

Sample :

Siul2\_Dio\_lp\_Example\_S32G274A\_M7

printf() to console can't work

■ sample setting

■ Test result

# sample setting

workspace - Siul2\_Dio\_Ip\_Example\_S32G274A\_M7/src/main.c - S32 Design Studio for S32 Platform

File Edit Source Refactor Navigate Search Project 配置工具 Run Window Help

```
#include "Siul2_Port_Ip.h"
#include "Siul2_Dio_Ip.h"
#include <stdio.h>

volatile uint8 level;

void TestDelay(uint32 delay);
void TestDelay(uint32 delay)
{
    static volatile uint32 DelayTimer = 0;
    while(DelayTimer<delay)
    {
        DelayTimer++;
    }
    DelayTimer=0;
}

/**
 * @brief      Main function of the example
 * @details    Initialize the used drivers and uses the Icu
 *             and Dio drivers to toggle a LED on a push button
 */
int main(void)
{
    //uint8 i = 0U;
    /* Initialize all pins using the Port driver */
    Siul2_Port_Ip_Init(NUM_OF_CONFIGURED_PINS0, g_pin_mux_InitConfigArr0);

    //while (i++ < 10)
    while(1)
    {
        /* Dio_WriteChannel(DioConf_DioChannel_Digital_Output_LED_D78, STD_HIGH); */
        Siul2_Dio_Ip_WritePin(LED_PORT, LED_PIN, 1U);
        level = Siul2_Dio_Ip_ReadPin(LED_PORT, LED_PIN);
        //printf("the level is %d\r\n",level);
        //TestDelay(48000000);
        TestDelay(4800000);
        /* Dio_WriteChannel(DioConf_DioChannel_Digital_Output_LED_D78, STD_LOW); */
        Siul2_Dio_Ip_WritePin(LED_PORT, LED_PIN, 0U);
        level = Siul2_Dio_Ip_ReadPin(LED_PORT, LED_PIN);
        //TestDelay(48000000);
        TestDelay(4800000);
        printf("LED show \r\n");
    }

    return (0U);
}
```

The function shall  
On and off again and again

- > Resource Builders
- ▼ C/C++ Build
  - Build Variables
  - Environment
  - Logging
  - Settings
  - Tool Chain Editor
- > C/C++ General
- EmbSys Register View
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- Task Tags
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### Settings

- Tool Settings
- Build Steps
- Build Artifact
- Binary Parsers
- ✖ Error Parsers

- Cross Settings
- Target Processor
- ▼ Standard S32DS C Compiler
  - Dialect
  - Preprocessor
  - Includes
  - Optimization
  - Debugging
  - Warnings
  - Miscellaneous
- ▼ Standard S32DS C Linker
  - General
  - Libraries
  - Miscellaneous
  - Shared Library Settings
  - Link Order
- ▼ Standard S32DS Assembler
  - General
  - Preprocessor
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- ▼ Standard S32DS Create Flash Image
  - General
- ▼ Standard S32DS Print Size
  - General
- ▼ Standard S32DS C Preprocessor
  - Settings
- ▼ Standard S32DS Disassembler
  - Settings

Other target flags

Arm family

Architecture

Instruction set

Thumb interwork (-mthumb-interwork)

Endianness

Float ABI

FPU Type

Unaligned access

Libraries support

Sysroot

Restore Defaults **Apply**

**Apply and Close** Cancel



type filter text

- ✓ C/C++ Application
  - Siul2\_Dio\_Ip\_Example\_S32G274A\_M7.elf
  - C/C++ Remote Application
- Eclipse Application
- GDB Hardware Debugging
- ✓ GDB PEMicro Interface Debugging
  - Siul2\_Dio\_Ip\_Example\_S32G274A\_M7 Debug\_RAM
  - GDB SEGGER J-Link Debugging
- Launch Group
- Launch Group (Deprecated)
- Launch Group for S32 Debugger
- LAX Simulator
- ✓ S32 Debugger
  - Linflexd\_Uart\_Ip\_Example\_S32G274A\_M7\_Debug\_RAM\_S32Debug
  - Siul2\_Dio\_Ip\_Example\_S32G274A\_M7\_Debug\_RAM\_S32Debug
  - Spi\_Transfer\_S32G274A\_M7\_Debug\_RAM\_S32Debug
  - Uart\_Example\_S32G274A\_M7\_Debug\_RAM\_S32Debug
- S32 Debugger Flash Programmer
- VLAB Simulator Debugging

Filter matched 19 of 29 items

Name: Siul2\_Dio\_Ip\_Example\_S32G274A\_M7 Debug\_RAM

Main PEMicro Debugger Startup Source Common SVD Support OS Awareness

## Semihosting Settings

 Enable semihosting Console routed to:  Telnet  GDB client Enable Telnet console Telnet Port: 51794

## Load Symbols and Executable

 Load symbols Use project binary: Siul2\_Dio\_Ip\_Example\_S32G274A\_M7.elf Use file:  Workspace... File System...Symbols offset (hex):  Load executable Use project binary: Siul2\_Dio\_Ip\_Example\_S32G274A\_M7.elf Use file:  Workspace... File System...Executable offset (hex): 

## Runtime Options

 Attach to Running Target  Run on reset Set PC (absolute hex address or symbol):   Set breakpoint at: main

GDB run commands:

Revert

Apply

Debug

Close

Project Explorer

- Linflexd\_Uart\_Ip\_Example\_S32G274A\_M7: Debug\_RAM
- Siul2\_Dio\_Ip\_Example\_S32G274A\_M7: Debug\_RAM
  - Binaries
  - Includes
  - Project\_Settings
  - RTD
    - include
    - src
    - board
    - generate
    - generate/include
    - generate/src
    - src
      - main.c
  - Debug\_RAM
    - board
    - generate
    - Project\_Settings
    - RTD
    - src
      - Siul2\_Dio\_Ip\_Example\_S32G274A\_M7.elf - [arm/le]
      - application.bin
      - blob.bin
      - makefile
      - objects.mk
      - Siul2\_Dio\_Ip\_Example\_S32G274A\_M7.args
      - Siul2\_Dio\_Ip\_Example\_S32G274A\_M7.bin
      - Siul2\_Dio\_Ip\_Example\_S32G274A\_M7.map
      - sources.mk
    - include
      - description.txt
      - example\_Siul2\_Dio.mex
  - Spi\_Transfer\_S32G274A\_M7: Debug\_RAM
  - Uart\_Example\_S32G274A\_M7: Debug\_RAM

```

volatile uint8 level;

void TestDelay(uint32 delay);
void TestDelay(uint32 delay)
{
    static volatile uint32 DelayTimer = 0;
    while(DelayTimer<delay)
    {
        DelayTimer++;
    }
    DelayTimer=0;
}

/**
 * @brief      Main function of the example
 * @details    Initialize the used drivers and uses the Icu
 *             and Dio drivers to toggle a LED on a push button
 */
int main(void)
{
    //uint8 i = 0U;
    /* Initialize all pins using the Port driver */
    Siul2_Port_Ip_Init(NUM_OF_CONFIGURED_PINS0, g_pin_mux_InitConfigArr0);

    //while (i++ < 10)
    while(1)
    {
        /* Dio_WriteChannel(DioConf_DioChannel_Digital_Output_LED_D78, STD_HIGH); */
        Siul2_Dio_Ip_WritePin(LED_PORT, LED_PIN, 1U);
        level = Siul2_Dio_Ip_ReadPin(LED_PORT, LED_PIN);
        //printf("the level is %d\r\n",level);
        //TestDelay(48000000);
        TestDelay(4800000);
    }
}

```

Outline

- Siul2\_Port\_Ip.h
- Siul2\_Dio\_Ip.h
- studio.h
- level : volatile uint8
- TestDelay(uint32) : void
- TestDelay(uint32) : void
- main(void) : int

CDT Global Build Console

text	data	bss	dec	hex	filename
287380	0	12288	299668	49294	Siul2_Dio_Ip_Example_S32G274A_M7.elf

Finished building: Siul2\_Dio\_Ip\_Example\_S32G274A\_M7.siz  
 Finished building: Siul2\_Dio\_Ip\_Example\_S32G274A\_M7.bin

10:27:57 Build Finished. 0 errors, 0 warnings. (took 1s.352ms)

10:28:45 \*\*\*\* Incremental Build of configuration Debug\_RAM for project Siul2\_Dio\_Ip\_Example\_S32G274A\_M7 \*\*\*\*

```

make -j8 all
Invoking: Standard S32DS Print Size
arm-none-eabi-size --format=berkeley Siul2_Dio_Ip_Example_S32G274A_M7.elf
text  data  bss  dec  hex filename
287380  0  12288  299668  49294 Siul2_Dio_Ip_Example_S32G274A_M7.elf
Finished building: Siul2_Dio_Ip_Example_S32G274A_M7.siz

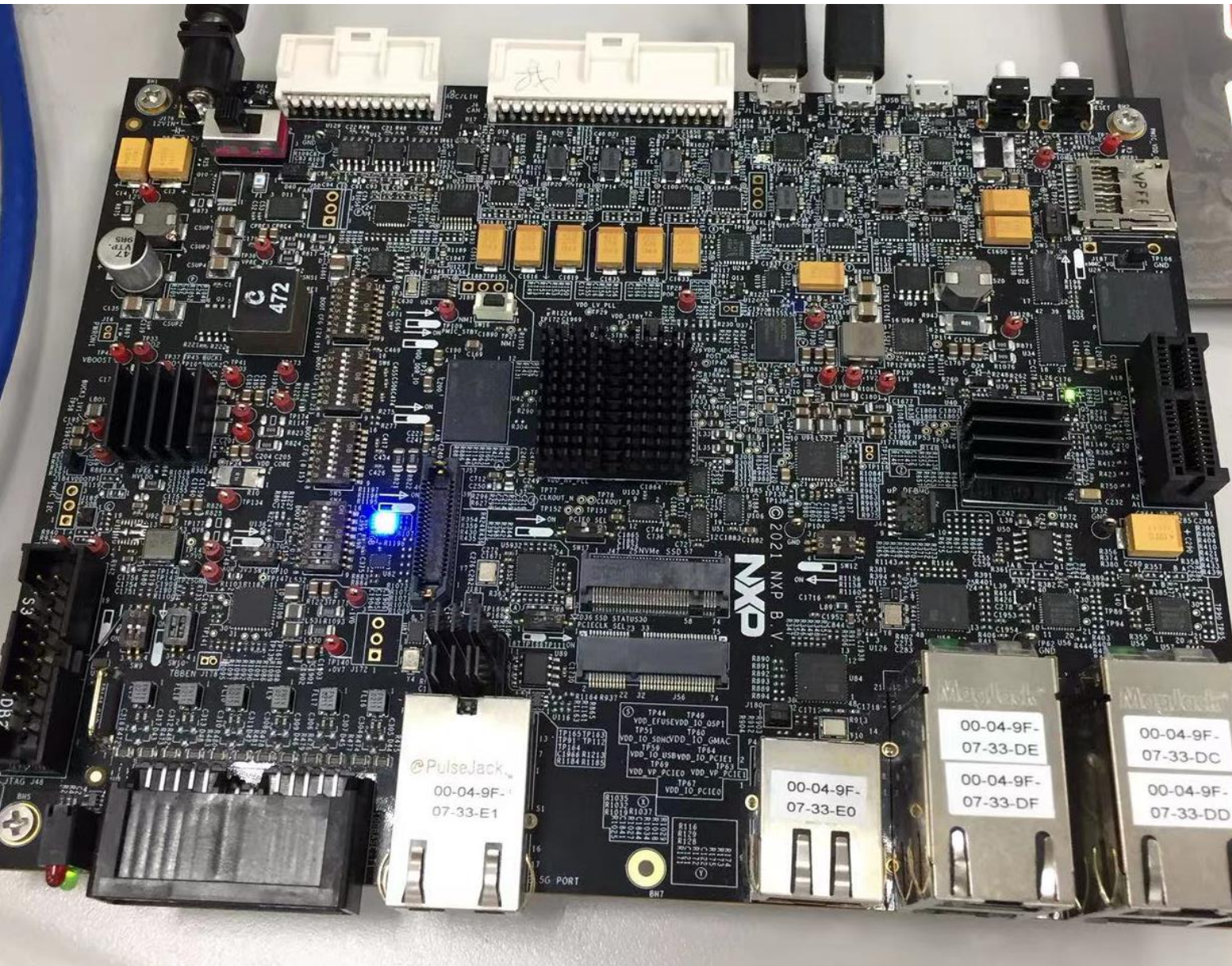
```

10:28:45 Build Finished. 0 errors, 0 warnings. (took 341ms)

- 1 CDT Global Build Console
- 2 CDT Build Console [Siul2\_Dio\_Ip\_Example\_S32G274A\_M7]
- 3 FreeRTOS Task Aware Debugger Console version 1.0.8 (201810241449)

Dashboard

- Project Creation
  - S32DS Application Project
  - S32DS Library Project
- Build/Debug
  - Build (All)
  - Clean (All)
  - Debug
- Settings
  - Project
  - Build se
  - Debug



1. Download bin file to norflash
2. The function **isn't ok**. It shall on and off but it is only on.

Project Explorer

- Linflexd\_Uart\_Ip\_Example\_S32G274A\_M7: Debug\_RAM
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  - Binaries
  - Includes
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  - RTD
    - include
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  - generate/include
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      - Siul2\_Dio\_Ip\_Example\_S32G274A\_M7.map
      - sources.mk
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      - example\_Siul2\_Dio.mex
  - Spi\_Transfer\_S32G274A\_M7: Debug\_RAM
  - Uart\_Example\_S32G274A\_M7: Debug\_RAM

```
main.c Mcu.h Uart.c Uart_Ipw.c System_Ip.c Siul2_Port_Ip.c main.c studio.h Siul2_Dio_Ip... main.c 39
```

```
while(1)
{
    /* Dio_WriteChannel(DioConf_DioChannel_Digital_Output_LED_D78, STD_HIGH); */
    Siul2_Dio_Ip_WritePin(LED_PORT, LED_PIN, 1U);
    level = Siul2_Dio_Ip_ReadPin(LED_PORT, LED_PIN);
    //printf("the level is %d\r\n",level);
    //TestDelay(4800000);
    TestDelay(4800000);
    /* Dio_WriteChannel(DioConf_DioChannel_Digital_Output_LED_D78, STD_LOW); */
    Siul2_Dio_Ip_WritePin(LED_PORT, LED_PIN, 0U);
    level = Siul2_Dio_Ip_ReadPin(LED_PORT, LED_PIN);
    //TestDelay(4800000);
    TestDelay(4800000);
    printf("LED show \r\n");
}

return (0U);
}

#ifdef __cplusplus
}
```

Problems Tasks Console Properties Terminal Search

CDT Global Build Console

Finished building: ../Project\_Settings/Startup\_Code/startup\_cm7.s

Building target: Siul2\_Dio\_Ip\_Example\_S32G274A\_M7.elf  
Invoking: Standard S32DS C Linker  
arm-none-eabi-gcc -o "Siul2\_Dio\_Ip\_Example\_S32G274A\_M7.elf" "@Siul2\_Dio\_Ip\_Example\_S32G274A\_M7.args"  
Finished building target: Siul2\_Dio\_Ip\_Example\_S32G274A\_M7.elf

Invoking: Standard S32DS Create Flash Image  
Invoking: Standard S32DS Print Size  
arm-none-eabi-objcopy -O binary Siul2\_Dio\_Ip\_Example\_S32G274A\_M7.elf "Siul2\_Dio\_Ip\_Example\_S32G274A\_M7.bin"  
arm-none-eabi-size --format=berkeley Siul2\_Dio\_Ip\_Example\_S32G274A\_M7.elf

text	data	bss	dec	hex	filename
287380	0	12288	299668	49294	Siul2_Dio_Ip_Example_S32G274A_M7.elf

Finished building: Siul2\_Dio\_Ip\_Example\_S32G274A\_M7.siz  
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make -j8 all  
Invoking: Standard S32DS Print Size  
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287380	0	12288	299668	49294	Siul2_Dio_Ip_Example_S32G274A_M7.elf

Finished building: Siul2\_Dio\_Ip\_Example\_S32G274A\_M7.siz

Dashboard

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  - Debug
- Settings
  - Project
  - Build se
  - Debug

10:28:45 Build Finished. 0 errors, 0 warnings. (took 341ms)

No message of "LED show"