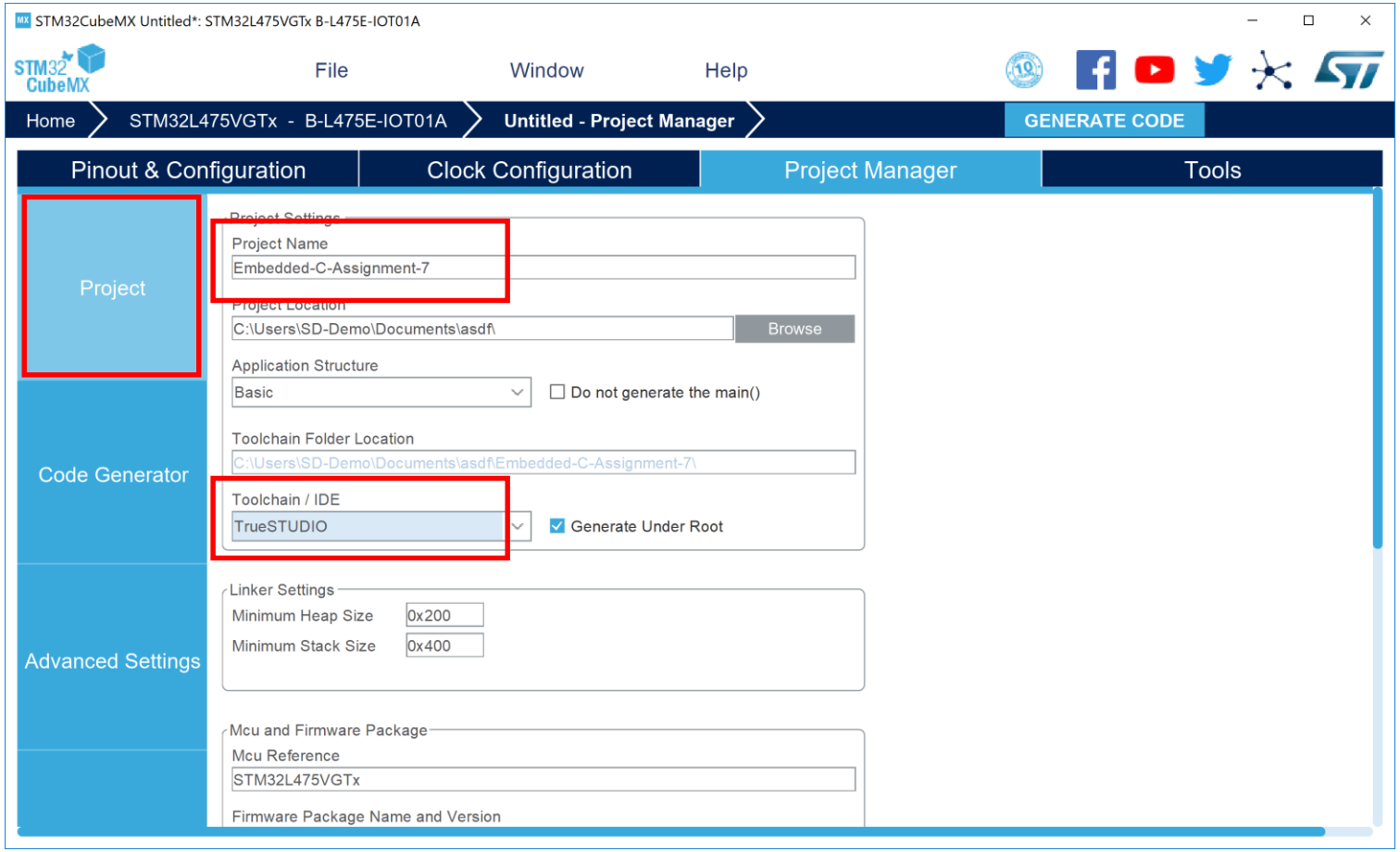
# Step 7. Observe Results (Pinout View)



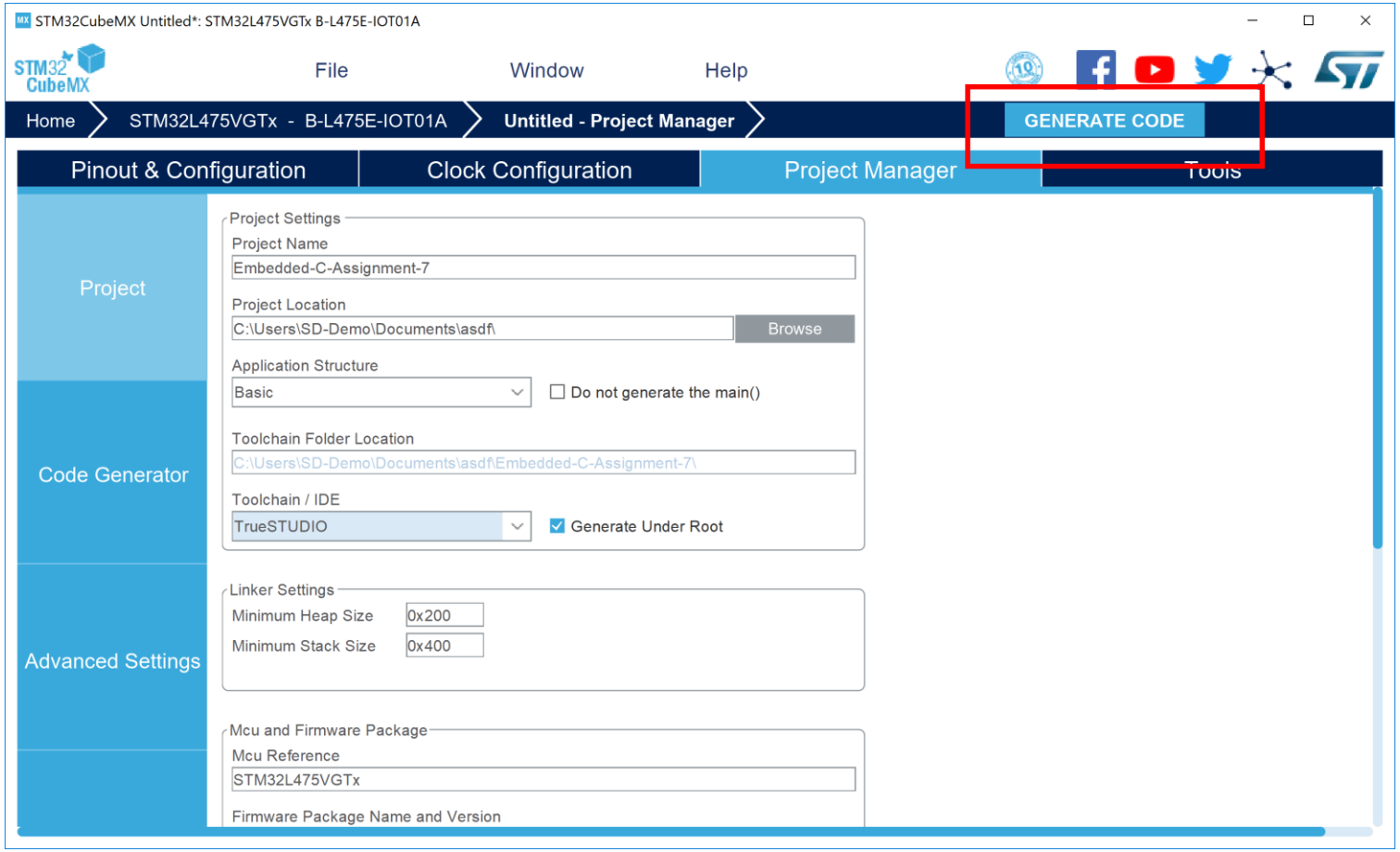
# Step 8. Select Project Manager Tab



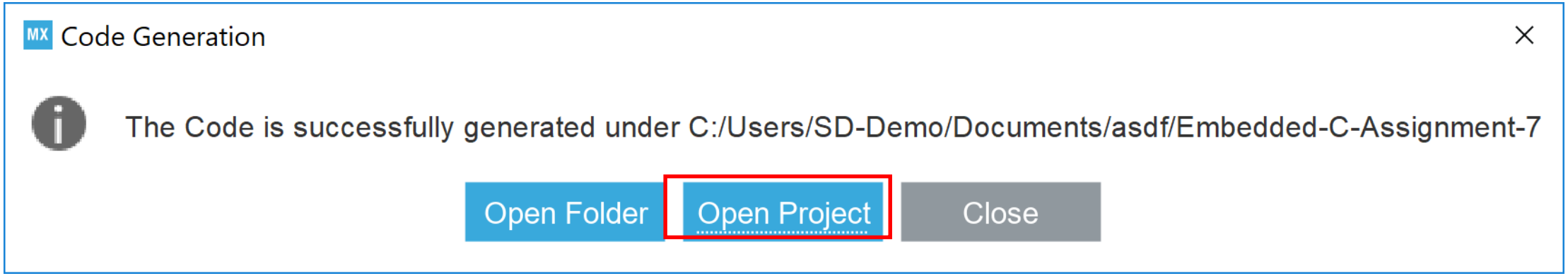
# Step 9. Enter “Embedded-C-Assigment-7” and select TrueStudio as IDE



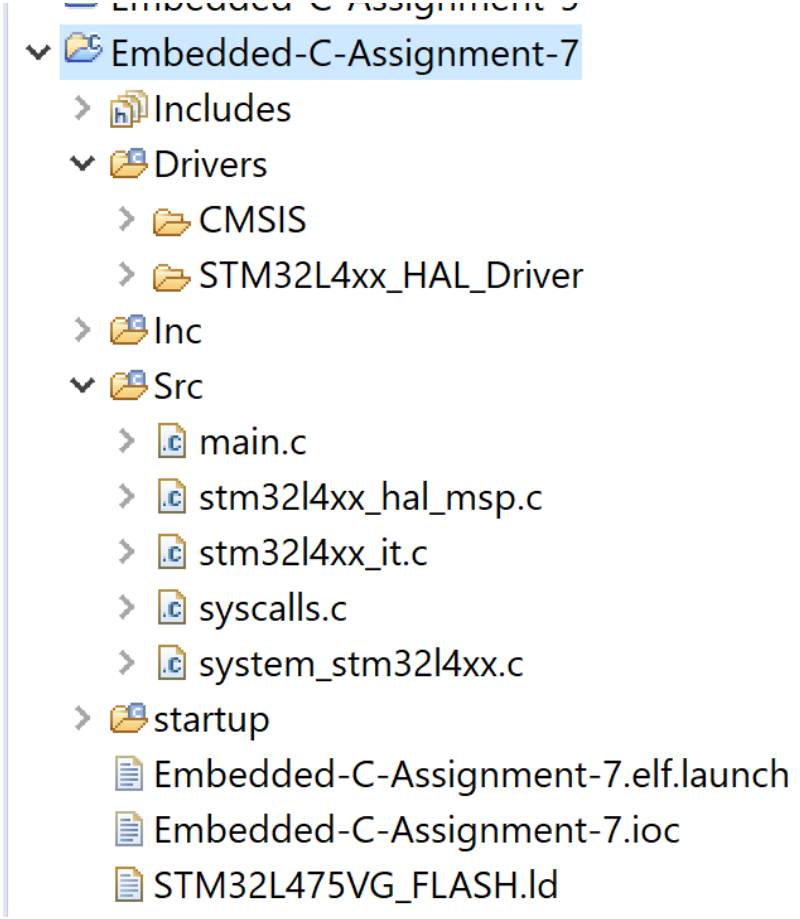
# Step 10. Select “Generate Code”



# Step 11. Select “Open Project”



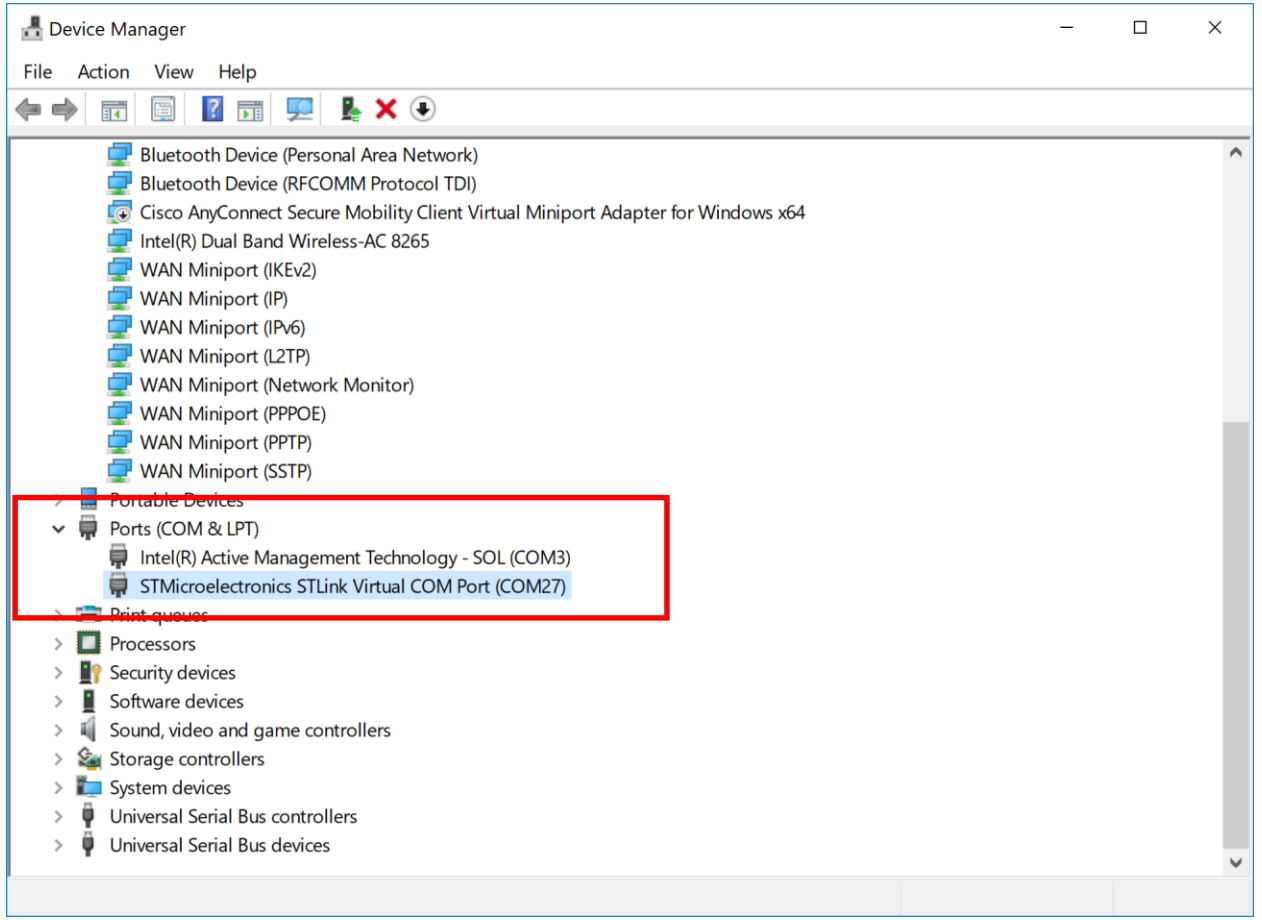
# Step 12. Resulting Project



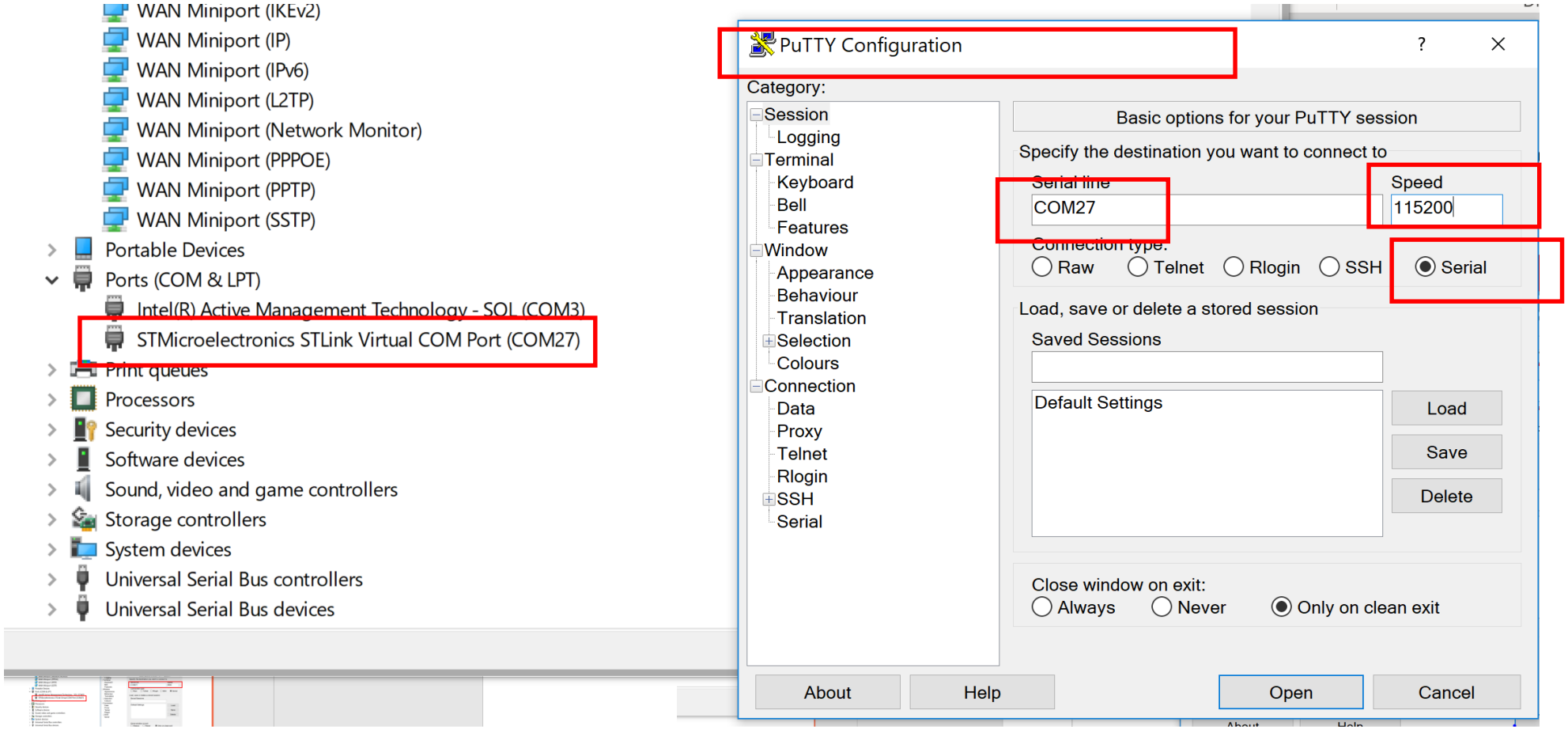
# Step 13. In main.c, add code to display a “0123456789\n” once a second on UART1

```
119  /* USER CODE END 2 */
120
121  /* Infinite loop */
122  /* USER CODE BEGIN WHILE */
123  char *msg = "0123456789\n";
124  int index = 0;
125  int len = strlen(msg);
126
127  while (1)
128  {
129      HAL_UART_Transmit(&huart1, (uint8_t *)&msg[index], 1, 0);
130
131      index++;
132      if (index == len) {
133          index = 0;
134      }
135
136      HAL_Delay(1000);
137
138    /* USER CODE END WHILE */
139
140    /* USER CODE BEGIN 3 */
141  }
```

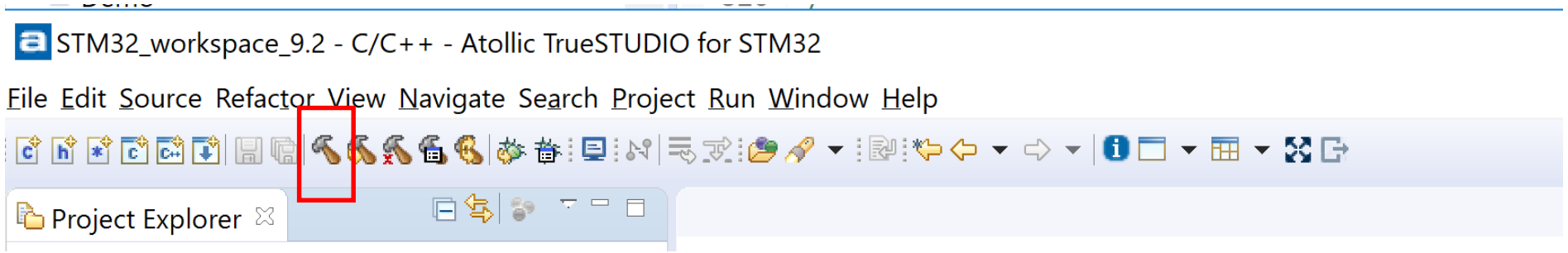
# Step 14. Open Device Manager, plug in STM board, Observe COM Port

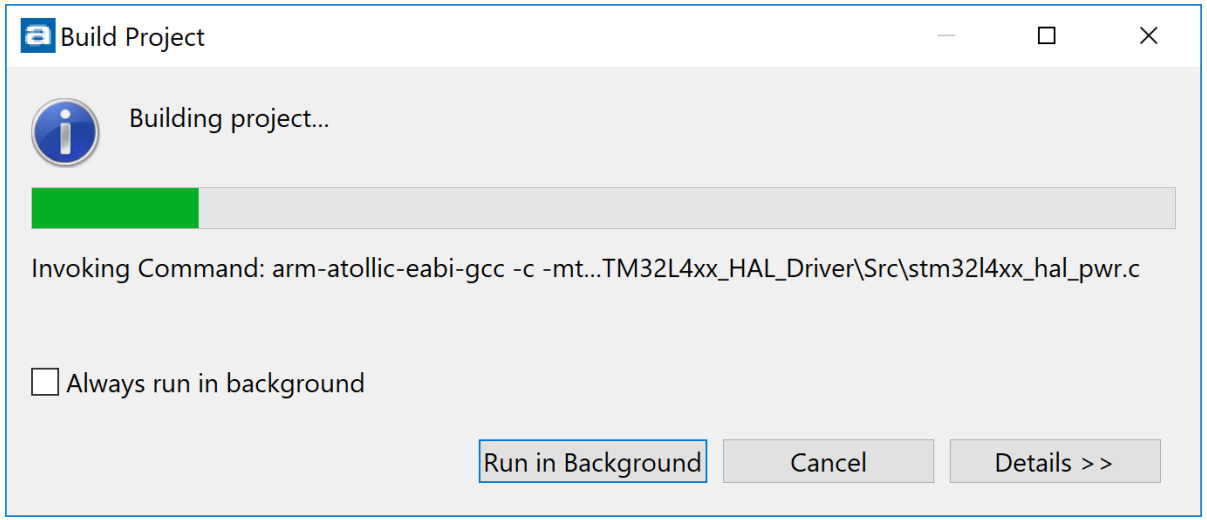


# Step 15. Startup PuTTY on STM COM Port

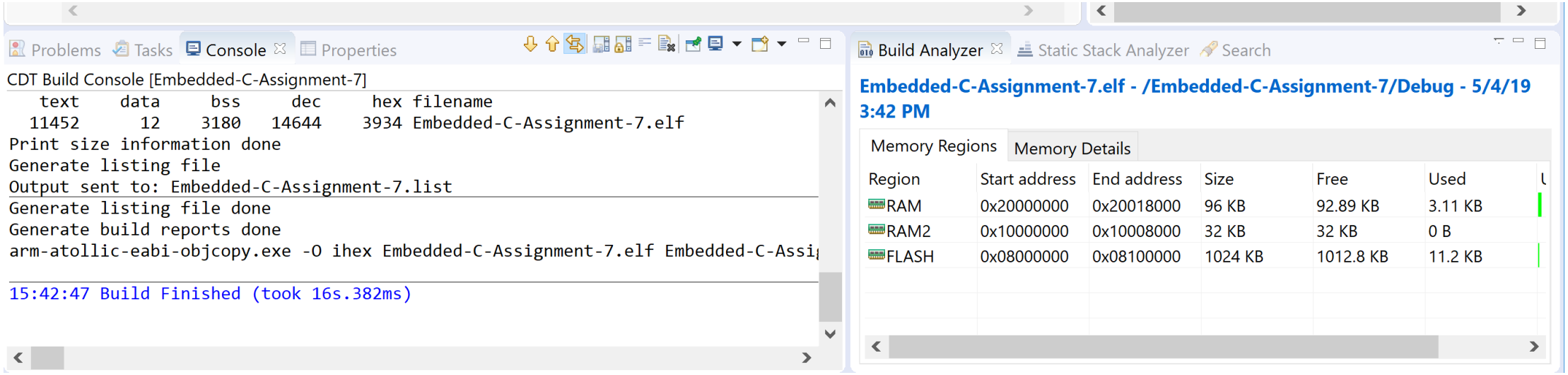


# Step 16. Build Project

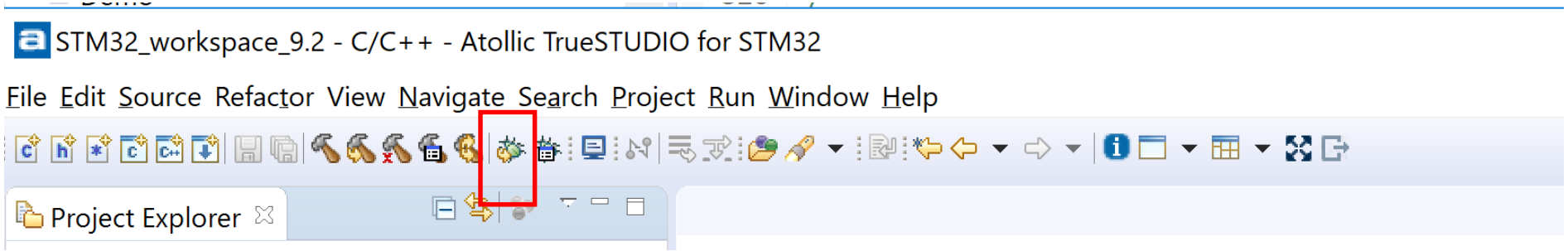


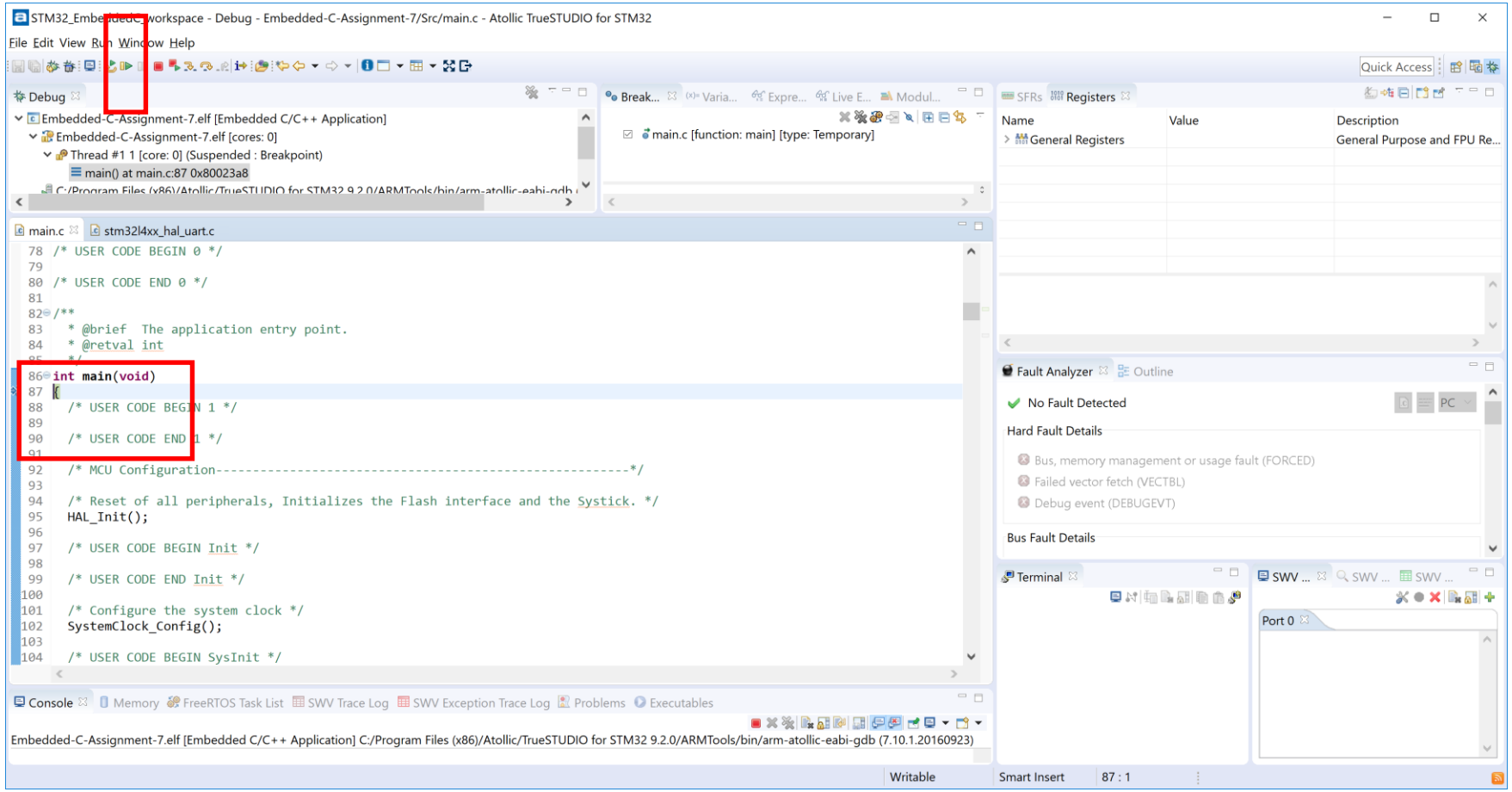
# Step 17. Results of Build



# Step 18. Run in Debug



# Step 19. Hit Breakpoint, then click Resume



# Step 20. Observe output on serial port