

# Evaluation Board for 3 MSPS, 12-Bit SAR ADC

# EVAL-AD7482CB

#### **FEATURES**

Full-featured evaluation board for the AD7482
EVAL-CONTROL BRD2 compatible
Standalone capability
On-board analog buffering and reference
Various linking options
PC software for control and data analysis when used with the
EVAL-CONTROL BRD2

#### INTRODUCTION

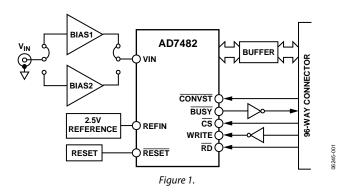
This data sheet describes the evaluation board for the AD7482, which is a high speed, low power, 12-bit successive approximation ADC. This part operates from a single 5 V supply and features throughput rates of up to 3 MSPS. Full details on the AD7482 are found in the AD7482 data sheet (available from

Analog Devices, Inc.) and should be consulted in conjunction with this data sheet when using the evaluation board.

On-board components include an AD780 (a pin programmable 2.5 V or 3 V ultra high precision band gap reference), AD829, AD8022, and AD711 op amps, an ADM809 reset generator, two 7S04 inverters and a 16-bit FCT245 type digital buffer. Various link options are explained in detail in Table 1.

Interface to this board is accomplished through a 96-way connector. This 96-way connector is compatible with the evaluation board controller (EVAL-CONTROL BRD2) which is also available from Analog Devices. External sockets are provided for CONVST, RD, WR, and CS signals, a bipolar analog input signal, a biased-up unipolar signal, optional external reference, and offset voltages.

#### **FUNCTIONAL BLOCK DIAGRAM**



# **TABLE OF CONTENTS**

1
1
1
2
3
3
3
6
7
7
7

Evaluation Board Software	8
Setup Menu Screen	8
Setting Up the Eval-ControL BRD2	8
Running the Software	8
Software Configuration Files	8
Software Description	9
Menu Bar	10
Evaluation Board Schematics and Artwork	11
Ordering Information	16
Ordering Guide	17
ESD Caution	17

### **REVISION HISTORY**

8/07—Revision 0: Initial Version

## **EVALUATION BOARD HARDWARE**

### **OPERATING THE AD7482 EVALUATION BOARD**

#### **Power Supplies**

When using this evaluation board with the EVAL-CONTROL BRD2, all supplies are provided from the controller board through the 96-way connector.

When using the board as a standalone unit, external supplies must be provided. This evaluation board has nine power supply inputs: AV<sub>DD</sub>, AGND, +12 V, -12 V, AGND, DV<sub>DD</sub>, DGND, V<sub>DRIVE</sub>, and DGND. If the evaluation board is used in standalone mode, a +5 V supply must be connected to both the AV<sub>DD</sub> and DV<sub>DD</sub> inputs. The +12 V and -12 V supplies are required

for the op amps. The  $V_{\text{DRIVE}}$  input can be connected to a supply from +2.7 V to +5 V, allowing the evaluation board to be connected to both +3 V and +5 V systems. The supplies are decoupled to the ground plane with 10  $\mu\text{F}$  tantalum and 0.1  $\mu\text{F}$  multilayer ceramic capacitors at the point where they enter the board. Noise on the supplies is further reduced with the use of EMC filters and ferrite beads. The supply pins of all the op amps and the reference are also decoupled with 10  $\mu\text{F}$  tantalum and 0.1  $\mu\text{F}$  ceramic capacitors as are the  $V_{DD}$  pins of the AD7482. This evaluation board consists of four layers. One of these layers is used as a dedicated ground plane, which allows for good decoupling and shielding.

#### **LINK OPTIONS**

There are 25 link options which must be set for the required operating setup before using the evaluation board. The functions of the options are outlined in Table 1. There is no Link 25.

Table 1.

Link No.	Function
LK1	Selects the source of CONVST input.
	In Position A, CONVST is sourced from the external connector, J9.
	In Position B, CONVST is connected to the 96-way connector.
LK2	Selects the source for the bias up voltage.
	In Position A, it is connected to the reference voltage (divided down by R6 and R8).
	In Position B, it is connected to AV <sub>DD</sub> .
	In Position C, it is connected to the external connector, J10.
LK3	Used to short out the 1 $k\Omega$ series input resistor on the analog input.
LK4, LK5	Used to select which op amp is utilized in the analog input bias up circuitry. Both these links must be set to the same
	position.
	Position A selects the AD829.
	Position B selects the AD8022.
LK6	Used to put the AD7482 into standby mode.
	In Position A, the standby pin is connected to DV <sub>DD</sub> , putting the part in standby mode.
	In Position B, the standby pin is connected to GND for normal operation.
LK7	Used to put the AD7482 into nap mode.
	In Position A, the NAP pin is connected to DV <sub>DD</sub> putting the part in nap mode.
	In Position B, the NAP pin is connected to GND for normal operation.
LK8	Selects whether the CLIP input is tied high or low.
	Position A ties the CLIP pin to DV <sub>DD</sub> .
	Position B ties the CLIP pin to GND. See the AD7482 data sheet for further details.
LK9	Selects whether the MODE1 input is tied high or low.
	Position A ties the MODE 1 pin to DV <sub>DD</sub> .  Position B ties the MODE 1 pin to CND See the AD7483 data sheet for further details.
11/10	Position B ties the MODE 1 pin to GND. See the AD7482 data sheet for further details.
LK10	Selects whether the MODE2 input is tied high or low.
	Position A ties the MODE2 pin to DV <sub>DD</sub> .  Position B ties the MODE3 pin to CND. See the AD7483 data sheet for further details.
LK11	Position B ties the MODE2 pin to GND. See the AD7482 data sheet for further details.
LNII	Configures the AD7482 for use with an internal or external reference. With this link in position, the part is configured for use with an external +2.5 V reference.
LK12	Selects the source for the V <sub>DRIVE</sub> voltage.
	In Position A, V <sub>DRIVE</sub> is connected to DV <sub>DD</sub> .
	In Position B, V <sub>DRIVE</sub> is taken from the external connector, J5.

Link No.	Function
LK13	Selects the source for the external reference.
	Position A selects the on-board AD780.
	Position B selects the external connector, J4.
LK14, LK15	When using an external reference, LK14 and LK15 should be in place to connect the reference pins to the external reference source.
LK16	Selects the source for the DV <sub>DD</sub> supply.
	Position A selects the 96-way edge connector from the EVAL-CONTROL BRD2 as the source.
	Position B selects the external connector, J7.
LK17	Selects whether the analog input is taken from the on-board op amps or directly from the external connector, J3.
	Position A selects the op amps.
	Position B selects the external connector, J3.
LK18	Inserting LK18 terminates the analog input applied to J2 with a 50 $\Omega$ resistor.
LK19	Selects the source for the AV <sub>DD</sub> supply.
	Position A selects the 96-way edge connector from the EVAL-CONTROL BRD2 as the source.
	Position B selects the external connector, J6.
LK20	Selects the source for the +12 V supply.
	Position A selects the 96-way edge connector from the EVAL-CONTROL BRD2 as the source.
	Position B selects the external connector, J8.
LK21	Selects the source for the -12 V supply.
	Position A selects the 96-way edge connector from the EVAL-CONTROL BRD2 as the source.
	Position B selects the external connector, J8.
LK22	Selects the source of CS input.
	In Position A, CS is sourced from the external connector, J11.
	In Position B, CS is connected to the 96-way connector.
LK23	Selects the source of RD input.
	In Position A, RD is sourced from the external connector, J11.
	In Position B, RD is connected to the 96-way connector.
LK24	Selects the source of WR input.
	In Position A, WR is sourced from the external connector, J11.
	In Position B, WR is connected to the 96-way connector.
LK25	N/A
LK26	Inserting LK26 terminates the analog input applied to J3 with a 50 $\Omega$ resistor.

### **Initial Setup Conditions**

Take care before applying power or signals to the evaluation board to ensure that all link positions are as per the required operating mode. Failure to do this could result in damage to the evaluation board. Table 2 shows the default positions of the links. The board is set up for use with the evaluation board controller.

**Table 2. Initial Link Positions** 

Link No.	Position	Function			
LK1	В	CONVST input is connected to the 96-way connector.			
LK2	Α	The bias up voltage is connected to the reference voltage (divided down by R6 and R8).			
LK3	IN	1 $k\Omega$ series input resistor on the analog input is shorted.			
LK4	Α	AD829 is used in the analog input bias up circuitry.			
LK5	Α	AD829 is used in the analog input bias up circuitry.			
LK6	В	STBY pin is connected to GND for normal operation.			
LK7	В	NAP pin is connected to GND for normal operation.			
LK8	Α	CLIP pin is tied to DV <sub>DD</sub> . See the AD7482 data sheet for further details.			
LK9	В	The MODE1 input pin is tied to GND. See the AD7482 data sheet for further details.			
LK10	Α	The MODE2 input pin is tied to DV <sub>DD</sub> . See the AD7482 data sheet for further details.			
LK11	IN	The AD7482 is configured for use with an external +2.5 V reference.			
LK12	Α	V <sub>DRIVE</sub> is connected to DV <sub>DD</sub> .			
LK13	Α	AD780 selected as source for external reference.			
LK14	IN	Reference pins connected to the external reference source.			
LK15	IN	rence pins connected to the external reference source.			
LK16	Α	DV <sub>DD</sub> supply sourced from the 96-way edge connector from the EVAL-CONTROL BRD2.			
LK17	Α	Analog input is taken from the on-board op amps.			
LK18	OUT	No 50 $\Omega$ termination on the analog input applied to J2.			
LK19	Α	AV <sub>DD</sub> supply sourced from the 96-way edge connector from the EVAL-CONTROL BRD2.			
LK20	Α	+12 V supply sourced from the 96-way edge connector from the EVAL-CONTROL BRD2.			
LK21	Α	-12 V supply sourced from the 96-way edge connector from the EVAL-CONTROL BRD2.			
LK22	В	CS is driven from the 96-way connector on the EVAL-CONTROL BRD2.			
LK23	В	RD is driven from the 96-way connector on the EVAL-CONTROL BRD2.			
LK24	В	$\overline{ m WR}$ is driven from the 96-way connector on the EVAL-CONTROL BRD2.			
LK25	N/A				
LK26	OUT	No 50 $\Omega$ termination on the analog input applied to J3.			

### **EVALUATION BOARD INTERFACING**

Interface to the evaluation board via a 96-way connector, J1. J1 is used to connect the evaluation board to the EVAL-CONTROL BRD2 or other system. The pinout for the J1 connector is shown in Figure 2 and its pin descriptions and pin designators are shown in Table 3 and Table 4.

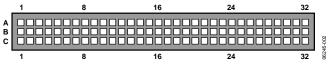


Figure 2. Pin Configuration for the 96-Way Connector, J1

Table 3.

Signal	Description
FL0	Flag Zero. This output is connected to the CONVST pin of the AD7482 via LK1.
ĪRQ2	Interrupt Request 2. This input is connected to the BUSY output of the AD7482 through the inverter, U7.
RD	Read. An output connected to the $\overline{RD}$ pin of the AD7482 via LK23.
WR	Write. An output connected to the $\overline{\text{WR}}$ input of the AD7482 via LK24.
CS	Chip Select. An output connected to the $\overline{\text{CS}}$ input pin of the AD7482 via LK22.
D0 to D14	Data Lines. These bidirectional data lines are connected to the data bus of the AD7482 through the buffer, U2.
DGND	Digital Ground. These lines are connected to the ground plane of the AD7482 evaluation board.
AGND	Analog Ground. These lines are connected to the ground plane of the AD7482 evaluation board.
$DV_DD$	Digital $+5$ V Supply. These lines are connected to the DV <sub>DD</sub> supply line on the AD7482 evaluation board via LK16.
$AV_DD$	Analog +5 V Supply. These lines are connected to the $AV_{DD}$ supply line on the AD7482 evaluation board via LK19.
+12 V	+12 V Supply. These lines are connected to the +12 V supply line on the AD7482 evaluation board via LK20.
-12 V	-12V Supply. These lines are connected to the $-12V$ supply line on the AD7482 evaluation board via LK21.

Table 4. 96-Way Connector Pin Functions<sup>1</sup>

Pin No.	Pin No. Row A Row B Row C			
1				
2		D0		
3		D1		
4	DGND	DGND	DGND	
5		D2		
6		D3		
7		D4		
8	DV <sub>DD</sub> Edge	DV <sub>DD</sub> Edge	DV <sub>DD</sub> Edge	
9	RD	D5	WR	
10		D6	<del>CS</del>	
11		D7		
12	DGND	DGND	DGND	
13		D8		
14		D9		
15		D10		
16	DGND	DGND	DGND	
17	FL0	D11	ĪRQ2	
18	D12	D13	D14	
19				
20	DGND	DGND	DGND	
21	AGND	AGND	AGND	
22	AGND	AGND	AGND	
23	AGND	AGND	AGND	
24	AGND	AGND	AGND	
25	AGND	AGND	AGND	
26	AGND	AGND	AGND	
27		AGND		
28		AGND		
29	AGND	AGND	AGND	
30	-12 V	AGND	+12 V	
31				
32	$AV_{DD}$	$AV_{DD}$	AV <sub>DD</sub>	

<sup>&</sup>lt;sup>1</sup> The unused pins of the 96-way connector are not shown.

#### **SOCKETS**

There are eight input sockets relevant to the operation of the AD7482 on this evaluation board. The functions of these sockets are outlined in Table 5.

**Table 5. Socket Functions** 

	14010 01 0001101 1 4110110110			
Socket	Description			
J2	Subminiature BNC socket for bipolar input signals which are biased up by the on-board op amps and into VIN.			
J3	Subminiature BNC socket for unipolar input signals which are connected directly to VIN.			
J4	Subminiature BNC socket for an external reference.			
J9	Subminiature BNC socket for an external CONVST signal.			
J10	Subminiature BNC socket for an external offset voltage, which are used to bias up the signal applied at J2.			
J11	Subminiature BNC socket for an external $\overline{CS}$ signal.			
J12	Subminiature BNC socket for an external RD signal.			
J13	Subminiature BNC socket for an external $\overline{\text{WR}}$ signal.			

#### **CONNECTORS**

There are five connectors on the AD7482 evaluation board outlined in Table 6.

**Table 6. Connector Functions** 

Socket	Function			
J1	96-way connector for parallel interface and power supply connections.			
J5	External V <sub>DRIVE</sub> connector.			
J6	External AV <sub>DD</sub> and AGND connector.			
J7	External DV <sub>DD</sub> and DGND connector.			
J8	External +12 V, –12 V, and AGND power connector.			

### **OPERATING WITH THE EVAL-CONTROL BRD2**

The evaluation board can be operated in a standalone mode or operated in conjunction with the EVAL-CONTROL BRD2. The EVAL-CONTROL BRD2 is available from Analog Devices under the order entry EVAL-CONTROL BRD2. When operated with this control board, all supplies and control signals to operate the AD7482 are provided by the EVAL-CONTROL BRD2. Software to communicate with the control board and the AD7482 is provided with the AD7482 evaluation board package. This EVAL-CONTROL BRD2 also operates with all Analog Devices evaluation boards that end with the letters CB in their title.

The 96-way connector on the EVAL-AD7482CB plugs directly into the 96-way connector on the EVAL-CONTROL BRD2. The EVAL-CONTROL BRD2 provides all the supplies for the evaluation board. It is powered from a 12 V ac transformer. Suitable transformers are available from Analog Devices as an accessory under the following part numbers:

- EVAL-110VAC-US (For use in the US or Japan)
- EVAL-220VAC-UK (For use in the UK)
- EVAL-220VAC-EU (For use in Europe)

These transformers are also available from other suppliers including Digi-Key Corp. (US) and Campbell Collins, Ltd. (UK).

Connection between the EVAL-CONTROL BRD2 and the parallel port of a PC is via a standard Centronics printer port cable, which is provided as part of the EVAL-CONTROL BRD2 package. Refer to the manual that accompanies the EVAL-CONTROL BRD2 for more details.

### **EVALUATION BOARD SOFTWARE**

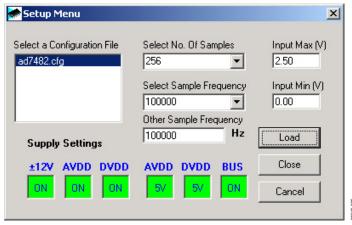


Figure 3. The Setup Menu Dialog Box

#### **SETUP MENU SCREEN**

The **Setup Menu** dialog box is responsible for allowing the user to load the required configuration file for the evaluation board (see Figure 3). When the configuration file is loaded, the software acquires detailed information about the evaluation board and part connected to the EVAL-CONTROL BRD2 such as the number of bits, maximum sampling rate, output coding, maximum analog input, and power supply requirements. The configuration file also tells the software the name of the DSP program file, which should download to the EVAL-CONTROL BRD2. These files are supplied by Analog Devices with the evaluation board.

#### SETTING UP THE EVAL-CONTROL BRD2

The EVAL-CONTROL BRD2 and the EVAL-7482CB should be connected together via the 96-way connector. The power should be applied to the EVAL-CONTROL BRD2. At this stage, the red LED should be flashing which indicates that the EVAL-CONTROL BRD2 is functional and ready to receive instructions. The software (previously installed) should be loaded before the printer port cable is connected between the EVAL-CONTROL BRD2 and the PC. This ensures that the printer port has been initialized correctly. The printer port cable can then be connected between the PC and EVAL-CONTROL BRD2.

#### **RUNNING THE SOFTWARE**

With the hardware set up, the user is now in a position to use the software to control the EVAL-CONTROL BRD2 and the evaluation board. In the software screen, the user should select the **File** menu and click **Setup**. This displays the **Setup Menu** (see Figure 3). A window on the left of the setup form lists all the available configuration files. The configuration files are text-based files, which contain information about the particular evaluation board to be tested. The information contained is listed in the Setup Menu Screen section. Select the relevant configuration file and click **Load**. In the case of the AD7482

evaluation board, only one configuration file is available: ad7482.cfg. The EVAL-CONTROL BRD2 is reset and the DSP program is downloaded. When the download is complete, the power supply settings indicated in the configuration file are set and the user may hear some of the relays clicking. The pulldown menu items, such as Select No. Of Samples and Select Sample Frequency, have been set to the default values specified in the configuration file. The user is free to change these at will. Once all the settings have been determined, the user can click Close and return to the main screen.

### **SOFTWARE CONFIGURATION FILES**

Software configuration files give the EVAL-CONTROL BRD2 software information on how the software and hardware should perform. They contain information such as the name of the DSP program to be downloaded, the default and maximum sampling frequencies, the number of samples to take, and the power supply settings to use. A typical Software Configuration File (\*.cfg) is shown in Listing 1.

#### **Listing 1. Typical Configuration File**

[EVAL-CONTROL BOARD]
partname:AD7482
programname:ad7482.PRG
samplefrequency:1200000
maxsamplefrequency:2200000
samples:2048
+/-15V:on
dvdd:5:on
avdd:5:on
bus:on
;options 2scomp, binary
dataformat:binary
numberofbits:12
inputVmax:2.5
inputVmin:0
[endofconfig]

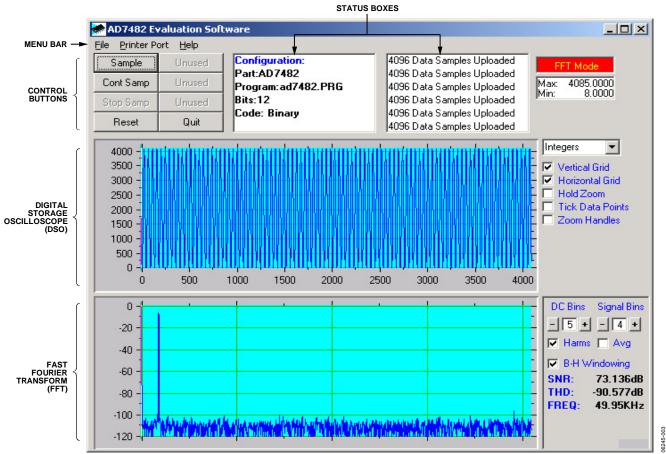


Figure 4. AD7482 Main Dialog Box

#### **SOFTWARE DESCRIPTION**

The software that controls the EVAL-CONTROL BRD2 and the evaluation board consists of three dialog boxes. The screen shown in Figure 4 appears when the software is running. The main function of this screen is to allow the user to read a predetermined number of samples from the evaluation board and display them both in the time and frequency domain. The screen can be divided into three sections.

The upper third of the screen contains the control buttons, the menu bar, and various status windows. The control buttons allow the user to take samples, reset the part, and quit the program. The menu bar allows the user to enter the setup menu, select which printer port to use to control the EVAL-CONTROL BRD2, load and save data, and get information about the software. The status windows indicate the setup of the evaluation board/device, number of samples taken, and any information or error messages generated.

The middle third of the screen is a digital storage oscilloscope (DSO). When samples are uploaded from the EVAL-CONTROL BRD2 they are displayed here. The samples can be displayed either as integer values or as voltages (determined by the input range of the device in question). Once samples have been displayed, clicking at any point in the graph shows the sample number and the value of the point directly beneath the cursor. Along the axis

of the graph are zoom handles. These allow the user to zoom in and out to get a closer look at a particular sample if required. When another set of samples is taken, the graph attempts to display all values collected unless the **Hold Zoom** check box has been selected. In this case, the graph keeps the same axis settings as for the previous set of data samples. Additional check boxes are provided to give the user control over the vertical and horizontal grids and data points.

The lower third of the screen shows either a fast Fourier transform (FFT) of the data or a histogram which displays the number of occurrences of each particular code read back. The FFT (default option) is typically used when the user is concerned with examining an ADC's performance in the frequency domain while the histogram gives an indication of the ADC's performance with DC signals. The option displayed can be toggled by clicking the **FFT Mode/Histogram Mode** button in the top right of the screen. Figure 5 shows how the main screen looks when the Histogram option is selected.

#### **Sample Button**

When the user clicks **Sample**, the software instructs the EVAL-CONTROL BRD2 to take the required number of samples at the required frequency from the evaluation board. The AD7482 evaluation board runs up to 2.2 MSPS so the user can choose any sampling frequency up to this rate as well as the number of

samples to be taken. These samples are then uploaded and displayed. An FFT and histogram are also calculated and displayed. If the user clicks **Cont Sample**, the software repeats the process indefinitely until the user clicks the button again. While the software is continuously sampling data the other control buttons are disabled.

#### **Reset Button**

The **Reset** button causes the EVAL-CONTROL BRD2 to perform a reset function. When this happens, the power supplies to the evaluation board are turned off and the program in the DSP memory is lost. Repeat the setup instructions to download another program if required.

#### **Ouit Button**

The **Quit** button exits the software; however, the program running on the EVAL-CONTROL BRD2 is not terminated.

#### **MENU BAR**

The main dialog box of the evaluation software contains a number of options available as pull-down menu items.

#### File Menu

- **Setup Menu**: Selecting this option displays the **Setup Menu** dialog box as shown in Figure 3.
- Load Raw Data: Selecting this option allows the user to load data that has been saved by the software during a previous session.

- Save Raw Data: Selecting this option allows the user to save the current set of sample data points. The data can be reloaded to the evaluation software at a later date or can be used by other programs for analysis.
- Save Binary Data: Selecting this option allows the user to save the current set of sample data points. The data is saved in binary format as a text file. This method can be useful for examining code flicker and looking for stuck bits.
- Save FFT Data: Selecting this option allows you to save the current set of FFT data points. FFT data cannot be reloaded into the EVAL-CONTROL BRD2 software, but can be loaded into other software packages for further analysis.
- Exit: Quits the program.

#### **Printer Port Menu**

This menu item allows the user to select which printer port should be used for communication with the EVAL-CONTROL BRD2.

- LPT1: Selects 0x378 as the printer port base address. This is the default option.
- LPT2: Selects 0x278 as the printer port base address.
- PRN: Selects 0x3BC as the printer port base address.

#### Help Menu

This menu item gives information about the current revision of software for the particular evaluation board being used.

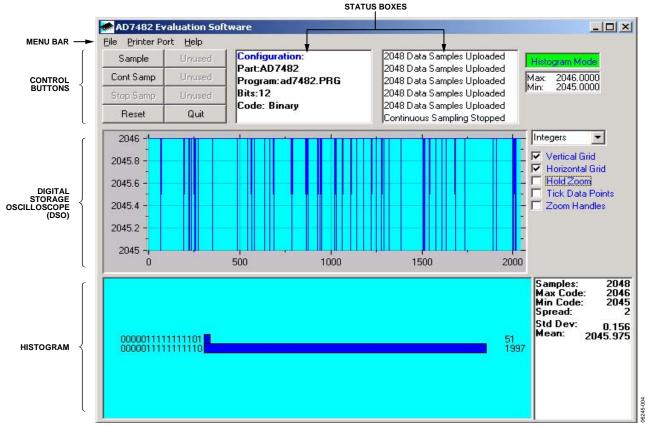


Figure 5. AD7482 Main Screen-Histogram Mode

# **EVALUATION BOARD SCHEMATICS AND ARTWORK**



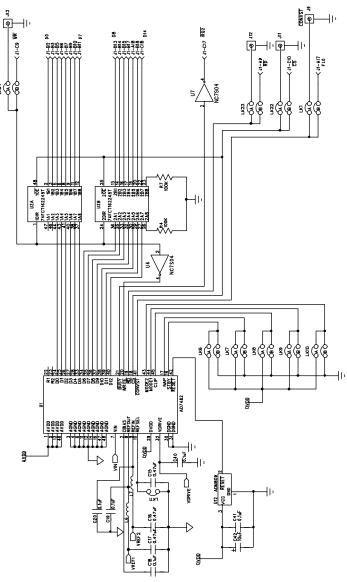


Figure 6. Evaluation Board Schematic Page 1

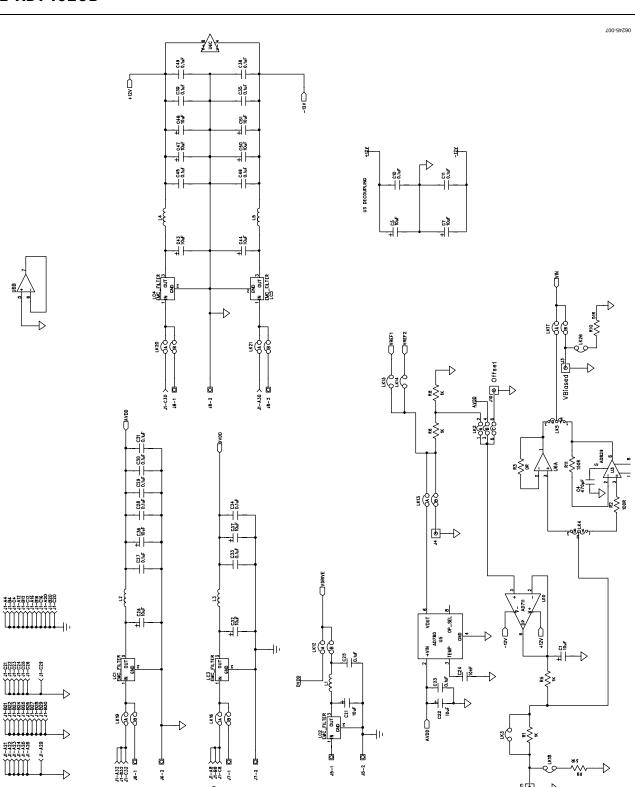


Figure 7. Evaluation Board Schematic Page 2

AVDD

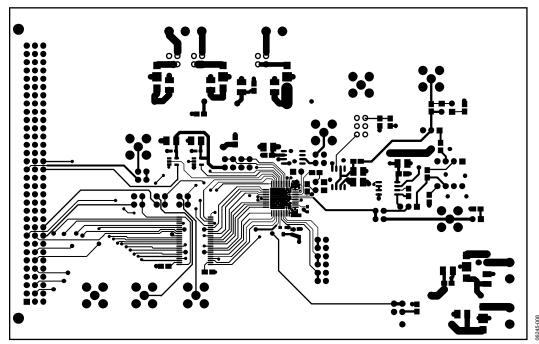


Figure 8. Component Side Etch

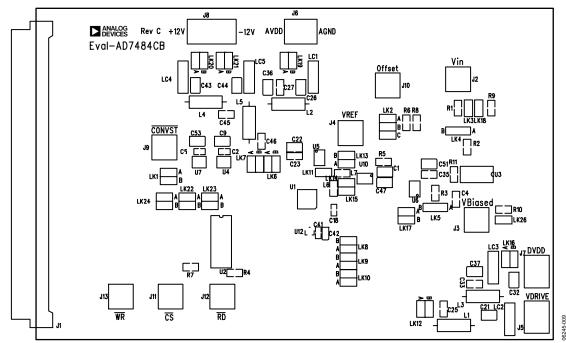


Figure 9. Component Side Silkscreen

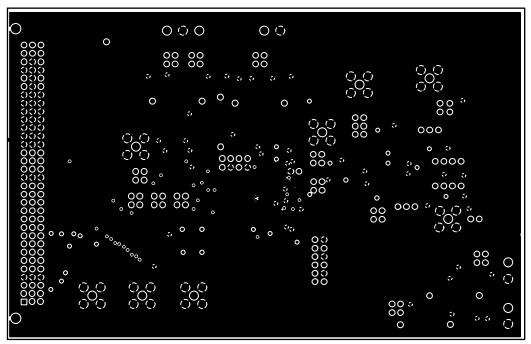


Figure 10. Internal Ground Plane Layer

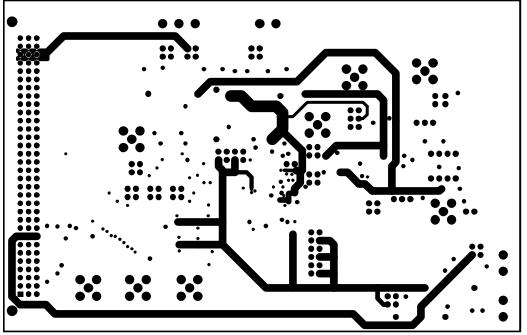


Figure 11 Internal Layer Etch

Rev. 0 | Page 14 of 20

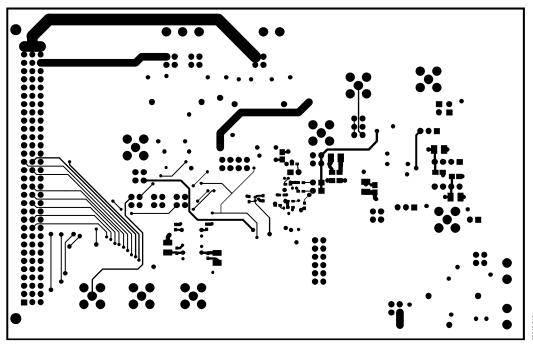


Figure 12. Solder Side Etch

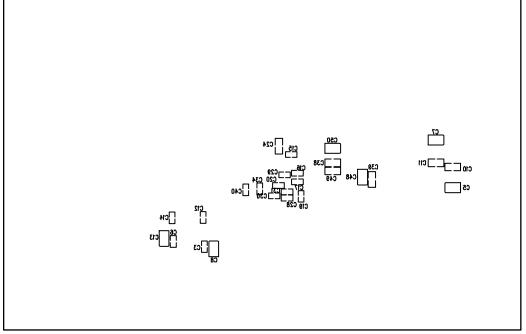


Figure 13 .Solder Side Silk Screen

# **ORDERING INFORMATION**

Table 7. Bill of Materials

Qty.	Part Type	Reference Designator	Supplier/Manufacturer	Order Number
1	AD7482BST	U1	Analog Devices, Inc.	AD7482BST
1	74FCT162245T	U2	Digi-Key/Pericom	PI74FCT162245ATV-ND
1	AD829JN	U3	Analog Devices, Inc.	AD829JN
2	NC7S04M5	U4, U7	Fairchild Semi.	FEC 685-914
1	AD780BR	U5	Analog Devices, Inc.	AD780BR
1	AD8022AR	U6	Analog Devices, Inc.	AD8022AR
1	AD711KR	U10	Analog Devices, Inc.	AD711KR
1	ADM809-5LART	U12	Analog Devices, Inc.	ADM809-5LART
19	10 μF 20 V surface-mount capacitor (TAJ-B)	C1, C5, C7 to C9, C13, C21, C22, C26, C32, C36, C37, C43 to C44, C47, C48, C50, C51, C53	AVX	FEC 197-427
16	0.1 μF surface-mount capacitor (0603 type)	C2, C3, C6, C12, C14, C18 to C20, C28 to C31, C34, C40, C41, C52	AVX	FEC 317-287
1	470 pF surface-mount capacitor (0805 type)	C4	AVX	FEC 499-195
12	0.1 μF surface-mount capacitor (0805 type)	C10, C11, C23, C25, C27, C33, C35, C38, C39, C45, C46, C49	AVX	FEC 499-687
1	10 nF surface-mount capacitor (0805 type)	C24	AVX	FEC 499-225
3	0.47 μF surface-mount capacitor (0603 type)	C15 to C17	AVX	FEC 317-275
1	10 μF 10 V surface-mount capacitor (TAJ-A)	C42	AVX	FEC 893-950
5	Ferrite beads	L1 to L5	Multicomp, Inc.	FEC 323-4861
2	Surface-mount chip inductors (0805 type)	L6 to L7	Philips Comp.	FEC 305-6521
5	Surface-mount EMC filters	LC1 to LC5	Murata	FEC 869-958
4	1 kΩ surface-mount resistor (0805 type)	R1, R5 to R6, R8	Multicomp, Inc.	FEC 911-859
1	0 Ω surface-mount resistor (0805 type)	R3	Multicomp, Inc.	FEC 772-239
2	100 kΩ surface-mount resistor (0805 type)	R4, R7	Multicomp, Inc.	FEC 613-332
2	51 Ω surface-mount resistor (0805 type)	R9, R10	Multicomp, Inc.	FEC 771-181
1	100 Ω surface-mount resistor (0805 type)	R2	Multicomp, Inc.	FEC 911-732
1	150 Ω surface-mount resistor (0805 type)	R11	Multicomp, Inc.	FEC 911-756
1	96 Pin 90° DIN41612 plug	J1	Harting	FEC 104-986
8	Gold 50 Ω SMB jack	J2 to J4, J9 to J13	M/A-COM	FEC 310-682
3	2-pin terminal block	J5 to J7	Lumberg	FEC 151-785
1	3-pin terminal block	J8	Lumberg	FEC 151-786
6	Single jumper	LK3, LK11, LK14, LK15, LK18, LK26	Harwin	FEC 511-705
16	2-way jumper	LK1, LK6 to LK10, LK12, LK13, LK16, LK17, LK19 to LK24	Harwin	FEC 511-791
1	3-way jumper	LK2	Harwin	FEC 511-780
2	2-way SIP jumper	LK4, LK5	Harwin	511-705
25	Shorting link	LK1 to LK24, LK26		528-456
4	Stick-on feet	Each Corner	3M	FEC 148-922
1	PCB	EVAL-AD7482CB		N/A

### **ORDERING GUIDE**

Model	Description		
EVAL-AD7482CB	Evaluation Board		

### **ESD CAUTION**



**ESD (electrostatic discharge) sensitive device.**Charged devices and circuit boards can discharge without detection. Although this product features patented or proprietary protection circuitry, damage may occur on devices subjected to high energy ESD. Therefore, proper ESD precautions should be taken to avoid performance degradation or loss of functionality.

**NOTES** 

# **NOTES**

CV/	ΛI	Λ	U.	7 A (	0	71		D
CV	ΑI	L-A	\U A	/4(	מ	ZI	J	D

NOTES