#### **General Description**

The MAX9972 evaluation kit is a fully assembled and tested printed circuit board (PCB) that simplifies evaluation and demonstrates the functionality of the MAX9972, a quad-channel, ultra-low power pin electronics IC. The MAX5734 DAC is included in the EV kit for pin electronic IC level setting. Standard  $50\Omega$  SMA connectors are included on the EV kit for the inputs and outputs to allow for quick and easy evaluation on the test bench.

The EV kit contains a microcontroller (MCU) that translates between the SPI interface and USB to allow the user to configure internal registers and modes with graphical user interface (GUI) software running on a PC. The EV kit includes Windows<sup>®</sup> 10-compatible software that provides a simple GUI for configuration of all the MAX9972 registers through SPI. The EV kit is fully assembled and tested at the factory.

This document includes the <u>MAX9972 EV Kit Bill of</u> <u>Materials</u>, a list of equipment required to evaluate the device, a straightforward test procedure to verify functionality, a description of the EV kit circuit, <u>MAX9972 EV Kit</u> <u>Schematic Diagrams</u>, and <u>MAX9972 EV Kit PCB Layout</u> <u>Diagrams</u>.

#### **Features**

- Easy Evaluation of MAX9972 Quad-Channel DCL and PMU Switches
- On-Board MAX5734 2-Channel, 16-Bit DAC
- On-Board MAX32625 Pico Board
- Includes Heatsink
- On-Board Voltage Regulators
- USB Interface
- Headers for External SPI Interface
- Proven PCB Layout
- Fully Assembled and Tested

#### Ordering Information appears at end of data sheet.

Windows is a registered trademark and registered service mark of Microsoft Corporation.

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#### **Quick Start**

#### **Required Equipment**

This section lists the recommended test equipment to verify operation of the MAX9972. It is intended as a guide only and some substitutions are possible.

- MAX9972 EV kit
- A user-supplied Windows 10-compatible PC with a spare USB 2.0 port
- Dual-output DC power supply
  - +8V/500mA
  - -5V/500mA
- Function/pulse generator (recommend high speed up to 250MHz)
- High-speed oscilloscope (recommend 1GHz bandwidth)
- Digital multimeter
- SMA/SMA cable as needed for connection to the equipment

#### **Software and Drivers**

The MAX9972 EV kit is used in conjunction with the Arm® Cortex® M4 processor with FPU, MAX32625PICO application platform or PICO board to provide power and control the device through a software application or GUI. Users also have the option to connect SPI through their system with J1 header on the EV kit.

#### Install the MAX9972 EV Kit GUI Software

This process takes less than 10 minutes after downloading the software package.

- Download the MAX9972 EV kit software from <u>www.maximintegrated.com/evkit-software</u>, run the installation file, and install the GUI package.
- Run the GUI program.

#### Powering the MAX9972 EV Kit

- Set the DC supply to +8V and connect (through an ammeter if desired) to the headers (VCC) and ground (GND) on the EV kit. Do not turn on the supply.
- Set the DC supply to -5V and connect (through an ammeter if desired) to the headers (VEE) and ground (GND) on the EV kit. Do not turn on the supply.



- There are on-board linear regulators to power the MAX9972 VL and VCTV and the MAX5734 32-channel DAC, connect jumpers in default position, as shown in Table 1 and Table 2.
- Verify that the heatsink is installed and flush on the top of the MAX9972 IC.

#### Procedure

This section provides a step-by-step guide to operating the EV kit and testing the device functions.

Caution: Do not turn on the DC power or function generator until all connections are completed. Connect all power-supply grounds to a single ground terminal.

- Set the function generator to output peak-to-peak amplitude of 500mV with offset +250mV. Ensure that the outputs are disabled (high impedance). Set the square wave frequency to 20MHz, 50% duty cycle.
- 2) Connect the function generator output to the DATA1 SMA connector on the MAX9972 EV kit with a SMA cable.
- 3) Set the RCV1 to a  $50\Omega$  terminator to disable the high-impedance output mode.
- 4) Connect the DUT1 SMA connector of the MAX9972

EV kit with a short SMA cable to the high-speed oscilloscope. Set the scope input impedance to  $50\Omega$ .

- 5) Verify the correct polarity, voltage, and current limit of all power supplies. Turn on the power supplies and function generator.
- 6) Connect the PC to the on-board MAX32625 PICO microcontroller module on the EV kit using the provided USB cable.
- 7) Select the COM port and click on the **Connect** button. The MAX9972 GUI should indicate EV kit connected in the status bar (outlined in blue), as shown in Figure 2.
- 8) Put the EV kit into drive mode by setting register values as shown on the Channel 1 tab, as shown in <u>Figure 1</u>. In this mode, VDH Level Voltage is set to 3.00 and VDL Level Voltage is set to 0.00 for Channel 1.
- 9) Click on the **Write Ch1** button to write the data into the MAX9972 and MAX5734 registers.
- 10) Set the oscilloscope to trigger on the DUT1 channel, with the trigger level set to 0.5V. Set the time base to 20ns per division. A 0 to 1.5V square wave of 20MHz should appear on the oscilloscope.

inannel 1	Observatio	Observal 0	Observald	Olahal	Desistan	
onameri	Channel 2	Channel 3	Channel 4	Global	Registers	
DAC Setting	JS	Offset Voltag	e = 0.00V	Driver		Control
VDH Lev	vel 0x8CCD	Voltage	3.00 +	Auto	matic 👅 Manual	Load Enable Low
VDL Lev	el 0x4000	Voltage	0.00 +	Coutput		
VDT Lev	ox599A	Voltage	1.00 +	Drive to	VDH/VDL/HiZ	Load Enable High
VCH Lev	0x4000	Voltage	0.00 +			
VCL Lev	el 0x4000	Voltage	0.00 +	Control		Sense Enable
VLD Lev	el 0x4000	Voltage	0.00 +	TERM		
		Write	DACs	LLEAK	S	Force Enable
nsolo						Write Ch1
6:52 PM Write Dat 6:52 PM Write Dat 6:52 PM Write Dat 6:52 PM Write Dat 6:52 PM Write Dat	a 0x4000 to register CH a 0x0002 to MAX9972 a 0x4000 to register AL a 0x4000 to register AL a 0x4000 to register AL	H4 VLD(0x03) CH4 Control(0x08) L COMPLO(0x01) L COMPHI(0x00) L Offset(0x20)				

Figure 1. MAX9972 EV Kit Software Main Window (Ch1 Tab)

#### **Detailed Description**

#### **Detailed Description of Software**

The MAX9972 GUI is organized into six tabs for all level setting registers and control signal settings, plus the **File** menu to save and load all these settings. There are identical tabs that control the four channels of the MAX9972. The **Global** tab contains level-setting DAC controls shared across all four channels. The **Registers** tab consists of all the user registers in the MAX9972 and MAX5734.

#### **Channel Tab**

Channel 1, Channel 2, Channel 3, and Channel 4 are identical and control each of the MAX9972 channels independently. These tabs contain **Level-Setting DACs** and **Channel Control**, as shown in <u>Figure 2</u>. After setting DAC levels and control signals, click on the **Write Ch**\_button to load data into the MAX9972 device through the SPI interface.



Figure 2. MAX9972 EV Kit Software Window (Level-Setting DACs and Control Register)

#### Level-Setting Channel DACs

The Level Setting Channel DACs group box contains signal level registers for VDH, VDL, VDT, VCH, VCL, and VLD level settings. Each voltage level can be set by entering value either in voltage box or hexadecimal box. Finer adjustment can be made by clicking on the +/- sign of the Voltage box. The VDHV, VDLV, VDTV, VCHV, VCLV, and VLDV voltage have 65,536 steps corresponding to 16 bits.

	About					
Channel 1 Channel 2	Channel 3 Channel	4 Global	Registers			
Global DAC Settings • COMPHI Level 0x4000 • COMPLO Level 0x4000 Calibration • Offset Level 0x4000	Offset Voltage = 0.00V Voltage 0.00 + Voltage 0.00 + Write DACs Voltage 0.00 + Write DACs					
nsole 16:52 PM Write Data 0x4000 to register CI 16:52 PM Write Data 0x0002 to MAY9973	14 VLD(0x03) CH4 Control(0x08)			 Write	All	

Figure 3. MAX9972 EV Kit Software Window (Level-Setting Channel DACs)

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#### **Channel Control Register**

Channel control register is a combination of **Driver** and **Control** group boxes.

Driver output is chosen by setting the **Automatic** or **Manual t**oggle button in the **Driver** group box. In automatic mode, driver output is selected from the **Output** drop-down box. In manual mode, driver output is selected based on the **Control** group box settings.

Passive load can be enabled or disabled with the **Load Enable Low** and **Load Enable High** check boxes. PMU switches can be enabled or disabled with **Sense Enable** and **Force Enable** check boxes.

#### **Global Tab**

The **Global** tab sheet (Figure 3) contains **Global DACs Settings** and **Offset Voltage** settings. **COMPHI Level** and **COMPLO Level** DAC's voltage level can be set by entering value either in the **Voltage** box or in the hexadecimal box. Offset level of the DAC can be set by entering value either in the **Voltage** box or in the hexadecimal box.

#### **Registers Tab**

There are two methods for configuring the MAX9972 and MAX5734 devices. The first method is through the graphical user interface as shown in Figure 2. The second method is through the **Registers** tab as shown in Figure 4. The **Registers** tab allows execution of serial commands manually. The **Registers** tab can also be used as a debug tool because it is capable of writing to every register of the MAX9972 and MAX5734.



Figure 4. MAX9972 EV Kit Software Window (Register Tab)

#### **Detailed Description of Hardware**

The MAX9972 evaluation kit is a fully assembled and tested PCB that evaluates the MAX9972 quad-channel, ultra-low power pin electronic driver, comparator, passive load, and PMU switches. The EV kit includes SMA connectors for the high-speed digital I/Os. The MAX9972 EV kit is connected to a computer through the universal serial bus (USB) port.

#### **Power Supplies**

Connect the power supplies using the high-current banana jacks, VEE (-5V) and VCC (8V). The GND banana jack on the MAX9972 EV kit is common for all the power supplies. All power supplies should be within the range specified in the MAX9972 IC data sheet. The MAX9972 EV kit needs only two supplies to be connected to the board; all other supplies are generated through regulators on the EV kit.

#### **High-Speed Digital I/Os**

The top edge and the bottom edge of the PCB are populated with edge-launch SMA connectors and are the high-speed digital I/Os of the MAX9972. It is recommended that the CMPH\_ and CMPL\_ outputs are connected to  $50\Omega$  terminated oscilloscope/logic analyzer at the end of the attached cable.

The high-speed digital inputs (DATA\_ and RCV\_) are intended for use with a high-speed, single-ended signal source. The high-speed digital outputs (CMPH\_/CMPL\_) are intended for use with a high-speed differential logic analyzer. These outputs can be double terminated at the measurement source by external  $50\Omega$  resistors.

#### **Pin Driver Outputs**

The quad-pin driver output pins (DUT\_) are accessed through the edge launch SMA connectors, located on the right edge of the PCB. The outputs have a typical output impedance of  $50\Omega$ .

#### **Test Points**

There are test points on the EV kit to facilitate performance analysis and circuit modification. The test points are listed in Table 3.

#### **Device Ground Sense**

The MAX5734 IC can sense the ground potential at the device under test (DUT). The MAX5734 is preconfigured to have the device ground sense pin (DGS) connected to the ground plane through a  $0\Omega$  resistor (R9). If remote sensing is desired, remove R9 and connect DGS pin to the remote DUT ground.

#### **Temperature Sensing**

The MAX9972 EV kit provides the means to determine the MAX9972 IC's die temperature through the TEMP test point. During operation, continuously monitor the TEMP pin to ensure that the junction temperature does not exceed +150°C, which corresponds with +4.2V. During normal operation, a voltage of 3V to 3.6V is typical. The MAX9972 GUI provides another way to monitor die temperature.

#### **Jumper Settings**

Tables 1, 2 and 3 provide a list for jumper settings.

JUMPER	SHUNT POSITION	DESCRIPTION
12	1-2*	Connects VEE to the negative power-supply input banana jack
JZ	Open†	Disconnects VEE from the negative input power supply
12	1-2*	Connects VCC to the positive power-supply input banana jack
55	Open†	Disconnects VCC from the positive input power supply
14	Open*	Disconnects EP from GND
54	1-2	Connects EP to GND

#### **Table 1. Power Supplies Jumper Settings**

\*Indicates default jumper state.

+Connect the power supply through ammeter to monitor supply current.

#### JUMPER SHUNT POSITION DESCRIPTION 1-2\* Connects channel 1 DHV to MAX5734 DAC output DHV1 Open Disconnects channel 1 DHV from MAX5734 DAC output 1-2\* Connects channel 1 DLV to MAX5734 DAC output DLV1 Open Disconnects channel 1 DLV from MAX5734 DAC output 1-2\* Connects channel 1 DTV to MAX5734 DAC output DTV1 Disconnects channel 1 DTV from MAX5734 DAC output Open 1-2\* Connects channel 1 CHV to MAX5734 DAC output CHV1 Open Disconnects channel 1 CHV from MAX5734 DAC output 1-2\* Connects channel 1 CLV to MAX5734 DAC output CLV1 Disconnects channel 1 CLV from MAX5734 DAC output Open 1-2\* Connects channel 1 LDV to MAX5734 DAC output LDV1 Disconnects channel 1 LDV from MAX5734 DAC output Open 1-2\* Connects COMPHI to MAX5734 DAC output COMPHI Disconnects COMPHI from MAX5734 DAC output Open 1-2\* Connects COMPLO to MAX5734 DAC output COMPLO Open Disconnects COMPLO from MAX5734 DAC output 1-2\* Connects channel 2 DHV to MAX5734 DAC output DHV2 Open Disconnects channel 2 DHV from MAX5734 DAC output 1-2\* Connects channel 2 DLV to MAX5734 DAC output DLV2 Open Disconnects channel 2 DLV from MAX5734 DAC output 1-2\* Connects channel 2 DTV to MAX5734 DAC output DTV2 Open Disconnects channel 2 DTV from MAX5734 DAC output 1-2\* Connects channel 2 CHV to MAX5734 DAC output CHV2 Open Disconnects channel 2 CHV from MAX5734 DAC output 1-2\* Connects channel 2 CLV to MAX5734 DAC output CLV2 Open Disconnects channel 2 CLV from MAX5734 DAC output 1-2\* Connects channel 2 LDV to MAX5734 DAC output LDV2 Open Disconnects channel 2 LDV from MAX5734 DAC output 1-2\* Connects channel 3 DHV to MAX5734 DAC output DHV3 Open Disconnects channel 3 DHV from MAX5734 DAC output 1-2\* Connects channel 3 DLV to MAX5734 DAC output DLV3 Open Disconnects channel 3 DLV from MAX5734 DAC output 1-2\* Connects channel 3 DTV to MAX5734 DAC output DTV3 Disconnects channel 3 DTV from MAX5734 DAC output Open 1-2\* Connects channel 3 CHV to MAX5734 DAC output CHV3 Disconnects channel 3 CHV from MAX5734 DAC output Open 1-2\* Connects channel 3 CLV to MAX5734 DAC output CLV3 Open Disconnects channel 3 CLV from MAX5734 DAC output

#### **Table 2. Digital Interface Jumper Settings**

JUMPER	SHUNT POSITION	DESCRIPTION			
	1-2*	Connects channel 3 LDV to MAX5734 DAC output			
LDV3	Open	Disconnects channel 3 LDV from MAX5734 DAC output			
	1-2*	Connects channel 4 DHV to MAX5734 DAC output			
DHV4	Open	Disconnects channel 4 DHV from MAX5734 DAC output			
	1-2*	Connects channel 4 DLV to MAX5734 DAC output			
DLV4	Open	Disconnects channel 4 DLV from MAX5734 DAC output			
	1-2*	Connects channel 4 DTV to MAX5734 DAC output			
DTV4	Open	Disconnects channel 4 DTV from MAX5734 DAC output			
	1-2*	Connects channel 4 CHV to MAX5734 DAC output			
CHV4	Open	Disconnects channel 4 CHV from MAX5734 DAC output			
C1)/4	1-2*	Connects channel 4 CLV to MAX5734 DAC output			
GLV4	Open	Disconnects channel 4 CLV from MAX5734 DAC output			
	1-2*	Connects channel 4 LDV to MAX5734 DAC output			
LDV4	Open	Disconnects channel 4 LDV from MAX5734 DAC output			

#### Table 2. Digital Interface Jumper Settings (continued)

\*Indicates default jumper state.

### **Table 3. Test Points and Their Functions**

TEST POINT	DESCRIPTION
RSTB	Active-Low Serial-Port Reset Input
LOADB	Active-Low Serial-Port Load Input
CSB	Active-Low Serial-Port Chip-Select Input for MAX9972
SCLK	Serial-Port Clock Input
DIN	Serial-Port Data Input
DOUT	Serial-Port Data Output
CS_DAC	Active-Low Serial-Port Chip-Select Input for MAX5734 32-Channel DAC
DSP	Digital Serial-Interface Select Input
TEMP	Temperature Sensor Output
SENSE1	Channel 1 PMU Sense Connection
FORCE1	Channel 1 PMU Force Connection
PMU1	Channel 1 Parametric Measurement Connection
SENSE2	Channel 2 PMU Sense Connection
FORCE2	Channel 2 PMU Force Connection
PMU2	Channel 2 Parametric Measurement Connection
SENSE3	Channel 3 PMU Sense Connection
FORCE3	Channel 3 PMU Force Connection
PMU3	Channel 3 Parametric Measurement Connection
SENSE4	Channel 4 PMU Sense Connection
FORCE4	Channel 4 PMU Force Connection
PMU4	Channel 4 Parametric Measurement Connection

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### **Ordering Information**

PART	ТҮРЕ
MAX9972EVKIT#	EV Kit

#Denotes RoHS compliance.

#### MAX9972 EV Kit Bill of Materials

ITEM	REF_DES	QTY	MFG PART #	MANUFACTURER	VALUE	DESCRIPTION
1	C1-C17	17	C1608C0G1H103J080AA; CGA3E2C0G1H103J080AD; GRM1885C1H103JA01	TDK; TDK; MURATA	0.01UF	CAP; SMT (0603); 0.01UF; 5%; 50V; C0G; CERAMIC
2	C18, C21, C23-C25, C27	6	GCJ188R71H104KA12; GCM188R71H104K; CGA3E2X7R1H104K080AA; CGA3E2X7R1H104K080AD; CL10B104KB8WPN	MURATA; MURATA; TDK; TDK; SAMSUNG	0.1UF	CAP; SMT (0603); 0.1UF; 10%; 50V; X7R; CERAMIC
3	C19, C20, C26, C29-C32	7	UMK107BJ105KA; C1608X5R1H105K080AB; CL10A105KB8NNN; GRM188R61H105KAAL	TAIYO YUDEN; TDK; SAMSUNG; MURATA	1UF	CAP; SMT (0603); 1UF; 10%; 50V; X5R; CERAMIC
4	C22, C28	2	C1608X5R1E106M080AC; CL10A106MA8NRNC; GRM188R61E106MA73; ZRB18AR61E106ME01; GRT188R61E106ME13	TDK; SAMSUNG ELECTRONICS; MURATA;; MURATA	10UF	CAP; SMT (0603); 10UF; 20%; 25V; X5R; CERAMIC
5	CHV1-CHV4, CLV1-CLV4, COMPHI, COMPLO, DHV1-DHV4, DLV1-DLV4, DTV1-DTV4, J2-J4, LDV1-LDV4	29	PEC02SAAN	SULLINS	PEC02SAAN	CONNECTOR; MALE; THROUGH HOLE; BREAKAWAY; STRAIGHT; 2PINS
6	CMPH1-CMPH4, CMPL1-CMPL4, DATA1-DATA4, DUT1-DUT4, RCV1-RCV4	20	142-0701-851	JOHNSON COMPONENTS	142-0701-851	CONNECTOR; END LAUNCH JACK RECEPTACLE; BOARDMOUNT; STRAIGHT THROUGH; 2PINS;
7	GND, VCC, VEE	3	3267	POMONA ELECTRONICS	3267	CONNECTOR; MALE; PANELMOUNT; STANDARD UNINSULATED BANANA JACK; STRAIGHT; 1PIN
8	GND2	1	5012	KEYSTONE	N/A	TEST POINT; PIN DIA=0.125IN; TOTAL LENGTH=0.445IN; BOARD HOLE=0.063IN; WHITE; PHOSPHOR BRONZE WIRE SILVER PLATE FINISH;
9	J1	1	PEC10DAAN	SULLINS ELECTRONICS CORP	PEC10DAAN	CONNECTOR; MALE; THROUGH HOLE; BREAKAWAY; STRAIGHT; 20PINS
10	J16, J51	2	PBC10SAAN	SULLINS ELECTRONICS CORP	PBC10SAAN	CONNECTOR; MALE; THROUGH HOLE; BREAKAWAY; STRAIGHT; 10PINS; -65 DEGC TO +125 DEGC

### Evaluates: MAX9972

## MAX9972 EV Kit Schematic Diagrams (continued)

ITEM	REF_DES		QTY	MFG PART #	MANUFACTURER	VALUE	DESCRIPTION	
11	L2, L3		2	DFE252012F-100M	MURATA	10UH	INDUCTOR; SMT (1008); SHIELDED; 10UH; 20%; 0.95A	
12	MH1-MH4		4	9032	KEYSTONE	9032	MACHINE FABRICATED; ROUND-THRU HOLE SPACER; NO THREAD; M3.5; 5/8IN; NYLON	
13	R1		1	CRCW06031M69FK	VISHAY DALE	1.69M	RES; SMT (0603); 1.69M; 1%; +/-100PPM/DEGK; 0.1000W	
14	R2		1	CRCW06031M20FK	VISHAY DALE	1.2M	RES; SMT (0603); 1.2M; 1%; +/-100PPM/DEGC; 0.1000W	
15	R8		1	CRCW06031K00FK; ERJ-3EKF1001; CR0603AFX-1001ELF	VISHAY; Panasonic; Bourns	1K	RES; SMT (0603); 1K; 1%; +/-100PPM/DEGC; 0.1000W	
16	R9		1	CRCW06030000ZS; MCR03EZPJ000; ERJ-3GEY0R00; CR0603AJ/-000ELF	VISHAY; ROHM SEMICONDUCTOR; PANASONIC;BOURNS	0	RES; SMT (0603); 0; JUMPER; JUMPER; 0.1000W	
17	U1		1	MAX40026ATA+	MAXIM	MAX40026ATA+	IC; COMP; 280PS HIGH-SPEED COMPARATOR; ULTRA-LOWDISPERSION WITH LVDS OUTPUTS; TDFN8-EP	
18	U2		1	MAX32625PICO	MAXIM	MAX32625PICO	MODULE; BOARD; MAX32625PICO BOARD DESIGN FOR MAX32625 ARM CORTEX-M4F; BOARD; LAMINATED PLASTIC WITH COPPER CLAD;	
19	U3		1	MAX1735EUK30+	MAXIM	MAX1735EUK30+	IC; VREG; NEGATIVE-OUTPUT LOW-DROPOUT LINEAR REGULATOR; SOT23-5	
20	U4, U8		2	MAX1726EUK50+	MAXIM	MAX1726EUK50+	IC; VREG; ULTRA-LOW IQ LOW-DROPOUT LINEAR REGULATOR; SOT23-5	
21	U5		1	MAX1725EUK+	MAXIM	MAX1725EUK+	IC; REG; 12V; ULTRA-LOW IQ; LOW-DROPOUT LINEAR REGULATOR; SOT23-5	
22	U6		1	MAX5734AUTN+	MAXIM	MAX5734AUTN+	IC; DAC; 32-CHANNEL; 16-BIT; +/-8 MAX INL; VOLTAGE-OUTPUT DAC WITH SERIAL INTERFACE; TQFN56-EP 8X8	
23	U7		1	MAX6126AASA30+	MAXIM	MAX6126AASA30+	IC; VREF; VOLTAGE REFERENCE; NSOIC8	
24	U9		1	MAX9972ACCS+	MAXIM	MAX9972ACCS+	IC; DRV; QUAD ULTRA-LOW-POWER 300MBPS ATE DRIVER/COMPARATOR; TQFP80-EP 12X12	
25	Z1		1	10-6327-01G	AAVID	10-6327-01G	MACHINE FABRICATED; Q-PUSHPIN; 28.5MMX28.5MMX10MM; BGA SPRING TYPE; BLACK ANNODIZED ALUMINUM	
26	PCB		1	MAX9972	MAXIM	PCB	PCB:MAX9972	
27	MISC1	DNI	1	3025010-03	QUALTEK ELECTRONICS CORP	3025010-03	CONNECTOR; MALE; USB-A_MINI-B; USB 4P(A)/M - USB MINI 5P(B)/M; STRAIGHT; 36IN	
T01	AL		110					

### Evaluates: MAX9972



# MAX9972 EV Kit Schematic Diagrams



### MAX9972 EV Kit Schematic Diagrams (continued)



### MAX9972 EV Kit PCB Layout Diagrams

MAX9972 EV Kit PCB Layout—Top Silkscreen

### Evaluates: MAX9972



MAX9972 EV Kit PCB Layout—Top View



MAX9972 EV Kit PCB Layout—Internal 2 (Ground)



MAX9972 EV Kit PCB Layout—Internal 3 (VCC)



MAX9972 EV Kit PCB Layout—Internal 4 (VEE)



MAX9972 EV Kit PCB Layout—Internal 5 (VDD)



MAX9972 EV Kit PCB Layout—Bottom View



MAX9972 EV Kit PCB Layout—Silkscreen Bottom

#### Evaluates: MAX9972

#### **Revision History**

REVISION	REVISION	DESCRIPTION	PAGES
NUMBER	DATE		CHANGED
0	12/20	Release for market intro	—

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