Using ETB Trace Code for Runtime Profiling

建立工程

Unzip the ETB code to the project path.

The ETB profiling code consists of 3 sub folder: Common/include/lib



Configure related build properties.



Performance Advisor		Pre-define NAM	E (define, -D)
Advanced Options		C6678	
Advanced Debug Options		_ETB_EDMA	
Language Options	=		< add predefined
Parser Preprocessing Options	-		symbols
Predefined Symbols			
Diagnostic Options			
Runtime Model Options			
Advanced Optimizations			
Advanced Obtimizations			

 CCS Build 	Configuration: Debug [Active]
 C6000 Compiler 	
Processor Options Optimization Debug Options Include Options	Builder Behaviour Steps Variables Environment Pre-build steps
Performance Adviso Advanced Options C6000 Linker Basic Ontions	Command: Description:
File Search Path Advanced Options Builders C/C++ Build CC++ General	Post-build steps Command: copy i name.out i c\temp 8 Description:

集成代码

Declare the header file and global variable

- 1 Include "ETB_Profile.h"
- 2 The pDmaMemory point to the trace data buffer
- 3 The pETBHandle and pDSPHandle used for trace job setup and release

#include "ETB_Profile.h"

```
uint32_t *pDmaMemory = (uint32_t *)EDMA_DEST_ADDRESS;
ETBHandle* pETBHandle;
DSPTraceHandle* pDSPHandle;
```

Call the API to set up the trace job



Release trace job once it is done

Stop_ETB_Profile(&tProfileConfig,&pETBHandle,&pDSPHandle);

Change below trace buffer destination and length if needed.

These macro are defined on "ETB_Profile.h"

```
#define EDMA_DEST_ADDRESS 0x0c000000
#define EDMA_BFR_WORDS 0x1000 /* 0x4000 (16384) bytes */
#define TEMP_BFR_READ_SIZE 0x400
```

Change the trace file path if needed.

The related codes are on file "ETB_Profile_Func.c"

```
char * pFileName = "C:\\temp\\DSP_etbdata.bin";
```

运行程序

DSP 初始化

"evmc6678l.gel" is needed to initiate PLL/DDR/PSC if the application code does not cover it.

- 1 Use Menu "tools->gel files -> load GEL" to load the evmc6678l.gel
- 2 Initiate PLL and DDR by Menu "Scripts->EVMC6678L Init Functions -> Global_Default_Setup"

Scr	ipts Window Help			
Ō	EVMC6678L HW Setup	+	1	
	EVMC6678L Init Functions	•		Init_Functions_Help
	EVMC6678L Debug Tools	×		Global_Default_Setup
	Memory Map	•		Set_DSP_Cache
4	CPSW Functions	•		Set_PII2_666_7_MHz
	PA PLL Functions	•		Set_Psc_All_On
2	DDR EVMC6678L Functions	•		Set_Pin_Board

- 3 Execute Scripts Menu "Set_Psc_All_On" which will enable trace PSC.
- 4 Load the *.out file and get the trace file data.

数据分析

1 Execute the "convert_trace_file.bat" file which is packed with the demo code. The successful execution output is as below:

c:\temp>convert_trace_file.bat c:\temp>C:\ti\ccsv5\ccs_base\emulation\analysis\bin\bin2tdf -bin C:/temp/DSP_etb data.bin -app C:/temp/profile_with_ETB.out -procid 66x -sirev 1 -rcvr ETB -outpu t C:/temp/myTrace.tdf -dcmfile c:/temp/dcm.txt

*

- bin to TDF conversion successful no errors.
- 2 Use the CCS tools to analysis the trace data.
 - a. Open *.tcf and *.out file and get trace data view.

_	Jis Discript								
	менюту мар								
	GEL FILES	0.00	Addr.h	🖻 D	DeviceSpecific_C667	🕒 ETB_	Profi		
	Debugger Opti	Ulis							
	Pin Connect			******			*		
	Port Connect			*****	************	******	*		
	Save Memory								
	Load Memory								
	Fill Memory								
	DTOC Object V								
aa ka	RTOS Object Vi	ew (ROV)	timin	g value	e in sec to a fi	eld integ	er		
<u></u>	System Analyzei	vr 1	ol ^{rs.}	flow					
	Hardware Trace	a Analyzer	2 over	do Covo	1200				
	Thardware Trace	Andryzer		ue cover	age				
<u>ش</u>	Graph		+ Fui	tistical F	Uning Supplier Drafiling				
1	Image Analyze	r	Sta	itistical F	unction Profiling				
	Profile		+ Sta	ni Profilii cho Anel	ng				
	XDAIS Tools		> La	che Anai	IVSIS	America			
	RTSC Tools		t ne	emory in	rougnput and Access	Analysis			
a	- (i) ddr	frequency	/ va PC	Trace	_				
	(-/		Cu	stom Co	re Trace				
iti	on - (i) pos	ition of H	fiel Cu	stom Sys	stem Trans				
	-		Op	en File					
ALU	E ted int ddn	field velu	Op ≞ An	en File alysis Da	ashboard				
ALU	E ted int ddr	field valu	Jea iea iea iea iea iea iea iea i	en File alysis Da port Con	ashboard nfiguration				
ALU ver	E ted int ddr	field valu	Je a <mark>≞</mark> An Ge Im	en File alysis Da port Con	ashboard nfiguration				
ALU ver	E ted int ddr race Viewer - myTra	field valu ce.tdf ⊠	Je a 🖨 Im	en File alysis Da port Con	ashboard Ifiguration		Analyze - 🖼 🎪	- 🖼 😡 Start S	ton Besume
ALU ver	E ted int ddr race Viewer - myTra Program Address	field valu ce.tdf ⊠ Code	Je a ≞ An ➢ Im	en File alysis Da port Con	ashboard Ifiguration	Line Number	Analyze 👻 🗐 🔗 🤊	• 🖽 🔛 Start S	top Resume
ALU ver	E ted int ddr race Viewer - myTra Program Address 0x80DA8A	field valu ce.tdf 🛛 Code 0x2640	Delta Cycles	en File alysis Da port Con Cycle 1 1581	ashboard Ifiguration	Line Number 110	Analyze 🝷 🎘 🛷 🥆 Source		top Resume
ALU ver 1 *T	E ted int ddr race Viewer - myTra Program Address 0x80DA8A 0x80DA8C	field valu cce.tdf 🙁 Code 0x2640 0x20D0274	Delta Cycles	en File alysis Da port Con Cycle 1 1581 1582	ashboard Ifiguration Trace S Function startFunction startFunction	Line Number 110 110	Analyze 🝷 🎘 🔗 🤹 Source	E Start S Disassembly ADD.L1 STW.D1T1	A4,1,A4 A4,*+A3[8]
ALU ver 1 *T	E ted int ddr race Viewer - myTra Program Address 0x80DA8A 0x80DA8C 0x80DA8C	field valu cce.tdf ⊠ Code 0x2640 0x20D0274 0x7BD005A	Delta Cycles	en File alysis Da port Con Cycle 1 1581 1582 1583	Ashboard Afiguration Trace S. Function startFunction startFunction	Line Number 110 110 113	Analyze - 🗐 🐼 🔹 Source	Image: Start S Disassembly ADD.L1 STW.D1T1 ADD.L2	top Resume A4,1,A4 A4,*+A3[8] 8,B15,B15
ALU /er 1 *T 25 26 27 28	E ted int ddr race Viewer - myTra Program Address 0x80DA8A 0x80DA8C 0x80DA90 0x80DA94	field valu cce.tdf 🛛 Code 0x2640 0x20D0274 0x7BD005A 0x8CA362	Delta Cycles	en File alysis Da port Con Cycle 1 1581 1582 1583 1583	Infiguration	Line Number 110 110 113 113	Analyze - 🛃 🐼 • Source	F 🖼 🔛 Start S Disassembly ADD.L1 STW.D1T1 ADD.L2 BNOP.S2	top Resume A4,1,A4 A4,*+A3[8] 8,B15,B15 B3,5
ALU ver 1 *T 25 26 27 28 29	E ted int ddr race Viewer - myTra Program Address 0x80DA8A 0x80DA8A 0x80DA8A 0x80DA94 0x80DA94	field valu ccetdf 3 0x2640 0x2000274 0x7BD005A 0x8CA362 0xDC4D	Delta Cycles	en File alysis Da port Con Cycle 1 1581 1582 1583 1584 1590	Ashboard figuration Trace S Function startFunction startFunction startFunction appFunction	Line Number 110 113 113 113 122	Analyze - 🕅 🐼 - Source } while(dummy2 > 1)	F 🖼 🔛 Start S Disassembly ADD.1 STW.DIT1 ADD.12 BNOP.52 LDW.D2T2	A4,1,A4 A4,*+A3[8] 8,815,815 B3,5 *B15[2],B4
ALU ver 25 26 27 28 29 30	E ted int ddr race Viewer - myTra Program Address 0x80DA8A 0x80DA8A 0x80DA80 0x80DA90 0x80DA9A 0x80DA9A 0x80DA9A	field valu ccetdf 3 Code 0x2640 0x2000274 0x70B005A 0x8CA362 0x0C4D 0x102ADA	Delta Cycles	en File alysis Da port Con Cycle 1 1581 1582 1583 1584 1590 1595	Irace S. Function startFunction startFunction startFunction startFunction appFunction appFunction	Line Number 110 113 113 122 122	Analyze Source while(dummy2 > 1)	Bissembly ADDL1 STW.D1T1 ADD.12 BNOP.52 LDW.D2T2 CMPLTL2	A4,1,A4 A4,*+A3[8] 8,815,815 B3,5 *B15[2],B4 1,B4,B0
ALU ver 25 26 27 28 29 30 31	E ted int ddr race Viewer - myTra Drogram Address Ox80DA8A Ox80DA90 Ox80DA94 Ox80DA94 Ox80DA50 Ox80DA54	field valu ccetdf 33 Code 0x2640 0x20D0274 0x70BD05A 0x20D0274 0x70BD05A 0x20C4D 0x102ADA 0x2FECA120	Delta Cycles	en File alysis Da port Con Cycle 1 1581 1582 1583 1584 1590 1595 1596	Ashboard figuration Trace S. Function startFunction startFunction startFunction appFunction appFunction	Line Number 110 113 113 122 122 122	Analyze - 🛃 💸 • Source) while(dummy2 > 1)	E Start S Disassembly ADD.11 ADD.12 BNOP.52 LDW.02T2 CMPLT.12 [80] BNOP.51	top Resume A4,1,A4 A4,*+A3[8] 8,B15,B15 B3,5 *B15[2],B4 1,B4,B0 0x80dab8,
ALU ver 25 26 27 28 29 30 31 32	E ted int ddr Program Address 0x80DA8A 0x80DA84 0x80DA94 0x80DA94 0x80DA94 0x80DA94 0x80DA94 0x80DA94 0x80DA94 0x80DA94	field valu cettf 3 Code 0x2640 0x2000274 0x78D005A 0x8CA362 0x0C4D 0x102ADA 0x102ADA 0x102ADA	Delta Cycles	en File alysis Da port Con 1581 1582 1583 1584 1590 1595 1596 1602	Infiguration	Line Number 110 113 113 122 122 122 122 124	Analyze • [8] @ • Source) while(dummy2 > 1) dummy2;	E Constant Start S Disassembly ADD.L1 STW.D111 ADD.L2 BNOP.S2 LDW.D272 CMPLTL2 [B0] BNOP.S1 LDW.D272 LDW.D772 LDW.D	top Resume A4,1,A4 A4,*+A3(8) 88,B15,B15 B3,5 *B15(2),B4 1,B4,B0 0x80dab8, *B15(2),B4
ALU ver 25 26 27 28 29 30 31 32 33 24	E ted int ddr race Viewer - myTrz Program Address 0x80DA84 0x80DA90 0x80DA90 0x80DA90 0x80DA90 0x80DA90 0x80DA90 0x80DA90 0x80DA90 0x80DA90 0x80DA90 0x80DA90	field valu cettf 3 0x2640 0x200274 0x78D005A 0x8CA362 0x102ADA 0x102ADA 0x2FECA120 0x0C4D 0x0C4D	Delta Cycles	en File alysis Da port Con 1581 1582 1583 1584 1590 1595 1596 1602 1607 1608	Interpretation of the second o	Line Number 110 1113 113 122 122 122 122 124 124 124	Analyze Ana	E Start S Disassembly ADD.L1 STW.D111 ADD.L2 BNOP.S2 LDW.D272 CMPUTL2 [B0] BNOP.S1 LDW.D272 ADD.L2 STW D272 STW D272	top Resume A4,1,A4 A4,*+A3(8) 8,B15,B15 B3,5 *B15(2),B4 H,84,B0 A4,1,B4 B4,+1,B4 B4,+1,B4
ALU ver 25 26 27 28 29 30 31 32 33 34 35	E ted int ddr race Viewer - myTra 0x80DA8A 0x80DA80 0x80DA94 0x80DA90 0x80DA94 0x80DA90 0x80DA94 0x80DA90 0x80DA94 0x80DA90 0x80DA94 0x80DA90 0x80 0x80 0x80 0x80 0x80 0x80 0x80 0x	field valu ccetdf 33 Code 0x26400 0x20D0274 0x78D005A 0x8CA362 0x0C4D 0x102ADA 0x2FCA120 0x0C45 0x0C45 0x0C45	Delta Cycles	Cycle 1 Cycle 1 1581 1582 1583 1584 1590 1595 1596 1602 1607 1608	shboard figuration frace S Function starfunction starfunction starfunction starfunction starfunction appFunct	Line Number 110 113 113 112 122 122 124 124 124 124	Analyze • 🛃 🐼 • Source) while(dummy2 > 1) dummy2: if(dummy2 & 1)	Biassembly ADDL1 STW.D1T1 ADDL2 BNOP52 LDW.D2T2 (B0) BNOP51 LDW.D2T2 ADDL2 STW.D212 LDW.D2T2	top Resume A4,1,A4 A4,*+A3(8) 8,815,815 B3,5 *1815(2),B4 1,B4,B0 0x80dab8, *1815(2),B4 B4,-1,B4 B4,-1,B4 B4,*1815(2)
ALU ver 25 26 27 28 29 30 31 32 33 34 35 36	E ted int ddr race Viewer - myTra Program Address 0x80DA84 0x80DA80 0x80DA90 0x80DA90 0x80DA90 0x80DA90 0x80DA90 0x80DA90 0x80DA90 0x80DA90 0x80DA90 0x80DA90 0x80DA90 0x80DA90 0x80DA90 0x80DA90 0x80DA90	field valu code 32 0x2640 0x200274 0x780005A 0x0200274 0x780005A 0x102ADA 0x2FECA120 0x102ADA 0x2FECA120 0x102FA 0x0C45 0x102F5A	Delta Cycles	Cycle 1 1581 1582 1583 1584 1595 1596 1602 1607 1608 1609 1614	shiboard friguration frace S function starfunction starfunction appfunction appfunction appfunction appfunction appfunction appfunction appfunction appfunction appfunction appfunction appfunction appfunction	Line Number 110 113 113 112 122 122 122 124 124 124 124 125 125	Analyze Ana	Start S Disassembly ADD.L1 STW.D1T1 ADD.L2 BNOP.S2 LDW.D2T2 CMPLTL2 BNOP.S1 LDW.D2T2 ADD.L2 STW.D2T2 LDW.D2T2 ADD.L2	top Resume A4,1A4 A4,*+A3(8) 8,815,815 83,5 *815(2),84 1,84,80 0:800dab8, *815(2),84 B4,-1,184 B4,*815(2),84 B4,*15(2),84 B4,*15(2),84 B4,*15(2),84 B4,*15(2),84 B4,*16 B4,80
ALU ver 25 26 27 28 29 30 31 32 33 34 35 36 37	E ted int ddr race Viewer - myTra 0x80DA8C 0x80DA8C 0x80DA94 0x80DA8C 0x80DA94 0x80DA94 0x80DA94 0x80DA94 0x80DA95 0x80DA94 0x80DA82 0x80DA94 0x80DA95 0x80DA95 0x80DA95 0x80DA95	field valu cetdf 33 0x2640 0x2640 0x78D005A 0x8CA32 0x0C4D 0x102ADA 0x2FCA120 0x0C4D 0x2FCA120 0x0C4D 0x0C4D 0x0C4D 0x0C4D 0x0C4D 0x0C4D 0x0C4D 0x0C4D 0x0C4D	Delta Cycles Delta Cycles 1 1 1 1 1 5 1	Cycle 1 Cycle 1 1581 1582 1583 1584 1590 1595 1602 1607 1608 1609 1614 1615	sshboard fraceS_ function starfunction starfunction starfunction appfunction a	Line Number 110 113 113 122 122 122 122 124 124 124 124 125 125 125	Analyze - 王 (A - Analyze - 王 (A - Analyze - A - Analyze - A - A - A - A - A - A - A - A - A -	B B Start S Disasembly ADDL1 STW.D111 ADDL2 BNOPS2 LDW.0272 CMPL1.2 CMPL1.2 STW.D272 ADDL2 STW.D272 LDW.0272 LDW.027	top Resume A4,1,A4 A4,+A3(8) 8,815,815 83,5 *815(2),84 94,5(2),84 84,*815(2),84 84,*11,84 84,*815(2),84 1,84,80 0,x804ace), 0,x804ace),
ALU ver 25 26 27 28 29 30 31 32 33 34 35 36 37 38	E ted int ddr race Viewer - my'rac 0x80DA80 0x80 0x80DA80	field valu cettdf [3] Code 0x2640 0x2000274 0x78D005A 0x026CA362 0x026D 0x102ADA 0x7ECA120 0x024D 0x024D 0x0245A 0x10275A 0x3007A120 0x0C45	Delta Cycles Delta Cycles 1 1 6 5 1 1 6 5 1 1 6 5 1 6 5 1 1 5 1 6 5 1 1 5 1 6 5 1 1 5 1 6 5 1 1 5 1 6 5 1 1 5 1 5 1 6 5 1 1 5 1 1 5 1 1 5 1 1 5 1 1 5 1 1 5 1 1 5 1 1 5 1 1 5 1 1 5 1 1 5 1 1 1 5 1 1 1 5 1 1 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1	Cycle 1 1581 1582 1583 1584 1590 1595 1596 1602 1607 1608 1609 1614 1615 1621	Interest Section 2012 Section 2	Line Number 110 1113 113 112 122 122 124 124 124 125 125 125 125	Analyze Ana	B I Start S Disassembly ADD.L1 STW.D1T1 ADD.2 BNOPS1 LDW.D272 CMPLTL2 B0J BNOPS1 LDW.D272 ADD.L2 STW.D272 LDW.D272 LDW.D272 LDW.D272 LDW.D272 LDW.D272 LDW.D272 AND.L2 IB0J BNOPS1 LDW.D272	top Resume A4,1,A4 A4,+A3(8) 8,B15,B15 B3,5 B3,5 B3,5 B3,5 B3,5 B3,5 B3,5 B3,
ALU ver 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39	E ted int ddr race Viewer - myTra 0x800A8C 0x800A8C 0x800A8C 0x800A8A 0x800A8A 0x800A8A 0x800A8A 0x800A8A 0x800A8C 0x800A8C 0x800A8C 0x800A8C 0x800A8C 0x800A8C	field valu cetdf 33 0x2640 0x2000274 0x780005A 0x8CA362 0xDC4D 0x102AD 0x102AD 0x0245 0x102AD 0x0245 0x1025A 0x10075A 0x10075A 0x10075A	Delta Cycles Delta Cycles 1 1 1 6 5 1 1 5 1 6 5 1 1 5 1 6 5 1 1 5 1 1 5 1 1 5 1 1 5 1 1 5 1 1 1 5 1 1 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1	Cycle 1 1581 1582 1583 1584 1590 1595 1596 1607 1608 1609 1614 1615 1621 1626	Interest of the second	Line Number 110 113 113 113 113 113 113 113 113 112 122 12	Analyze Place Analyz	Big Start S Disassembly ADDL1 SIWDIT1 ADDL2 BNOFS2 CMPTL2	top Resume A4,1A4 A4,*+A3(8) 8,815,815 83,5 *815(2),84 B4,12,24 B4,*1815(2),84 B4,*1815(2),84 B4,*1815(2),84 B4,*1815(2),84 A(-1,84,80) 0x800dace, *815(2),84 A(-1,84,80)
ALU ver 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40	E ted int ddr race Viewer - myTra 0x800A80 0x800A80 0x800A80 0x800A80 0x800A80 0x800A80 0x800A80 0x800A80 0x800A80 0x800A60 0x8000 0x800 0x800 0x8000 0x800 0x800	field value ccode 0x2640 0x200274 0x78D005A 0x020274 0x78D005A 0x020274 0x78D005A 0x020275A 0x02075A 0x10875A 0x3007A120 0x10875A 0x3007A120	Delta Cycles Delta Cycles 1 1 1 6 5 1 5 1 6 5 1 1 1 1 1 1 1 1 1 1 1 1 1	Cycle T 1581 1582 1583 1584 1590 1595 1602 1607 1602 1607 1609 1614 1615 1626 1627	shboard figuration frace S function startfunction startfunction startfunction startfunction appFu	Line Number 110 113 113 112 122 122 122 124 124 124 124 125 125 125 125 129 129 129	Analyze • (1)	B Start S Dessembly ADDL1 STWD17 ADDL2 BND52 LOW.D272 CMMTL2 LOW.D272 ADDL2 STWD772 ADDL2 STWD772 ADDL2 LOW.D272 ANDL2	top Resume A4,1,A4 A4,*+A3(8) 88,05,815 B3,5 *815(2),B4 B4,-1,B4 B4,*B15(2),B4 B4,*B15(2),B4 H3,5(2),B4H3,5(2),B4 H3,5(2),B4 H3,5(2),B4H3,5(2),B4 H3,5(2),B4H3,5(2
ALU ver 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41	E ted int ddr race Viewer - myTra 0800A8 0800A8 0800A8 0800A8 0800A8 0800A8 0800A8 0800A8 0800A8 0800A8 0800A8 0800A8 0800A8 0800A8	field valu cetaf 33 Code 0x26404 0x2000274 0x8CA32 0x8CA32 0x024D 0x102ADA 0x2FECA120 0xDC4D 0x102F5A 0x3007A120 0xDC4D 0x102F5A 0x3007A120 0x00F5A 0x3000A120 0x00F5A	Op → An Delta Cycles 1 1 1 1 6 5 1 1 6 5 1 6 5 1 6 5 1 6 5 1 6 5 1 6 5 1 6 5 1 6 6 6	Cycle 1 1581 1582 1583 1584 1590 1595 1602 1607 1608 1609 1614 1615 1621 1621 1622 1627 1633	shiboard figuration frace S function starffunction starffunction starffunction starffunction spofunction appfunction appfuncti	Line Number 110 113 113 113 122 122 122 124 124 124 124 125 125 129 129 129 129 131	Analyze Ana	Constant of the second se	top Resume A4,1A4 A4+A3(8) 8,815,815 B3,5 *815(2),84 B4,1B4 B4,1B4 B4,1B5(2) B4,2B4 B4,1B5(2) B4,2B4 B4,815(2) B4,800 0x80dac8,4 B15(2),84 Dx80dac4,83 0x80da
ALU ver 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42	E ted int ddr race Viewer - myTra 0x800A8C 0x800	field valu cettf 3 Code 0x2640 0x200024 0x780005A 0x8C432 0x0C4D 0x6C41 0x76C4120 0x0C4D 0x10275A 0x3007A120 0x10275A 0x3007A120 0x10875A 0x3007A120 0x10875A 0x3007A120 0x10875A 0x3007A120 0x10875A 0x3007A120 0x10875A 0x3007A120 0x10875A 0x3007A120 0x10875A 0x3007A120 0x10875A 0x3007A120 0x10875A 0x3007A120 0x10875A 0x3007A120 0x10875A 0x3007A120 0x10875A 0x3007A120 0x10875A 0x3007A120 0x10875A 0x3007A120 0x10875A 0x10	Detta Cycless Detta Cycless 1 1 1 6 5 1 1 6 5 1 1 6 5 1 1 6 5	Cycle 1 Section 2015 Cycle 1 1581 1582 1582 1583 1584 1595 1595 1595 1602 1607 1608 1609 1615 1621 1625 1625 1627 1633 1633 1633	shiboard friguration frace S function starfunction starfunction appFunction	Line Number 110 113 113 112 122 122 122 124 124 124 124 125 125 125 125 125 129 129 129 129 129	Analyze Place Analyze Place Analyze Place Analyze Place Analyze Analyze Place Analyze	Comparing the second seco	top Resume A4.1,A4 A4.*+A3(8) 8.815,815 83.5 *815(2),84 84.*184 84.*184 84.*185(2) *815(2),84 84.*185(2),84 4.84,80 0x80da6a,8 0x80da6a,8 0x80da6a,8 815,0x8,815
ALU ver 225 226 227 228 229 30 31 32 33 34 35 36 37 38 39 40 41 42 43	E ted int ddr nace Viewer -myTra De300A8 De300	field valu cettf [3] Code 0x2640 0x20D0274 0x8CA362 0xDC4D 0x102ADA 0x2FECA120 0xDC4D 0x102ADA 0x2FECA120 0xDC4D 0x102FSA 0x3007A120 0x002FSA 0x3007A120 0x3007A120 0x3007A120 0x300A120 0x300A120 0x7F958 0x7F905A	Delta Cycles Delta Cycles 1 1 1 1 6 5 1 6 5 1 6 6 1 1 1 1 6 5 1 1 1 1 1 1 1 1 1 1 6 5 1 1 1 1 1 1 1 1 1 1 1 1 1	Cycle 1 1581 1582 1583 1584 1590 1595 1596 1595 1596 1602 1607 1608 1614 1615 1621 1621 1623 1639 1649	Interest Section 2017 Section 2	Line Number 110 113 113 113 122 122 122 124 124 125 125 125 125 125 129 129 129 129 129 129 129 129 129 129	Analyze • 🛃 🐼 • Source } while(dummy2 > 1) dummy2: if(dummy2 & 1) if(dummy2 & 0.04) startFunction(); { volatile int dummy1	Construction C	top Resume A4,1,A4 A4,+A3(8) A4,1,A4 A4,+A3(8) B3,5 *B15(2),B4 B3,5 *B15(2),B4 B4,-1,B4 B4,-1,B4 B4,-1,B4 B4,+1,B4 B4,+2,B4 B4,-2,B4 Dx80dab8, *B15(2),B4 J,B4,B0 0x80da64,0x8 Dx80da045,438 B15(2),B4 B15,0x8,B15 0,B4
ALU ver 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45	E ted int ddr race Viewer - myTra bogoan Address bogoAd bo	field valu cectof C Code 0:26400 0:2000274 0:0780005A 0:0780005A 0:078005A 0:078005A 0:078005A 0:00540 0:005500 0:005500 0:005500 0:005500 0:005500 0:005500 0:005500 0:005500 0:005500 0:005500 0:005500 0:005500 0:005500 0:005500 0:0055000 0:0055000 0:0055000 0:0055000 0:	Detta Cycles Detta Cycles 1 1 1 1 6 5 1 6 5 1 6 5 1 6 5 1 1 1 1 1 1 1 1 1 1 1 1 1	Cycle 1 1581 1582 1583 1584 1584 1586 1595 1596 1595 1596 1602 1607 1608 1607 1608 1607 1608 1614 1615 1621 1626 1627 1633 1640	shiboard friguration	Line Number 110 113 113 112 122 122 124 124 124 124 125 125 125 125 125 125 129 129 129 131 104 105 105	Analyze Ana	Call Page Start S Disassembly ADDL1 SIWDJT1 ADDL2 BNOPS2 BNOPS2 CMMTL2 BNOPS2 LOWDJ72 ADDL2 SIWDJ72 LOWDJ72 LOWDJ72 LOWDJ72 SWL2	top Resume A4,1A4 A4,+A3(8) 84,58,155 83,5 81,521,54 1,84,80 0x80da68, 84,*815(2),84 84,*815(2),84 4,84,80 0x80da64a, 0x80da64, 0x
ALU ver 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 44 45 46	E ted int ddr nac Viewer - myTra Dasta Address Dasta Addre	field valu cetof 3 Code 0x2640 0x78005A 0x78005A 0x78005A 0x78005A 0x024DA 0x024DA 0x024DA 0x024DA 0x024DA 0x024DA 0x024DA 0x10245A 0x024DA 0x10245A 0x10245A 0x10245A 0x10245A 0x100545 0x0200A120 0x795B 0x627 0x77 0x77 0x77 0x77 0x77 0x777 0x777 0x777 0x777 0x777 0x777 0x777 0x777 0x777 0x777 0x777 0x777 0x777 0x777 0x7777 0x7777 0x7777 0x7777 0x77777 0x7777777777	Delta Cycles Delta Cycles 1 1 1 1 1 6 5 1 6 5 1 6 5 1 1 1 1 1 1 1 1 1 1 1 1 1	en File port Cond 1581 1582 1583 1584 1580 1595 1602 1607 1608 1609 1614 1621 1621 1621 1623 1640 1641 1642	shiboard ifiguration frace S Function starfunction starfunction starfunction starfunction sppFunction appFunction appFunction appFunction appFunction appFunction appFunction appFunction appFunction appFunction appFunction appFunction appFunction appFunction appFunction appFunction appFunction sppFunction starfunction st	Line Number 110 113 113 113 113 113 113 113 113 112 122 12	Analyze • [1]	Borner Start S Borner Borner S Borner S Borner S Borner S Borner S	top Resume A4,1A4 A4,*+A3(8) A4,1A4 A4,*+A3(8) 8,815,815 B3,5 B15(2),84 B4,815,815 B4,815,815 B4,*815(2),84 B4,*1815(2),84 B4,*815(2),84 M315(2),84 M4,84,80 0x80dac4,83 B15,02,815 0x80dac4,83 B15,02,815 0x80dac4,83 B15,02,815 0x80dac4,83 B15,02,815

b. Use right-click menu to analyze the data, for example get function profile.

🖾 Co	onsole 🖽 *Trace Vie	ewer - myTrace	e.tdf 🛛													- 6
								Analy	/ze 🔻 🖽	- 🍫	🛚 📰 🛛 🔛 Star	rt Si	top Resume 🕯	h 🐎 -		3
	Program Address	Code	Disassembly		Delta Cycles	Cycle	Source	e Fund	tion Start							-
20	0x8067F4	0x300DA1	[!B0] BNOP.S1	0x8067fa,5	6	370950			0							
20	0x8067FA	0xDC4D	LDW.D2T2	*B15[2],B4	5	370956	<sou< td=""><td></td><td>0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></sou<>		0							
20	0x806800	0x102ADA	CMPLT.L2	1,B4,B0	1	370961						ĥ.				
20	0x806804	0x2FECA1	[B0] BNOP.S1	0x8067d8,5	6	370962		E C	olumn Set	tings	Chill C					
20	0x806808	0x1BC92E6	LDW.D2T2	*++B15[4],	5	370968	<sou< td=""><td>C</td><td>ору</td><td></td><td>Cui+C</td><td></td><td></td><td></td><td></td><td></td></sou<>	C	ору		Cui+C					
20	0x80680C	0x8CA362	BNOP.S2	B3,5	6	370973		00 Fi	reeze Upda	ate	Shift+F5					
20	0x806B1A	0xBCCD	LDW.D2T2	*B15[5],B4	5	370979	<sou.< td=""><td>D</td><td>ata</td><td></td><td>•</td><td></td><td></td><td></td><td></td><td></td></sou.<>	D	ata		•					
20	0x806B20	0x2641	ADD.L2	B4,1,B4	1	370984		🛃 E	nable Grou	iping	Shift+G					
20	0x806B22	0xBCC5	STW.D2T2	B4,*B15[5]	1	370985		G	roups		,					
20	0x806B24	0xED3	MVK.S2	200,B5	1	370986		🔅 Ir	isert a Boo	kmark						
20	0x806B26	0x8E89	CMPLT.L2	B4,B5,B0	1	370987		Т	race Viewe	r						
20	0x806B28	0x2FFCA1	[B0] BNOP.S1	0x806b18,5	6	370988		_				lor.				
20	0x806B2C	0xD19B	CALLP.S2	0x806838,B3	6	370994	<sou.< td=""><td>A</td><td>nalyze</td><td></td><td>,</td><td></td><td>Function Execut</td><td>ion Grap</td><td>n</td><td></td></sou.<>	A	nalyze		,		Function Execut	ion Grap	n	
20	0x806838	0x8CA362	BNOP.S2	B3,5	6	371000	<sou.< td=""><td></td><td>1</td><td></td><td></td><td>EV.</td><td>Statistical Funct</td><td>ion Profi</td><td>ling</td><td></td></sou.<>		1			EV.	Statistical Funct	ion Profi	ling	
20	0x806B2E	0x627	MVK.L2	0,B4	1	371006	<sou.< td=""><td></td><td>0</td><td></td><td></td><td></td><td>Cache Event Pro</td><td>ofiler</td><td>ing</td><td></td></sou.<>		0				Cache Event Pro	ofiler	ing	
20	0x806B30	0xFEC5	STW.D2T2	B4,*B15[23]	1	371007			0				Exclusive Functi	on Profile	er	
20	0x806B32	0x627	MVK.L2	0,B4	1	371008	<sou< td=""><td></td><td>0</td><td></td><td></td><td></td><td>Eunction Profile</td><td>r</td><td></td><td></td></sou<>		0				Eunction Profile	r		
20	0x806B34	0xD223	SET.S2	B4,22,22,B4	1	371009			0				Stall Cycle Profi	iler		
20	0x806B36	0x9F45	STW.D2T2	B4,*B15[24]	1	371010			0			_	stan cycle Pion			-

с.	The	example	profile	result:
----	-----	---------	---------	---------

Function Profiler views 🔻 🔡												
	Function	Calls	Excl Min	Excl Max	Excl Average	Excl Total	Incl Min	Incl Max	Incl Average	Incl Total	Excl Percent	Incl Percent
1	appFunction	22	4831	4831	4746.64	104426	17143	17143	16842.64	370538	28.14	36.77
2	doneFunction	1	6	6	6.00	6	6	6	6.00	6	0.00	0.00
3	endFunction	10	216	216	216.00	228744	216	216	216.00	228744	61.64	22.70
4	main	1	-	-	503.00	503	-	-	371104.00	371104	0.14	36.82
5	startFunction	10	36	36	36.00	37368	36	36	36.00	37368	10.07	3.71
6	unknown_0x808fc0_0x	1	-	-	11.00	11	-	-	11.00	11	0.00	0.00
7	unknown_0x809200_0	1	35	35	35.00	35	46	46	46.00	46	0.01	0.00
8	unknown_0x809258_0	1	2	2	2.00	2	11	11	11.00	11	0.00	0.00
9	unknown_0x809260_0	1	9	9	9.00	9	9	9	9.00	9	0.00	0.00