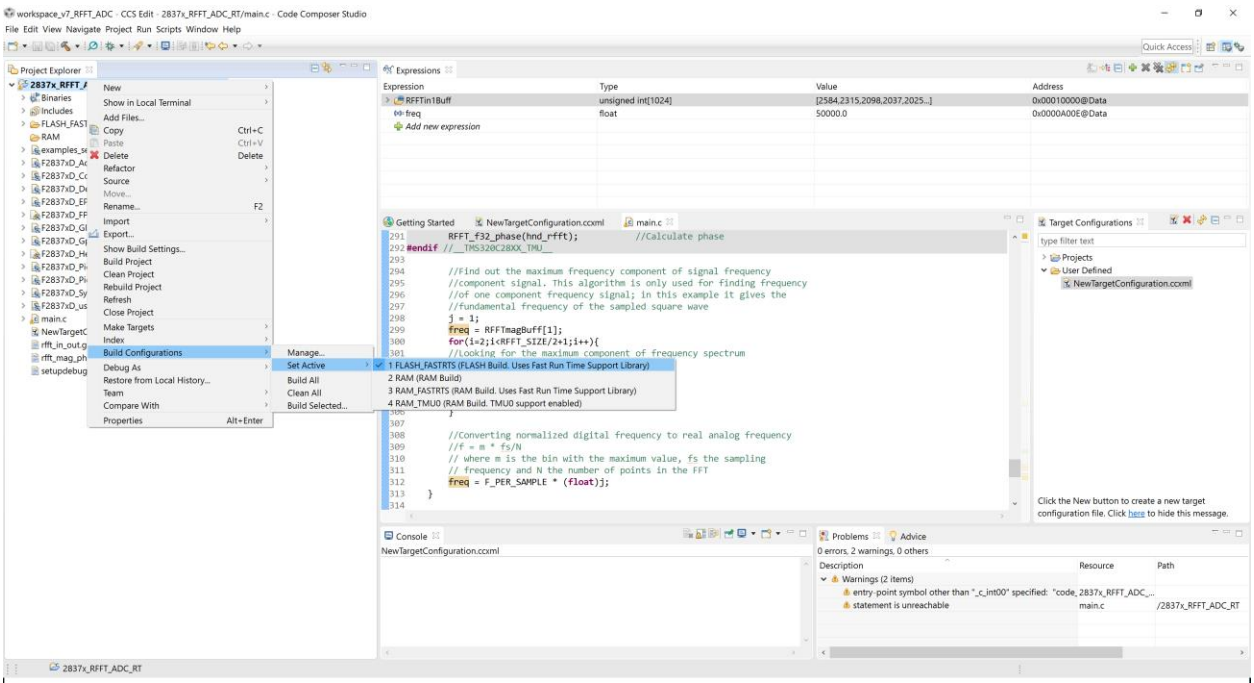
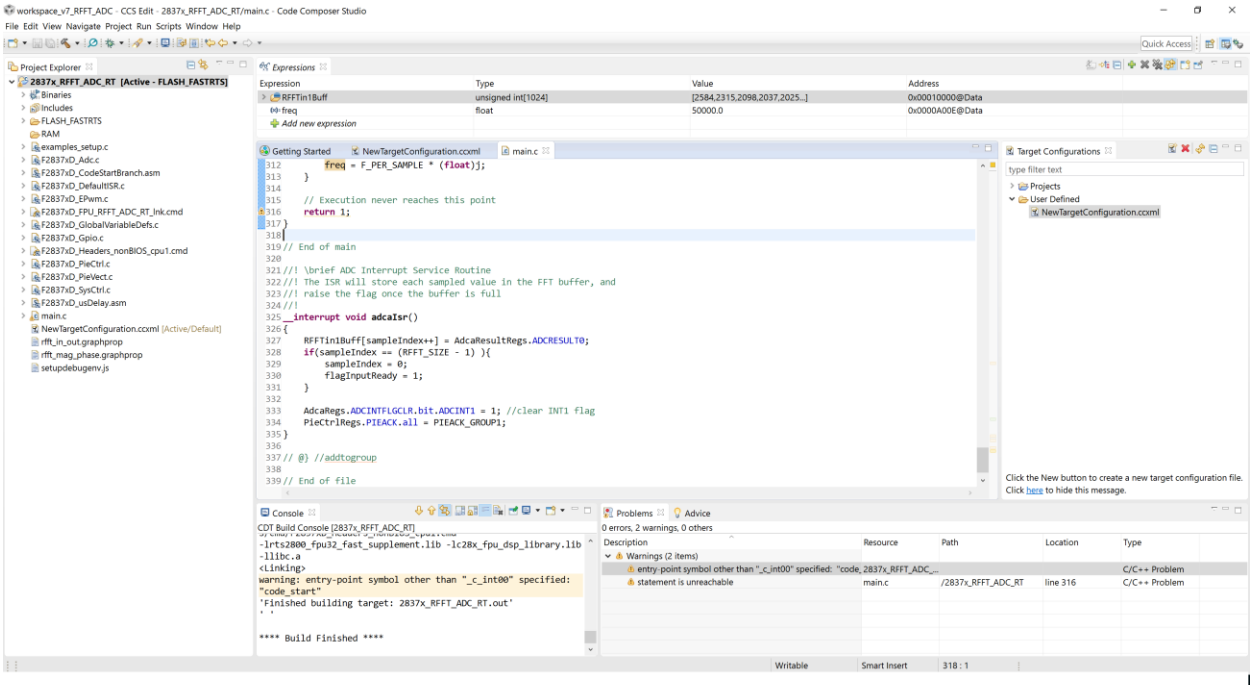


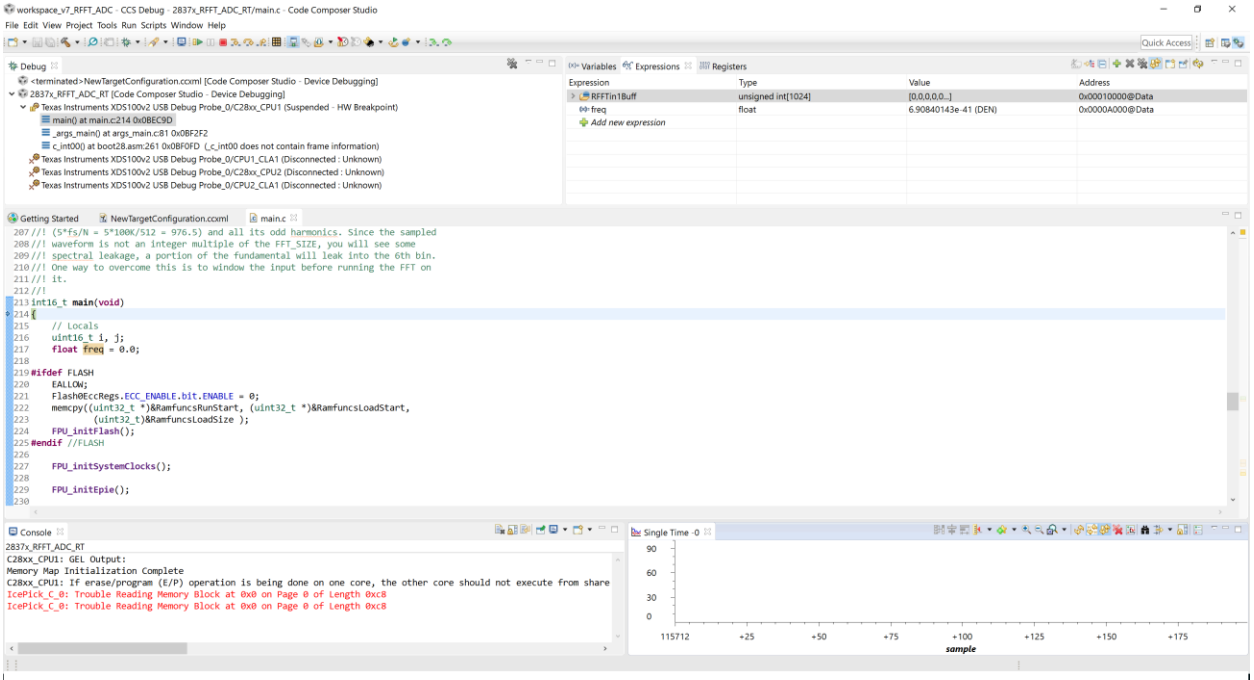
Rebuild project:



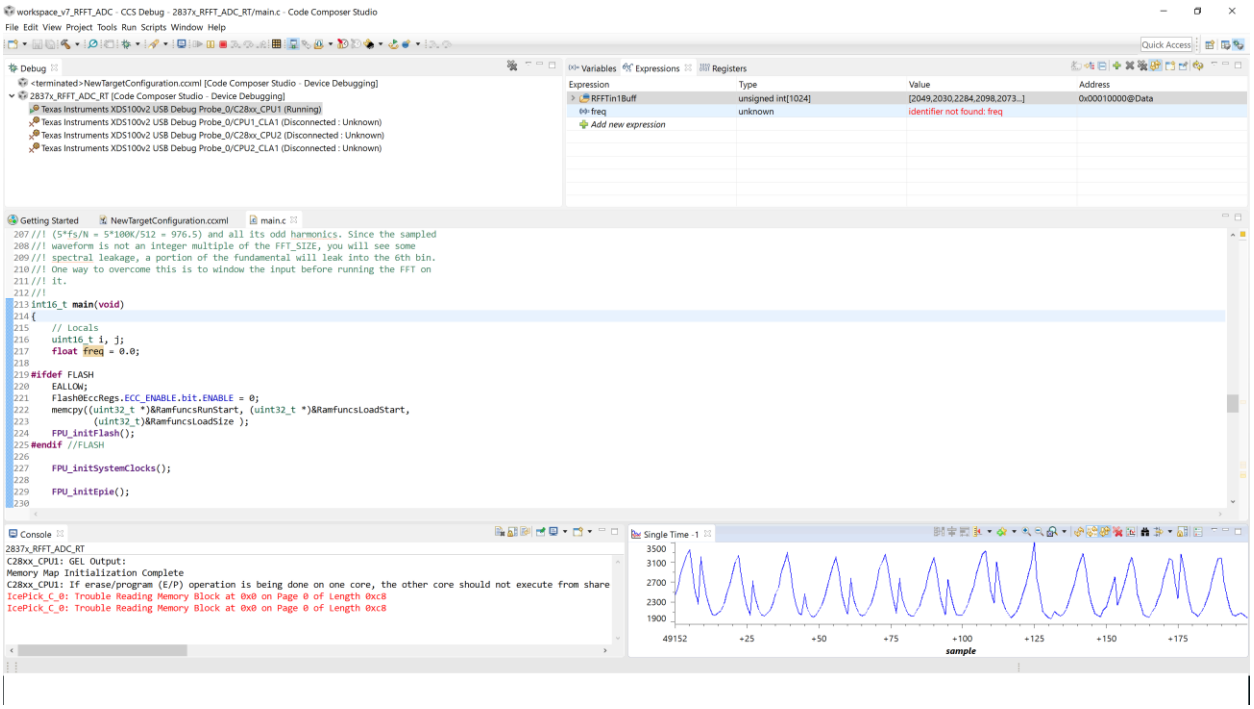
Power up the board and connected to ccs:

S1 boot switch (Launchpad 28379): 1/1/1

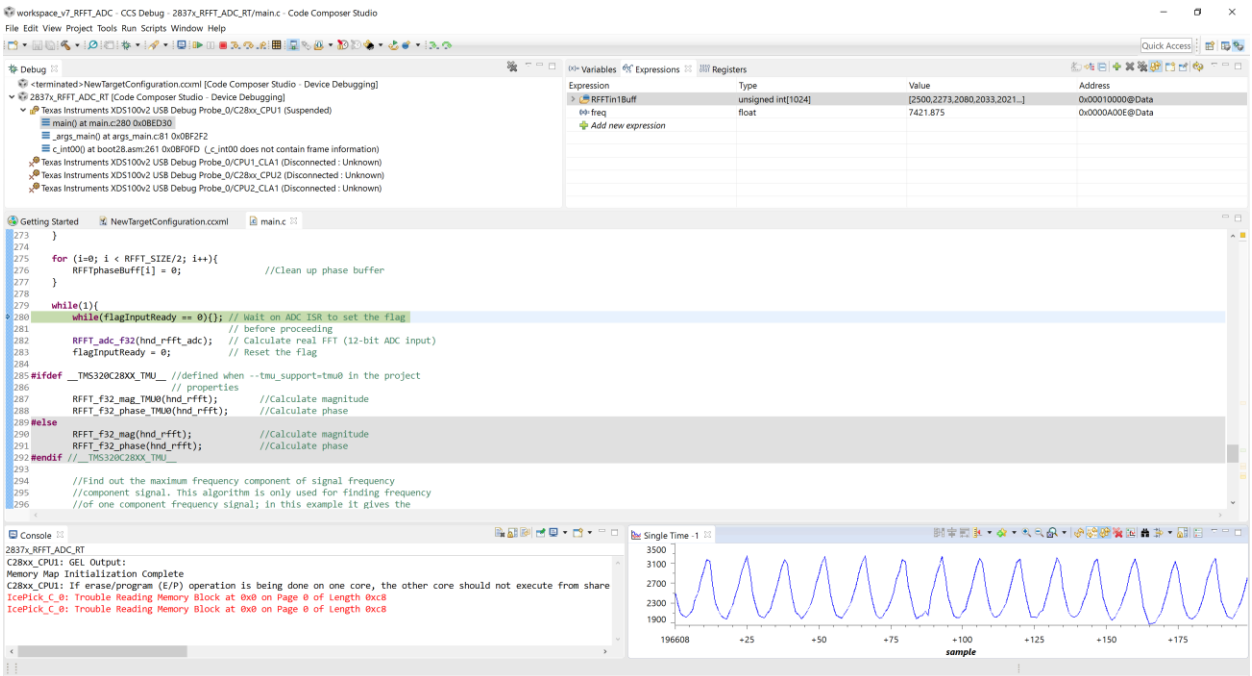
After uploading program to the flash:


workspace_v7_RFFT_ADC - CCS Debug - 2837x_RFFT_ADC_RT/main.c - Code Composer Studio
File Edit View Project Tools Run Scripts Window Help
Quick Access
Debug
<terminated>NewTargetConfiguration.ccxml [Code Composer Studio - Device Debugging]
2837x_RFFT_ADC_RT [Code Composer Studio - Device Debugging]
Texas Instruments XDS100v2 USB Debug Probe_0/C28xx_CPU1 (Suspended - HW Breakpoint)
main() at main.c:214 0x0BEC9D
_args_main() at args_main.c:81 0x0BF2F2
c_int00() at boot28.asm:261 0x0BF0FD (_c_int00 does not contain frame information)
Texas Instruments XDS100v2 USB Debug Probe_0/CPU1_CLA1 (Disconnected : Unknown)
Texas Instruments XDS100v2 USB Debug Probe_0/C28xx_CPU2 (Disconnected : Unknown)
Texas Instruments XDS100v2 USB Debug Probe_0/CPU2_CLA1 (Disconnected : Unknown)
Variables
Expressions
Registers
Expression
Type
Value
Address
RFFTin1Buff
unsigned int[1024]
[0,0,0,0,0...]
0x00010000@Data
freq
float
6.90840143e-41 (DEN)
0x0000A000@Data
Add new expression
Getting Started
NewTargetConfiguration.ccxml
main.c
207 //! (5*fs/N = 5*100K/512 = 976.5) and all its odd harmonics. Since the sampled
208 //! waveform is not an integer multiple of the FFT_SIZE, you will see some
209 //! spectral leakage, a portion of the fundamental will leak into the 6th bin.
210 //! One way to overcome this is to window the input before running the FFT on
211 //! it.
212 //!
213 int16_t main(void)
214 {
215 // Locals
216 uint16_t i, j;
217 float freq = 0.0;
218
219 #ifdef FLASH
220 EALLOW;
221 Flash0EccRegs.ECC_ENABLE.bit.ENABLE = 0;
222 memcpy((uint32_t *)&RamfuncsRunStart, (uint32_t *)&RamfuncsLoadStart,
223 (uint32_t)&RamfuncsLoadSize);
224 FPU_initFlash();
225 #endif //FLASH
226
227 FPU_initSystemClocks();
228
229 FPU_initEpie();
230
Console
2837x_RFFT_ADC_RT
C28xx_CPU1: GEL Output:
Memory Map Initialization Complete
C28xx_CPU1: If erase/program (E/P) operation is being done on one core, the other core should not execute from share
IcePick_C_0: Trouble Reading Memory Block at 0x0 on Page 0 of Length 0xc8
IcePick_C_0: Trouble Reading Memory Block at 0x0 on Page 0 of Length 0xc8
Single Time -0
90
60
30
0
115712
+25
+50
+75
+100
+125
+150
+175
sample

:

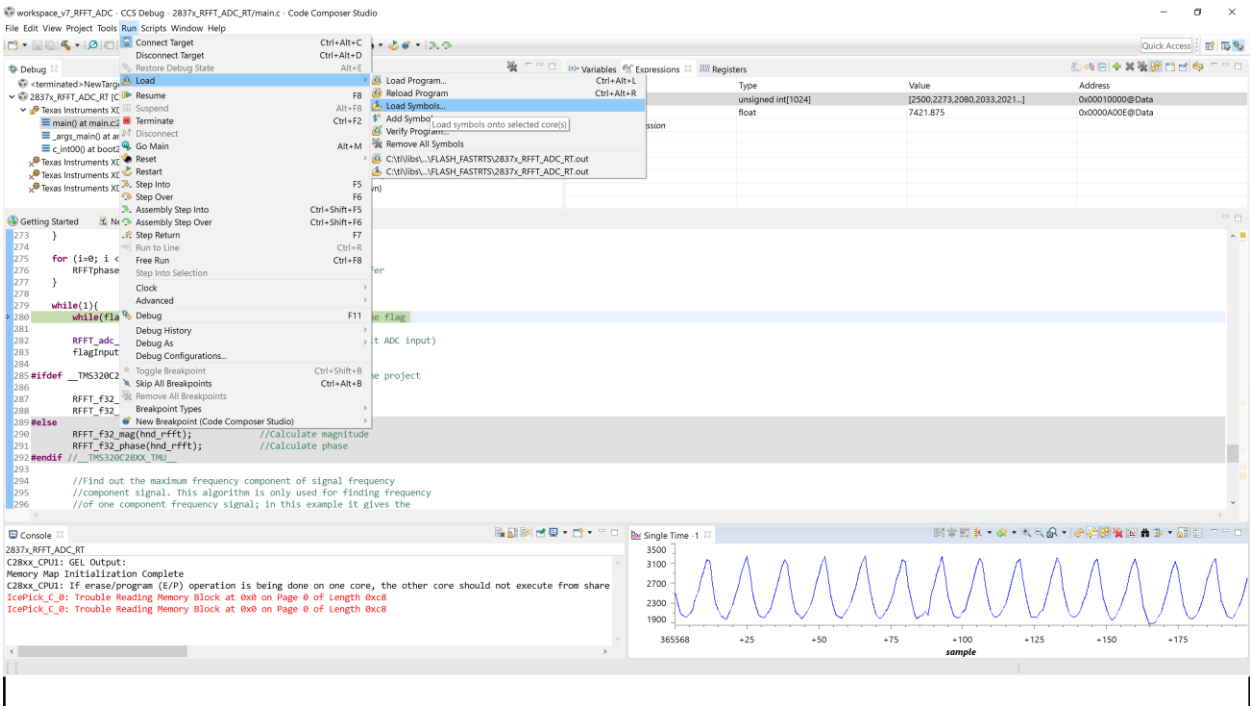

workspace_v7_RFFT_ADC - CCS Debug - 2837x_RFFT_ADC_RT/main.c - Code Composer Studio
File Edit View Project Tools Run Scripts Window Help
Quick Access
Debug
<terminated>NewTargetConfiguration.ccxml [Code Composer Studio - Device Debugging]
2837x_RFFT_ADC_RT [Code Composer Studio - Device Debugging]
Texas Instruments XDS100v2 USB Debug Probe_0/C28xx_CPU1 (Running)
Texas Instruments XDS100v2 USB Debug Probe_0/CPU1_CLA1 (Disconnected : Unknown)
Texas Instruments XDS100v2 USB Debug Probe_0/C28xx_CPU2 (Disconnected : Unknown)
Texas Instruments XDS100v2 USB Debug Probe_0/CPU2_CLA1 (Disconnected : Unknown)
Variables
Expressions
Registers
Expression
Type
Value
Address
RFFTin1Buff
unsigned int[1024]
[2049,2030,2284,2098,2073...]
0x00010000@Data
freq
unknown
identifier not found: freq
Add new expression
Getting Started
NewTargetConfiguration.ccxml
main.c
207 //! (5*fs/N = 5*100K/512 = 976.5) and all its odd harmonics. Since the sampled
208 //! waveform is not an integer multiple of the FFT_SIZE, you will see some
209 //! spectral leakage, a portion of the fundamental will leak into the 6th bin.
210 //! One way to overcome this is to window the input before running the FFT on
211 //! it.
212 //!
213 int16_t main(void)
214 {
215 // Locals
216 uint16_t i, j;
217 float freq = 0.0;
218
219 #ifdef FLASH
220 EALLOW;
221 Flash0EccRegs.ECC_ENABLE.bit.ENABLE = 0;
222 memcpy((uint32_t *)&RamfuncsRunStart, (uint32_t *)&RamfuncsLoadStart,
223 (uint32_t)&RamfuncsLoadSize);
224 FPU_initFlash();
225 #endif //FLASH
226
227 FPU_initSystemClocks();
228
229 FPU_initEpie();
230
Console
2837x_RFFT_ADC_RT
C28xx_CPU1: GEL Output:
Memory Map Initialization Complete
C28xx_CPU1: If erase/program (E/P) operation is being done on one core, the other core should not execute from share
IcePick_C_0: Trouble Reading Memory Block at 0x0 on Page 0 of Length 0xc8
IcePick_C_0: Trouble Reading Memory Block at 0x0 on Page 0 of Length 0xc8
Single Time -1
3500
3100
2700
2300
1900
49152
+25
+50
+75
+100
+125
+150
+175
sample

:



Now I can see the frequency of input signal is correct and = 7421Hz.

Next step: load symbols:



Now, pressing mechanical button reset on the board :

S1 boot switch (Launchpad 28379): 1/1/1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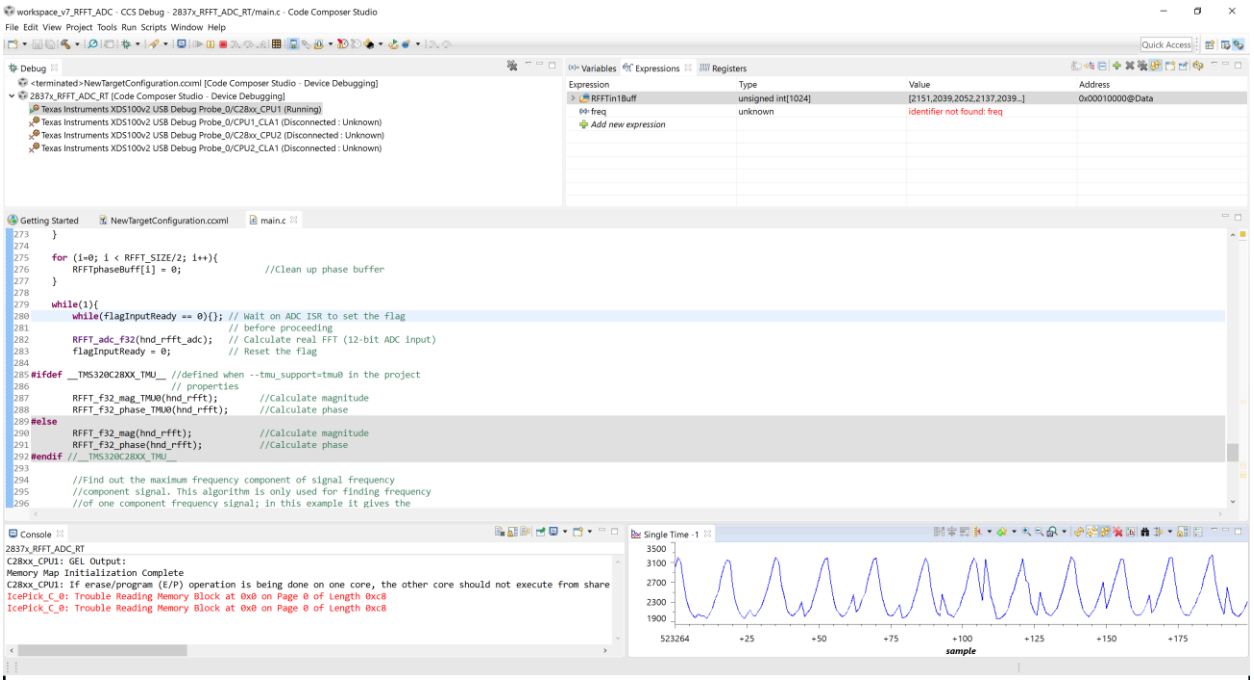


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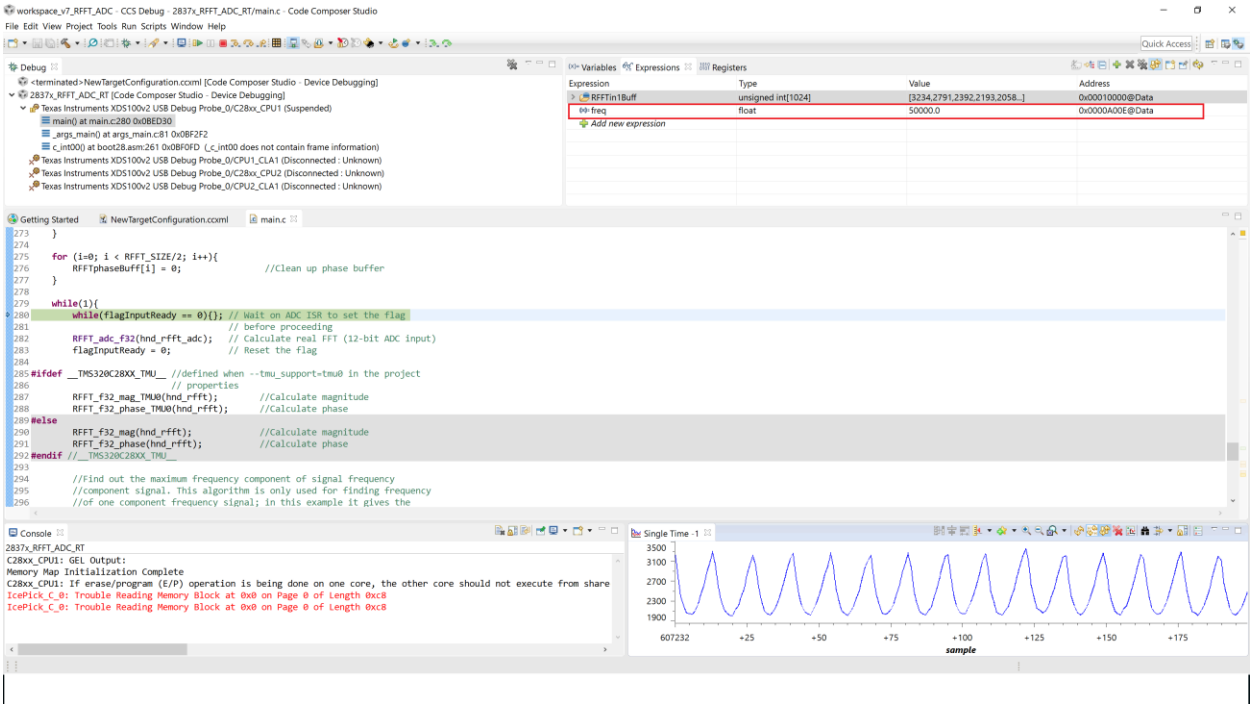

Frequency of input signal is not correct.