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| A Unified Flow for Embedded Systems Development  Embedded\_C  Lesson 3 | Abstract  This lab aims to debug the last assignment using GDP tool |

Debug the uart code which we coded last session

Initiate the virtual board and initiate the debugger

Use local host and port number=1234 to access virtual board on qemu software

A screenshot of a computer program

Description automatically generated

Try to put a breakpoint and move step by step

A screen shot of a computer

Description automatically generated

Continue “c” to run until first breakpoint

A screen shot of a computer

Description automatically generated

Continue “c” to run until the second breakpoint

A screen shot of a computer

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* Now code paused at function uart0\_void\_TransmitData();

Let’s go step by step into this function

A screenshot of a computer program

Description automatically generated

The next step will affect the qemu simulator and print the first character on the screen as we will see

:

A computer screen shot of a program

Description automatically generatedcharacter “H” is printed on the screen because the instruction

* UART0\_UARTDR\_UINT32\_REG=buffer[i];

Is executed

Using “finish” instruction it will execute the function until the end and print the whole statement.

A screenshot of a computer program

Description automatically generated

using “c” continue command it will execute the second function which print the second statement

* learn-in-depth

A screenshot of a computer program

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