

**ADS5263EVM
Connected to
TSW1250EVM**

Texas Instruments MBU



ADS 5263 GUI

Read Me

ADS5263 Features

Top Level/Pin Ctl Interface/Test Pattern Dig Sig Proc Dig Sig Proc FILTER I/O Mapping Debug

Self-Reset

Reg_Read

STAND_BY

GLOBAL_PDN

CONFIG PD PIN

Select 14bit ADC Mode

16B_14B ADC Operation

LVDS Current for Data Buff

LVDS Current for ADCLK Buff

LVDS Current for LCLK Buff

ENABLE SERIALIZATION

16x Serialization

14x Serialization

PAD two 0s

MSB_LSB

DATA_FORMAT

2-WIRE 0.5X FRAME

ENABLE LVDS TERM

Internal LVDS Termination for Data Buff

Internal LVDS Termination for ADCLK Buff

Internal LVDS Termination for LCLK Buff

DEVICE PIN CONTROL

ADC_RESET

PDN

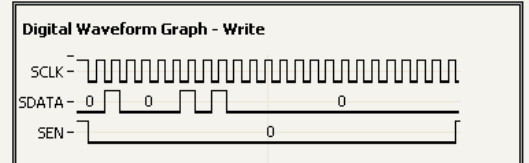
SAVE COMMAND SEQUENCE

COMMAND SEQUENCE PLAY BACK

Saving List

Index	Addr	Data

address	Data	Last Data
x 42	x 8000	x 8809





ADS 5263 GUI

Read Me

ADS5263 Features

Top Level/Pin Ctl Interface/Test Pattern Dig Sig Proc Dig Sig Proc FILTER I/O Mapping Debug

Custom Write Register

Write Address
x 42

Write Data
x 8000

Write Custom Register

Custom Read Register

Read Address
x 0

Read Data
x 0

Read Custom Register

Version 2.0 - 5/10/2010

Build date - 05/09/2011

12/5/2011 5:20:18 PM

READY

SAVE COMMAND SEQUENCE

Add addr/data to saving list

Save saving list to a file

COMMAND SEQUENCE PLAY BACK

Commands play back

Saving List

Clear Saving List

Index	Addr	Data

address

x 42

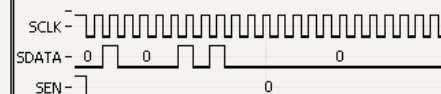
Data

x 8000

Last Data

x 8809

Digital Waveform Graph - Write





TSW 1250 GUI

TI ADC Selection

AD55263_2W

Number of bits

16

Channel Selection

Channel A

Window

Rectangular

Capture Data

Capture Single

0.5X Frame Clock

LSB First MSB First

Test Parameters

ADC Sampling Rate (Fs)

80M

ADC Input Target Frequency

5.00000000M

ADC Input Coherent Freq (Fc)

Calculated automatically

4.99633789M

Set Instrument to this frequency

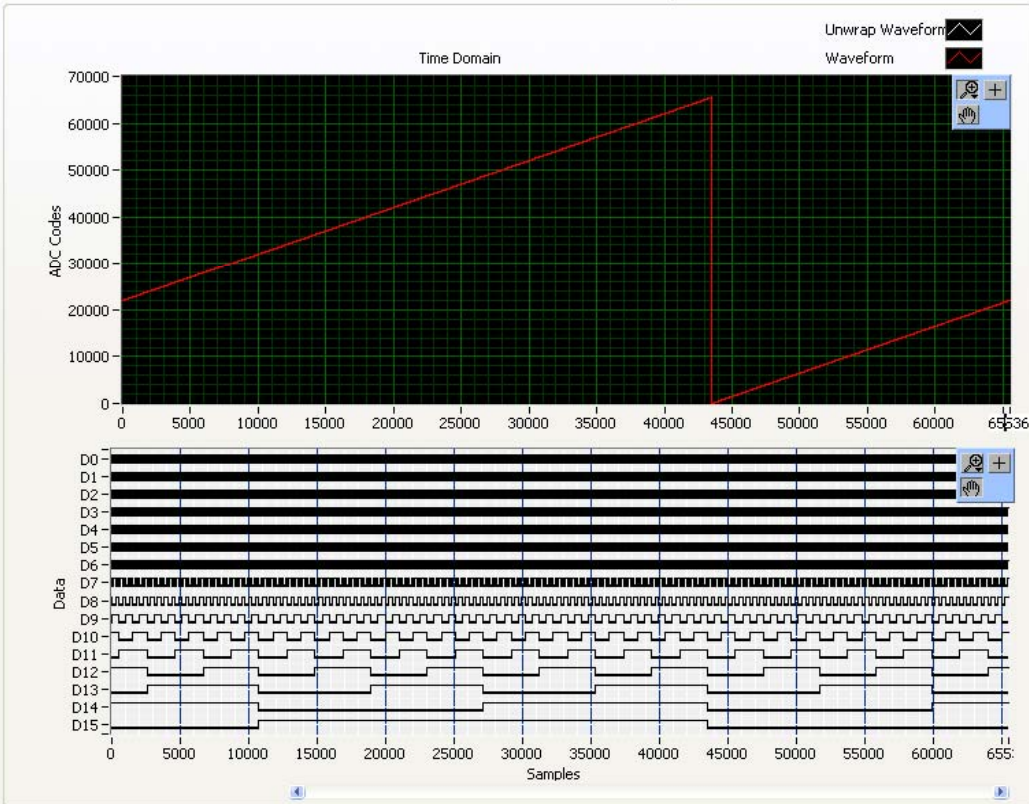
FFT Record Length (Ns)

65536

Overlay 'Unwrap Waveform'

Time Domain

Single Tone FFT



Unwrap Waveform
Waveform

	Value	Unit
Time Domain		
Min	0	Codes
Max	65535	Codes
St Dev	18918.7	Codes
Mean	32767.5	Codes
Median	32767.5	Codes
RMS	37836.7	Codes



TSW 1250 GUI

TI ADC Selection AD55263_2W
Number of bits 16
Channel Selection Channel B
Window Rectangular
Capture Data Capture Single
 0.5X Frame Clock
 LSB First MSB First

Test Parameters

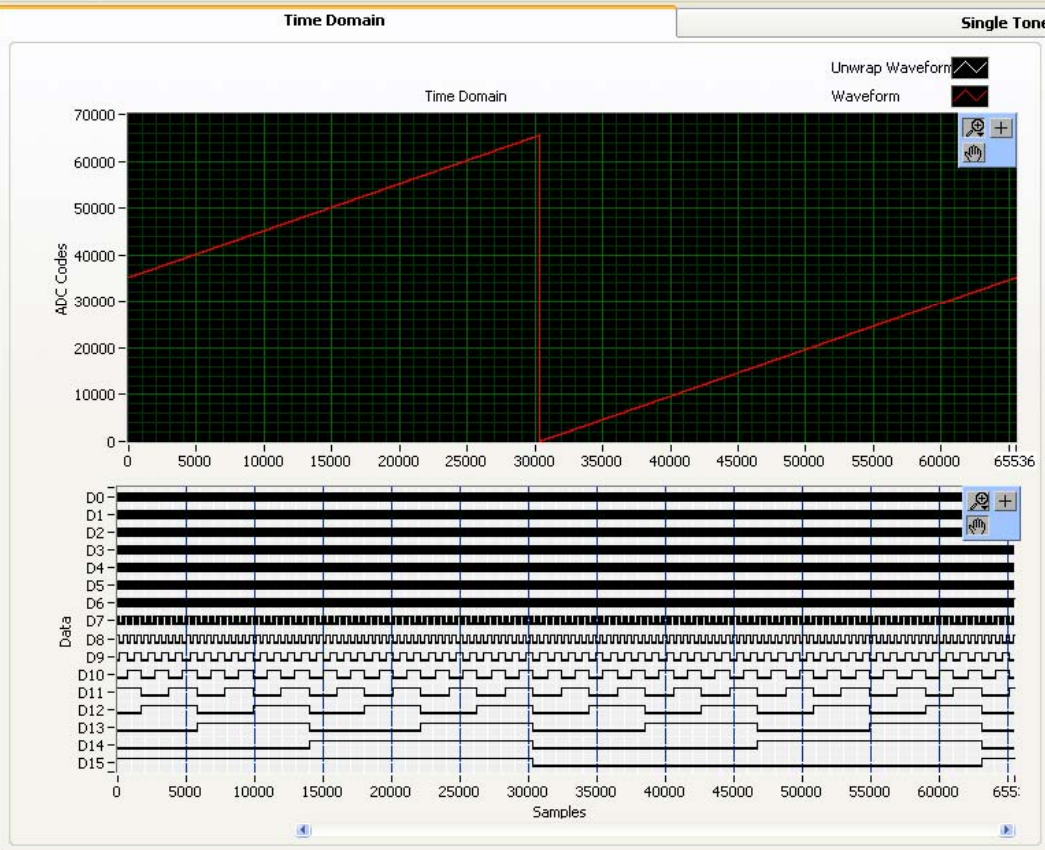
ADC Sampling Rate (Fs)
80M

ADC Input Target Frequency
5.00000000M

ADC Input Coherent Freq (Fc)
Calculated automatically
4.99633789M
Set Instrument to this frequency

FFT Record Length (Ns)
65536

Overlay 'Unwrap Waveform'



Single Tone FFT

	Value	Unit
Time Domain		
Min	0	Codes
Max	65535	Codes
St Dev	18918.7	Codes
Mean	32767.5	Codes
Median	32767.5	Codes
RMS	37836.7	Codes



TSW 1250 GUI

TI ADC Selection AD55263_2W
Number of bits 16
Channel Selection Channel C
Window Rectangular
Capture Data Capture Single
0.5X Frame Clock

LSB First
 MSB First

Test Parameters

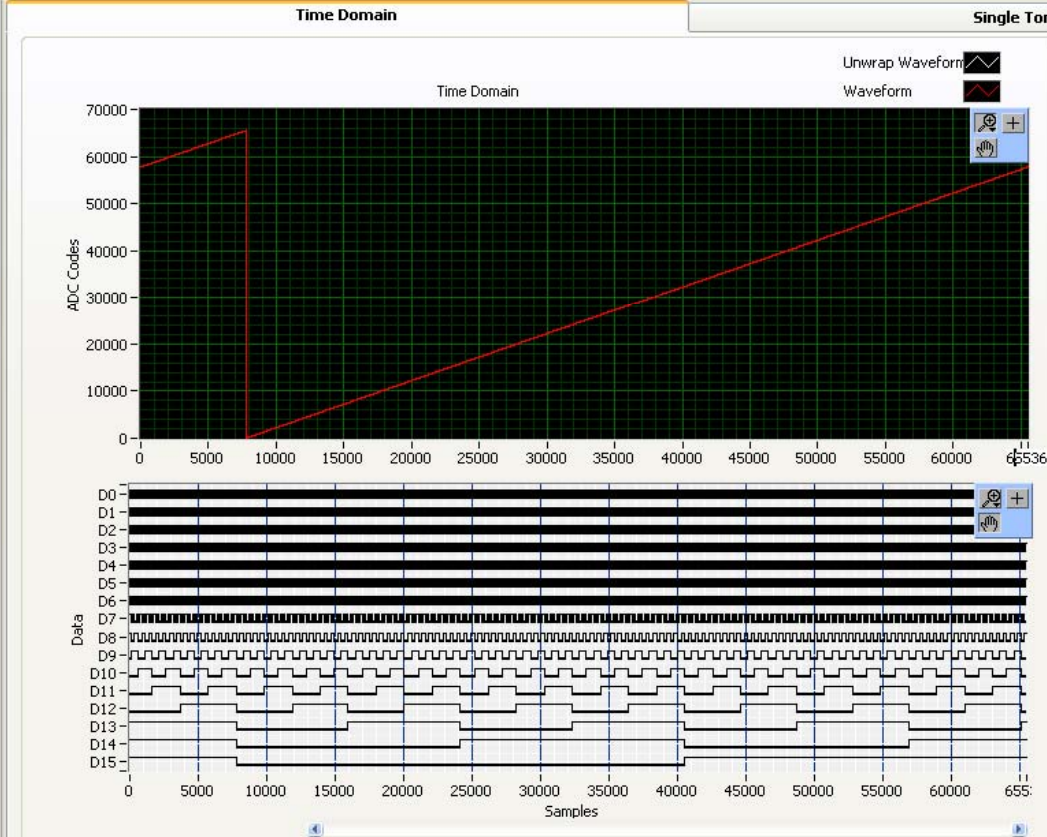
ADC Sampling Rate (Fs)
80M

ADC Input Target Frequency
5.00000000M

ADC Input Coherent Freq (Fc)
Calculated automatically
4.99633789M
Set Instrument to this frequency

FFT Record Length (Ns)
65536

Overlay 'Unwrap Waveform'



Single Tone FFT

	Value	Unit
Time Domain		
Min	0	Codes
Max	65535	Codes
St Dev	18918.7	Codes
Mean	32767.5	Codes
Median	32767.5	Codes
RMS	37836.7	Codes



TSW 1250 GUI

TI ADC Selection

AD55263_2W

Number of bits

16

Channel Selection

Channel D

Window

Rectangular

Capture Data

Capture Single

0.5X Frame Clock

LSB First

MSB First

Test Parameters

ADC Sampling Rate (Fs)

80M

ADC Input Target Frequency

5.00000000M

ADC Input Coherent Freq (Fc)

Calculated automatically

4.99633789M

Set Instrument to this frequency

FFT Record Length (Ns)

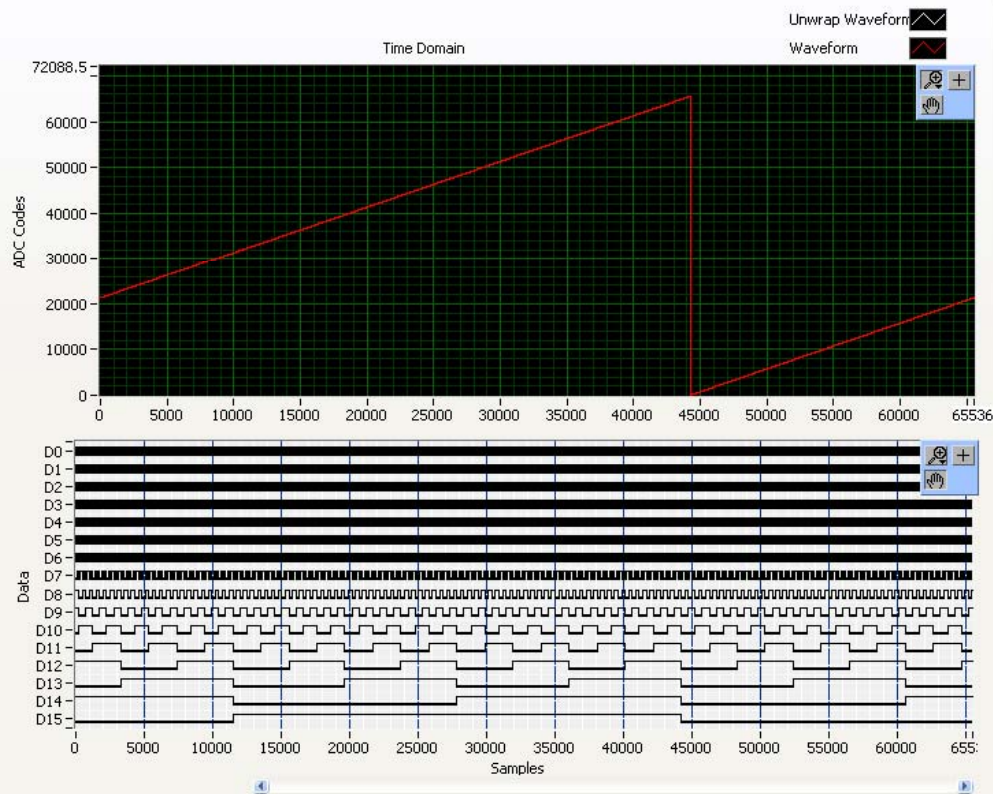
65536

Overlay

'Unwrap Waveform'

Time Domain

Single Tone FFT



	Value	Unit
Time Domain		
Min	0	Codes
Max	65535	Codes
St Dev	18918.7	Codes
Mean	32767.5	Codes
Median	32767.5	Codes
RMS	37836.7	Codes



TSW 1250 GUI

TI ADC Selection AD55263_2W
Number of bits 16
Channel Selection Channel D
Window Rectangular
Capture Data Capture Single
0.5X Frame Clock

LSB First
 MSB First

Test Parameters

ADC Sampling Rate (Fs)
80M

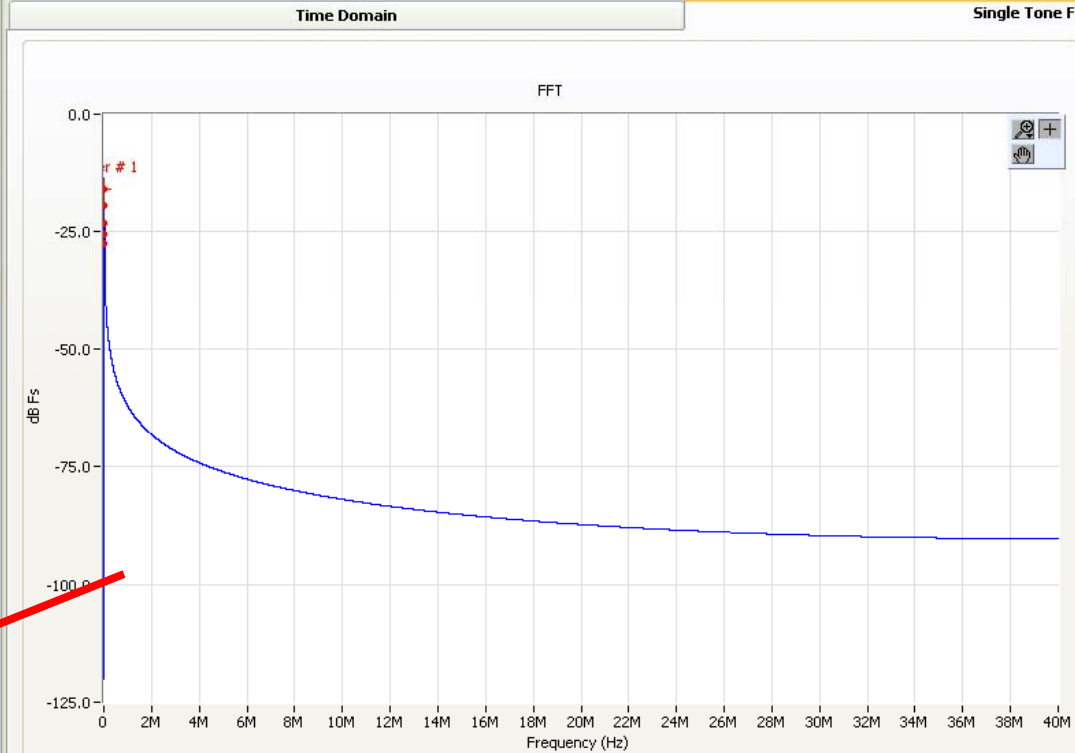
ADC Input Target Frequency
5.00000000M

ADC Input Coherent Freq (Fc)
Calculated automatically
4.99633789M
Set Instrument to this frequency

FFT Record Length (Ns)
65536

Message

TSW1250 found on COM28
 2 wire serial
 Firmware Type =4
 Firmware Ver= 2.02
 Software Version = 3.00



	Value	Unit
AC Results		
SNR	10.65	dBFS
SINAD	9.39	dBFS
SFDR	2.50	dBc
SFDR w/o 2 &	2.50	dBc
THD	15.37	dBFS
ENOB	1.48	bits
Time Domain		
Min	0	Codes
Max	65535	Codes
St. Dev.	18918.70	Codes
Mean	32767.50	Codes
Signal		
Frequency	5.00	MHz
Amplitude	-13.46	dBFS
Total Ampl.	0.00	dBFS
Distortion		
HD2	6.02	dBc
HD3	9.54	dBc
HD4	12.04	dBc
HD5	13.98	dBc
Marker #1	2.50	dBc
ADC Setup		
FFT Length	65536	points
Sample Rate	80.000	MSPS
BW Start	1.222	kHz
BW End	40.000	MHz