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SDP-K1 - IAR Embedded Workbench Project User Guide for ADBMS6830

Contributed by Pramod Pundyavana Krishna Revision - August 23, 2023

1 Introduction

The document describes the instruction to use ADBMS6830 demo board with SDP-K1 evaluation board (also known as EVAL-SDP-CK1Z) on IAR Embedded Workbench.

This serves as additional note to the "*SDP-K1 MBED Keil Studio User Guide for ADBMS6830*" where in the Hardware Setup is explained.

2 IAR Embedded Workbench installation (IDE)

Download IAR Embedded Workbench (Install 8.42.1 or latest version): https://www.iar.com/products/ architectures/arm/iar-embedded-workbench-for-arm/. You may have to use Trial license, or the full license.

Compile and Run the code

L. Open from other workbench -> EWARM.

Name		Туре		
3	ADBMS6830	File folder		
- 5	Drivers	File folder		
3	EWARM	File folder		
3	Inc	File folder		
- 5	Src	File folder		

2. open *Project.eww* workspace in IAR workbench.

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Name	Туре
Backup of SDP-K1.ewd	EWD File
Backup of SDP-K1.ewp	EWP File
🔊 Backup of SDP-K1.ewt	EWT File
🤣 Project.eww	IAR IDE Workspace
SDP-K1.dep	DEP File
🔊 SDP-K1.ewd	EWD File
🔊 SDP-K1.ewp	EWP File
🔊 SDP-K1.ewt	EWT File
🎭 startup_stm32f469xx.s	Assembler Source
🔊 stm32f469xx_flash.icf	ICF File
🔊 stm32f469xx_sram.icf	ICF File

3. Rebuild the IAR SDP-K1 Project.

Project - IAR Embedded Workb	ench IDE - Arm 8.50.9					
File Edit View Project CMSI	S-DAP Tools Window Help					
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Workspace	▼ ♣ × main.c serialPrintResult.					
SDP-K1	· · · ·					
Files	 edetails This 					
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ADBMS6830	Options					
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	C-STAT Static Analysis ad					
	Stop Build ad					
	Add > ad					
	Permana ad					
	Rename					
	Version Control System > art ad					
	Open Containing Folderart					
	File Properties					
	Set as Active op					
	printf("Clear					
SDP-K1	<					
Build						
Messages						
Deleting outputs for config	uration SDP-K1					
Updating build tree						
35 file(e) deleted						
55 me(s) deleted.						
Build Tool Output Debug Log						
Clean and make the selected project	t					

1. Connect SDP-K1 board in USB port then *Download and Debug* (Ctrl + D).





5. After successful flash programmed, program break at main, would look like...



orkspace 🔻 🕫	× main.	c 🗙 serialPrintResul	- Disseamble -
DP-K1	main	0	Run the program in the debuge
Hes SDP-K1 - SDP-K1 ⊕ MADBMS6830 ⊕ ADBMS6830 ⊕ ADBMS68300 ⊕	•	<pre>/* Private user code /* USER CODE BEGIN 0 */ /* USER CODE END 0 */ /* * @brief The application entry point. * @tretval int */ hat main(void) (/* USER CODE BEGIN 1 */ /* USER CODE END 1 */ /* USER CODE END 1 */ /* MCU Configuration*/ /* Exect of all peripherals. Initializes the Elash interface and the Systick. */</pre>	<pre>> HAL_TIM_I 0x800'ad3a: 0x4770) HAL_TIM_C 0x800'ad3c: 0x4770) HAL_TIM_C 0x800'ad3e: 0x4770 int main(void) (main: 0x800'ad40: 0xb580 HAL_Int(): 0x800'ad42: 0xf000 0xfc SystemClock_Config():</pre>
DP-K1		HAL_Init();	0x800'ad46: 0xf000 0xf8
minal I/O			T I I I I I I I I I I I I I I I I I I I
utput:			Log file: (
< put:			Ctrl codes Options.
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- 5. Push *Go* (F5)
- 7. Display menu correspond send command and check output result in *Terminal I/O*. In case COM port "*mbed Serial Port(COM xx)*" is open in another Terminal program, this might fail sometimes.



Workspace	▲ ₫ ×	main.c 🗙	serialPrintResu	💌	Disassem	bly	★ ₫ X
SDP-K1	v	main()		fo	Go to		 Memory
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SDP-K1		<		> ~	<		>
Terminal I/O : Input needed!							★ 廿 ×
Output:							Log file: Off
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Input:						Ctrl codes	Dptions
						Buffer size:	0
Build Terminal I/O : Input nee	eded! Deb	ug Log					

3 Related Resources

Engineers User Guide "SDP-K1 MBED Keil Studio User Guide for ADBMS6830"

IAR Embedded Workbench for ARM : https://www.iar.com/products/architectures/arm/iar-embedded-workbench-for-arm/

4 Document History

Revision	Description
Rev. Preliminary 0.1 - August 2022	Initial Document
by Pramod Pundyavana Krishna	