

workspace\_v8 - 2833x\_RFFT\_ADC\_RT/source/Main.c - Code Composer Studio

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Debug

28335-ControCard-NewTargetConfiguration.cxml [Code Composer Studio - Device Debugging]

- 28335-ControCard-NewTargetConfiguration.cxml (Code Composer Studio - Device Debugging)
  - main() at Main.c:196 0x0086c2
  - args.main() at args\_main.c:81 0x008BD4
  - c\_int00() at boot28.asm:261 0x008A33 (the entry point was reached)

Expression	Type	Value	Address
> fft	struct <unnamed>	{InBuf=0xAA11908B (???) Out...	0x0000C00E@Data
> rfft_adc	struct <unnamed>	{InBuf=0x0000C040 (4095) Tail...	0x0000C00A@Data
freq	float	9000.0	0x0000040E@Data
FFTReal_Magnitude	float[257]	[305.642029,0.0998369753,0...	0x0000C240@Data

```

193
194     FFTStartFlag = 0;           //Start collecting the next frame of data
195 }
196 asm(" NOP");
197 }
198 //end of main()
199
200 interrupt void adc_isr(void)
201 {
202     static Uint16 *AdcBufPtr = AdcBuf; // Pointer to ADC data buffer
  
```

Disassembly

Address	Instruction	Comment
0086c2: 7700	NOP	
173	while(1)	
0086c3: 6FAF	SB	C\$L5, UNC
		\$.:/RFFT_adc_f32u.asm:128:176\$( ), RFFT_
0086c4: FE02	ADDB	SP, #2
0086c5: A842	MOVL	*-SP[2], XAR
0086c6: 764086CC	LCR	\$.:/RFFT_adc
0086c8: 76408484	LCR	\$.:/RFFT_adc

Console

No consoles to display at this time.

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- 28335-ControCard-NewTargetConfiguration.cxml (Code Composer Studio - Device Debugging)
  - main() at Main.c:175 0x008672
  - args.main() at args\_main.c:81 0x008BD4
  - c\_int00() at boot28.asm:261 0x008A33 (the entry point was reached)

Name	Type	Value	Location
freq	float	1031.25	0x0000040E@Data
i	unsigned int	257	0x0000040D@Data
j	unsigned int	11	0x0000040C@Data

```

173     while(1) // endless loop - wait for an interrupt
174     {
175         if(FFTStartFlag) // If one frame data ready, then do FFT
176         {
177             RFFT_adc_f32u(&rfft_adc); // This version of FFT doesn't need buffer alignment
178             RFFT_f32_mag(&rfft); // Calculate spectrum amplitude
179             j = 1;
180         }
  
```

Disassembly

Address	Instruction	Comment
008672: 761F0300	MOVN	DP, #0x300
008674: 9202	MOV	AL, @0x2
008675: 614D	SB	C\$L9, EQ
177		RFFT_adc_f32u(&rfft_adc);
008676: 8F00C00A	MOVL	XAR4, #0x00c
008678: FF69	SPM	#0

Console

No consoles to display at this time.

Target Configurations

type filter text

- Projects
- User Defined

Click the New button to create a new target configuration file. Click [here](#) to hide this message.

Writable Smart Insert 175 : 1

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Quick Access

Debug

- 28335-ControCard-NewTargetConfiguration.cxml [Code Composer Studio - Device Debugging]
  - Texas Instruments XDS100v2 USB Debug Probe\_0/C28xx (Suspended)
    - main() at Main.c:196 0x0086C2
      - \_args.main() at args\_main.c:81 0x008BD4
      - c\_int00() at boot28.asm:261 0x008A33 (the entry point was reached)

Name	Type	Value	Location
freq	float	1968.75	0x0000040E@Data
i	unsigned int	257	0x0000040D@Data
j	unsigned int	21	0x0000040C@Data

Main.c

```

194     FFTStartFlag = 0;           //Start collecting the next frame of data
195 }
196 asm(" NOP");
197 }
198 } //end of main()
199
200 interrupt void adc_isr(void)
201 {
  
```

Disassembly

Memory Browser

Enter location here

C\$19:

```

0086c2: 7700  NOP
173      while(1)
0086c3: 6FAF  SB      C$15, UNC
$.-/RFFT_adc_f32u.asm:128:1765(), RFFT_
0086c4: FE02  ADB    SP, #2
0086c5: AB42  MOVL  *-SP[2], XAR
  
```

Console

No consoles to display at this time.

Target Configurations

Search

type filter text

- Projects
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Name	Type	Value	Location
freq	float	3000.0	0x0000040E@Data
i	unsigned int	257	0x0000040D@Data
j	unsigned int	32	0x0000040C@Data

Main.c

```

173 while(1)           // endless loop - wait for an interrupt
174 {
175     if(FFTStartFlag) // If one frame data ready, then do FFT
176     {
177         RFFT_adc_f32u(&rfft_adc); // This version of FFT doesn't need buffer alignment
178         RFFT_f32_mag(&rfft);      // Calculate spectrum amplitude
179
180         j = 1;
  
```

Disassembly

Memory Browser

Enter location here

C\$15:

```

008672: 761F0300  MOVN  DP, #0x300
008674: 9202      MOV   AL, @0x2
008675: 614D      SB   C$19, EQ
177      RFFT_adc_f32u(&rfft_adc);
008676: 8F00C00A  MOVL  XAR4, #0x00c
008678: FF69      SPM
  
```

Console

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Target Configurations

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