



# Evaluation Board for the AD7738 8-Channel, High Throughput, 24-Bit ADC

**Eval-AD7738EB**

## **AD7738 EVALUATION SYSTEM CONTENTS**

- EVAL-AD7738EB Evaluation Board
- PC COM Serial Cable
- Installation CD

## **INSTALLATION**

- Insert the AD7732/34/38 Evaluation System CD ROM into your CD ROM drive and double-click on the file "Setup.exe"
- Follow the on screen instructions to install the software on your PC

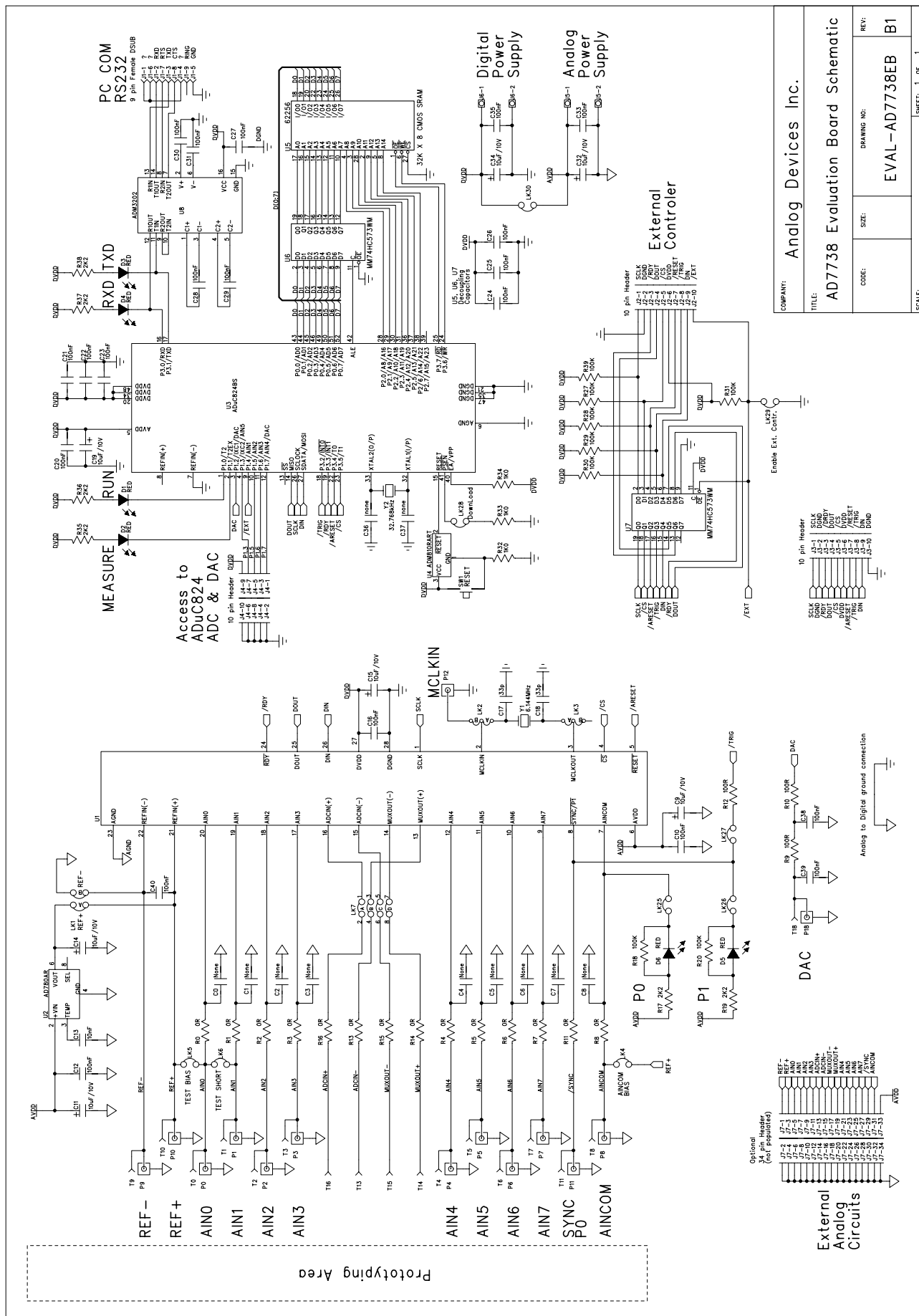
## **USING THE SOFTWARE**

- Launch the AD7738 evaluation software (Use Start / Programs / Analog Devices / AD773x / AD7738)
- Follow the instructions on the "EasyStart" window.

REV.B1 July 2003

Information furnished by Analog Devices is believed to be accurate and reliable. However, no responsibility is assumed by Analog Devices for its use, nor for any infringements of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Analog Devices.

One Technology Way, P.O. Box 9106, Norwood, MA 02062-9106, U.S.A.  
Tel: 781/329-4700 World Wide Web Site: <http://www.analog.com>  
Fax: 781/326-8703 Analog Devices, Inc., 1998



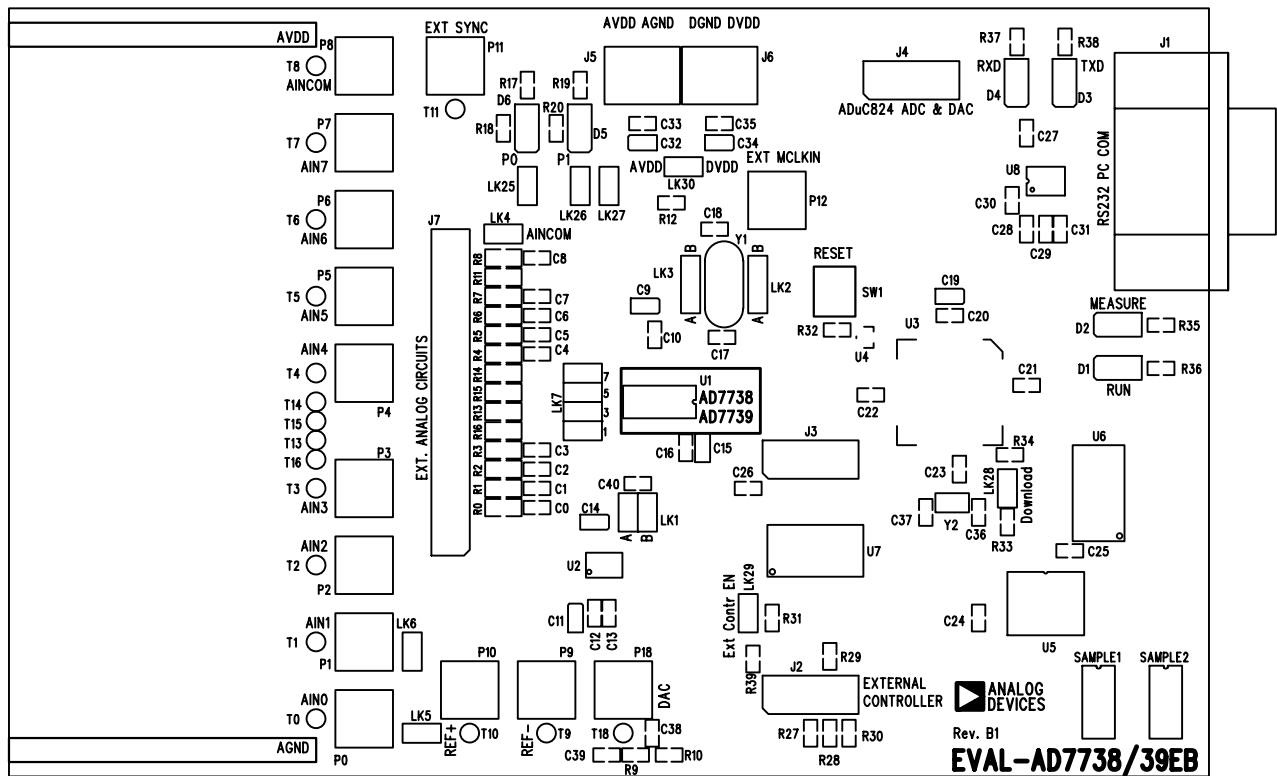


Figure 2. Evaluation Board Components Layout

# EVAL-AD7738EB

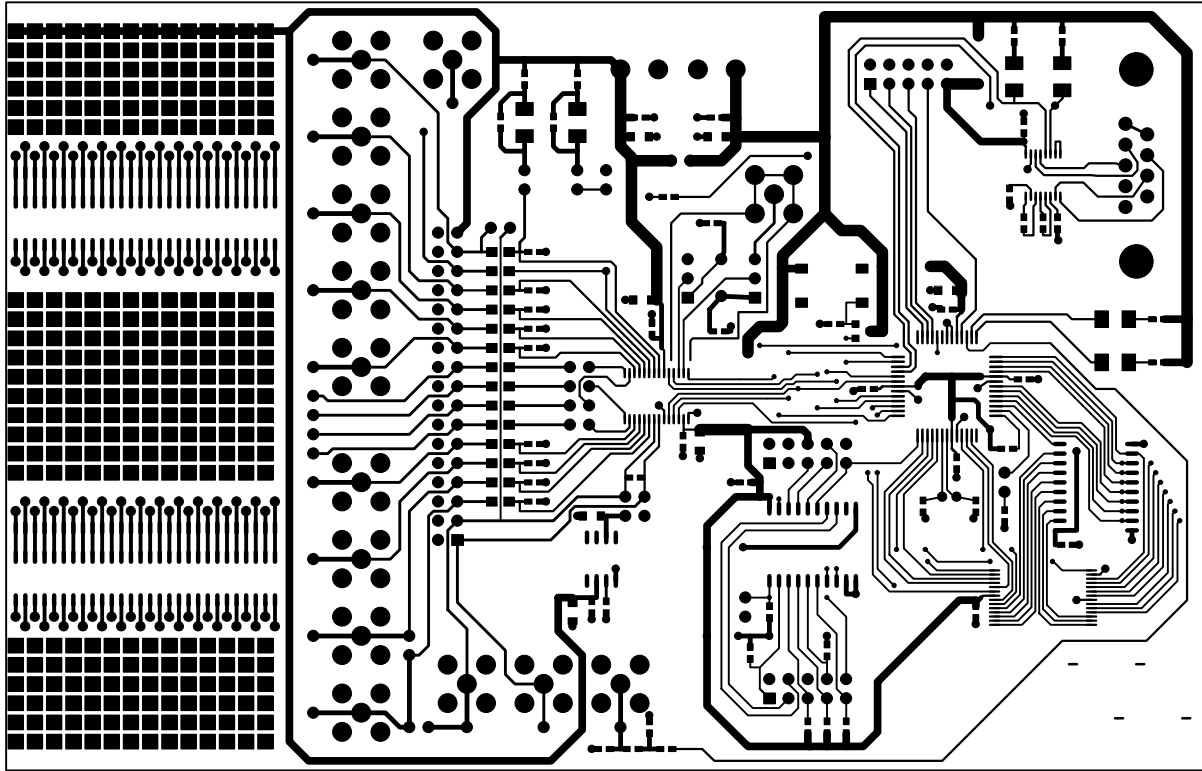


Figure 3. PCB Component Side Layout

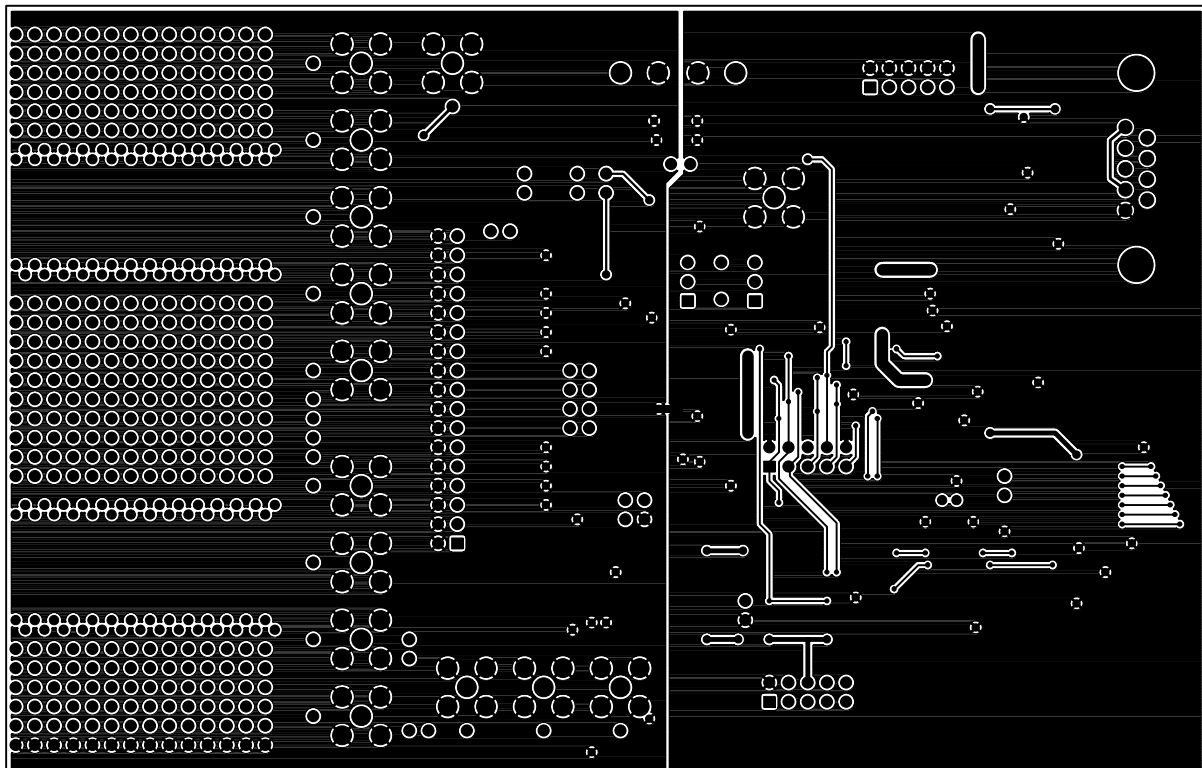


Figure 4. PCB Solder Side Layout

Component	Qty	Part	Description	Order No	Vendor
PCB	1		EVAL-AD7738EB Rev.B1		Analog Devices
U1	1	AD7738BRU	Sigma-Delta ADC TSSOP28	AD7738BRU	Analog Devices
Samples	2	AD7738BRU	Sigma-Delta ADC TSSOP28	AD7738BRU	Analog Devices
U2	1	AD780AR	Voltage Reference SO8	AD780AR	Analog Devices
U3	1	ADuC824BS	MicroConverter PQFP52	ADuC824BS	Analog Devices
U4	1	ADM810RART	Reset supervisory circuit SOT23	ADM810RART	Analog Devices
U8	1	ADM3202ARU	RS232 interface TSSOP-16	ADM3202ARU	Analog Devices
U5	1	62256	32K x 8 SRAM, 28 TSOP28	352-8509	Farnell
U6-7	2	74HC573	Transparent Latch, SO20	379-580	Farnell
D1-6	6	RED	SMD Red LED	515-607	Farnell
C17 C18	2	33pF	SMD Ceramic Cap, 0603 Case	498-555	Farnell
C13	1	10nF	SMD Ceramic Cap, 0603 Case	499-146	Farnell
C10 C12 C16 C20-31 C33 C35 C38 C39-40	20	100nF	SMD Ceramic Cap, 0603 Case	499-675	Farnell
C9 C11 C14-15 C19 C32 C34	7	10uF/10V	SMD Tantalum Cap, Case A	197-130	Farnell
R0-R8, R11, R13-16	14	0R	SMD Resistor, 0603 Case	772-239	Farnell
R13 R15 R16	3	100R	SMD Resistor, 0603 Case	612-364	Farnell
R32-34	3	1K0	SMD Resistor, 0603 Case	612-480	Farnell
R17 R19 R35-38	6	2K2	SMD Resistor, 0603 Case	612-522	Farnell
R18 R20 R27-31 R39	8	100K	SMD Resistor, 0603 Case	612-728	Farnell
Y1	1	6.144MHz	Crystal	300-6013-ND	DigiKey
Y2	1	32.768kHz	Watch crystal	221-533	Farnell
SW1	1	Pushbutton	SMD push button switch	177-807	Farnell
P0-12 P18	14	Socket	50ohm PCB SMB Jack	310-682	Farnell
J1	1	Socket	9 Pin 90° D-Type Socket	150-754	Farnell
J5-6	2	Socket	2 Pin Terminal Block	151-789	Farnell
LK1	1	2x2 pin	Double Row Link Header 0.1"	148-535	Farnell
LK2-3	2	1x3 pin	Single Row Link Header 0.1"	148-533	Farnell
LK4-6 LK25-30	9	1x2 pin	Single Row Link Header 0.1"	148-533	Farnell
LK7	1	2x4 pin	Double Row Link Header 0.1"	148-535	Farnell
J2-4	3	2x5 pin	Double Row Link Header 0.1"	148-535	Farnell

Table 1. Evaluation Board Components List