

MAX22520 Evaluation Kit

Evaluates: MAX22520

General Description

The MAX22520 evaluation kit (EV kit) is a fully assembled and tested circuit board that evaluates the MAX22520 OTP programmable digital output (DO).

The EV kit includes Windows®-compatible software that provides a graphical user interface (GUI) for exercising the test and programming features of the MAX22520. The EV kit is connected to a PC through a USB-A-to-micro-B cable.

Features

- OTP Programmable Digital Output (DO)
- 1-Wire Interface Terminals
- Windows 10-Compatible Software
- USB-PC Connection
- Proven PCB Layout
- Fully Assembled and Tested

[Ordering Information](#) appears at end of data sheet.

Quick Start

Recommended Equipment

- MAX22520 EV kit (USB-A-to-micro-B cable included)
- User-supplied Windows 10 PC with a spare USB port
- 24V, 1A DC power supply
- Two multimeters/voltmeters

Note: In the following sections, software-related items are identified by bolding. Text in **bold** refers to items directly from the EV kit software. Text in **bold and underlined** refers to items from the Windows operating system.

Procedure

The EV kit is fully assembled and tested. Follow the steps below to verify board operation before exercising the full features of the device:

- 1) Visit www.maximintegrated.com/evkitsoftware to download the latest version of the EV kit software, **MAX22520EVKITSetupVx.xx.ZIP**. Save the EV kit software to a temporary folder and uncompress the ZIP file.
- 2) Install the EV kit software and USB driver on your computer by running the **MAX22520EVKITSetupVx.xx.EXE** program inside the temporary folder. The program files are copied to your PC and icons are created in the Windows **Start | Programs | Maxim Integrated** menu. During software installation, some versions of Windows can show a warning message indicating that this software is from an unknown publisher. This is not an error condition and it is safe to proceed with installation. Administrator privileges are required to install the USB device driver on Windows.

Windows is registered trademark of Microsoft Corporation.

- 3) Verify that all the jumpers are in their default positions, as shown in [Table 1](#).
- 4) Connect one multimeter to the VCC testpoint (TP1).
- 5) Connect the other multimeter to the VLDO testpoint (TP2).
- 6) Connect the USB cable from the PC to the EV kit board. A Windows message appears when connecting the EV kit.
- 7) Start the EV kit software by opening its icon in the Windows **Start | Programs | Maxim Integrated** menu.
- 8) Click on the **Device** menu and select **Connect** to connect to the board. Verify that **Status: MAX22520 EV Kit Connected** is displayed on the status bar at the bottom right of the main window ([Figure 1](#)). Note that the voltage on the VCC test point is 0V (typ) when the board is connected.
- 9) Select the **Test Mode** radio button and click on the **Enter Test Mode** button to set the device into test mode. On-board LEDs turn off and on as the device enters test mode. The VCC test point is 14.8V (typ) when the device is in test mode and ready for evaluation. Verify that **OTP Ready for Test Mode Evaluation** is displayed in the bottom right of the main window.
- 10) Default register values are unknown in test mode when OTP is not programmed. Select the **3.3V** radio button in the **VLDO** box and click on the **Write Registers** button. Verify that the voltage on the VLDO test point is 3.3V (typ).
- 11) Select the **5V** radio button in the **VLDO** box and click on the **Write Registers** button. Verify that the voltage on the VLDO test point changes to 5V (typ).

Detailed Description of Software

Configuring the Registers in Test Mode

Once the EV kit is connected, select **Test Mode** to access the MAX22520 in OTP test mode. The EV kit software provides two ways to access the OTP registers when the device is in test mode: the **OTP** tab and the **Registers** tab.

In the **OTP** tab ([Figure 1](#)), use the drop-down menus, counters, and radio buttons to enable/disable functionality and set desired thresholds. Press the **Write Registers** button to write values to all of the registers in both OTP

banks (C1 and C2). Press the **Read Registers** button to read all registers in both banks.

The **Registers** tab includes a tabular listing of available registers and bits ([Figure 2](#)). Click on a register name in the left register table to access the individual bits in that register. When the register name is selected in the register table, the right register table shows the individual bits for that register. Click on the drop-down menu next to each bit in the lower table to select the bit setting. When all of the bits are set as desired, click on the **Write Registers** button to write the selected bit settings to the OTP registers.

Burn Mode

Select **Burn Mode** in the **Mode Select** box after the MAX22520 has entered test mode and the desired register values have been written to the device. Click on the **Verify Burn Ready** button to verify that the C1 and C2 banks are ready for OTP burn. Once the GUI has verified that the MAX22520 is ready to program, click on the **OTP Bank 1 Burn** or **OTP Bank 2 Burn** button to program the desired OTP registers.

Note that Bank C1 and Bank C2 must be programmed separately. After a bank is programmed, the VCC voltage on the MAX22520 EV kit drops to 0V and the part must be accessed in test mode again. Repeat the burn process for the unprogrammed bank.

Detailed Description of Hardware

The MAX22520 EV kit includes the MAX22520 OTP programmable digital output (DO) and the external components for writing to and evaluating the device. All logic-level I/Os and the digital output are available on yellow test points.

1-Wire Interface

The MAX22520 is 1-Wire OTP programmable using the VCC, DO, and GND pins. The MAX22520 EV kit uses the FT2232 USB-to-I²C transceiver to communicate with the PC and the DS2484 1-Wire master to communicate with the MAX22520.

Close the J2 and J3 jumpers on the MAX22520 EV kit for 1-Wire communication with the MAX22520. Remove the shunts on J2 and J3 to evaluate the part after the part has been programmed and the **Exit Test Mode** button on the GUI has been pressed, or after OTP programming.

1-Wire is a registered trademark of Maxim Integrated Products, Inc..

Power

On-Board Power Supplies

The MAX22520 EV kit includes the power circuitry required to evaluate the device in test mode and for programming the OTP registers. Close the J3 jumper to power the MAX22520 using the on-board supplies.

The MAX8880 low-dropout linear regulator generates the 4V (typ) needed to enter test mode. After the **Enter Test Mode** button is pressed, the MAX22520 is connected to this supply.

The MAX17062 DC-DC circuit generates 15V (typ). The V_{CC} input of the MAX22520 is connected to this voltage after the device has successfully entered test mode.

Evaluating the EV Kit with an External Supply

To evaluate the MAX22520 in test mode with a V_{CC} voltage other than 15V use the on-board power circuitry to set the device in test mode. After the IC is in test mode, set an external power supply to 15V and connect it to the open J3 jumper and change the voltage of the external supply to the desired V_{CC} voltage.

Click on the **Exit Test Mode** button and remove the J2 jumper to evaluate DO functionality after the OTP registers have been programmed.

Digipot (RT, WP, RB)

The MAX22520 features an integrated digipot. Place a shunt on the J4 jumper to connect RT to V_{LDO} . Place a shunt on the J8 jumper to connect RB to ground. Remove the shunts on J4 and J8 to connect RT and RB to other voltages, respectively. Ensure that $V_{RT} > V_{RB}$ and $V_{RT} \leq V_{LDO}$ when using external voltages for the digipot.

Open-Drain Logic Outputs (LO1, LO2, LO3)

The MAX22520 includes three configurable open-drain logic outputs, LO1, LO2, and LO3. Each logic output on the EV kit is connected to a current-limiting resistor and LED for visual feedback. Program the logic outputs (LO_) by selecting the required function from a drop-down menu (LO1 and LO2), or selecting the desired radio button (LO3). Click on the **Write Registers** button to program the OTP registers in the GUI.

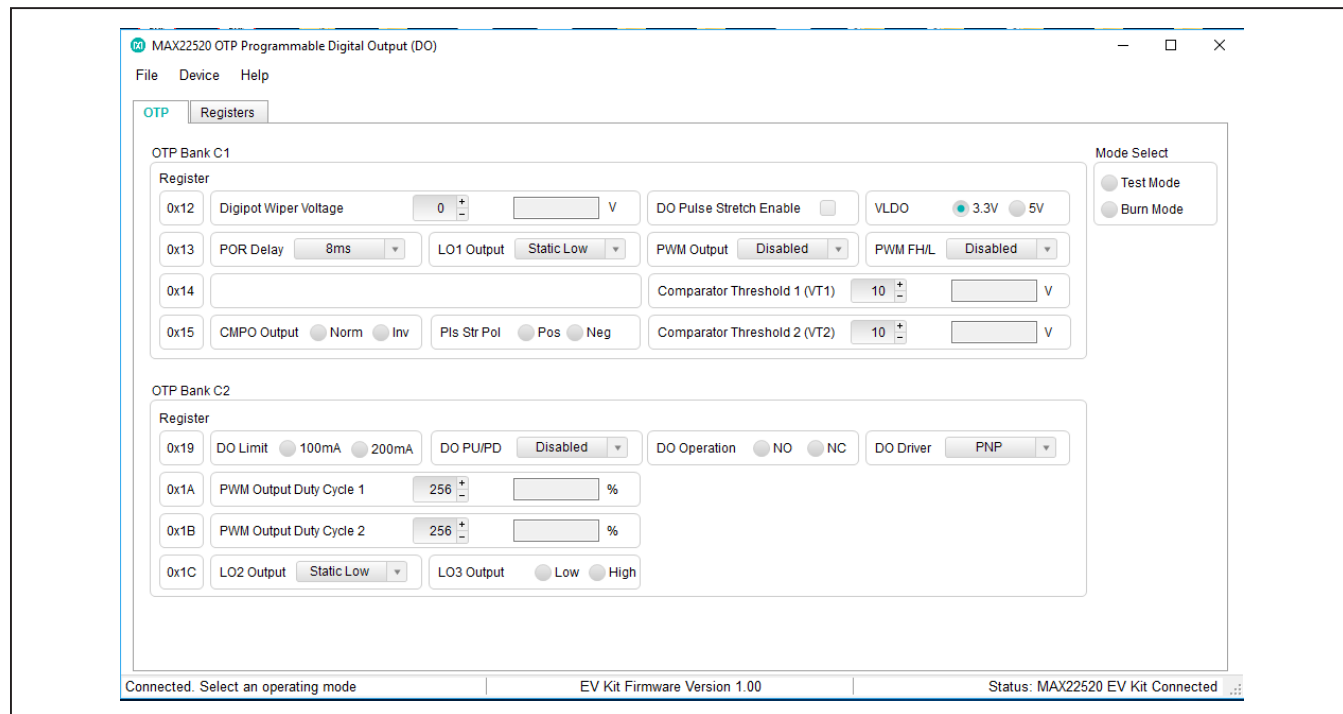


Figure 1. MAX22520 EV Kit Software, EV Kit is Connected

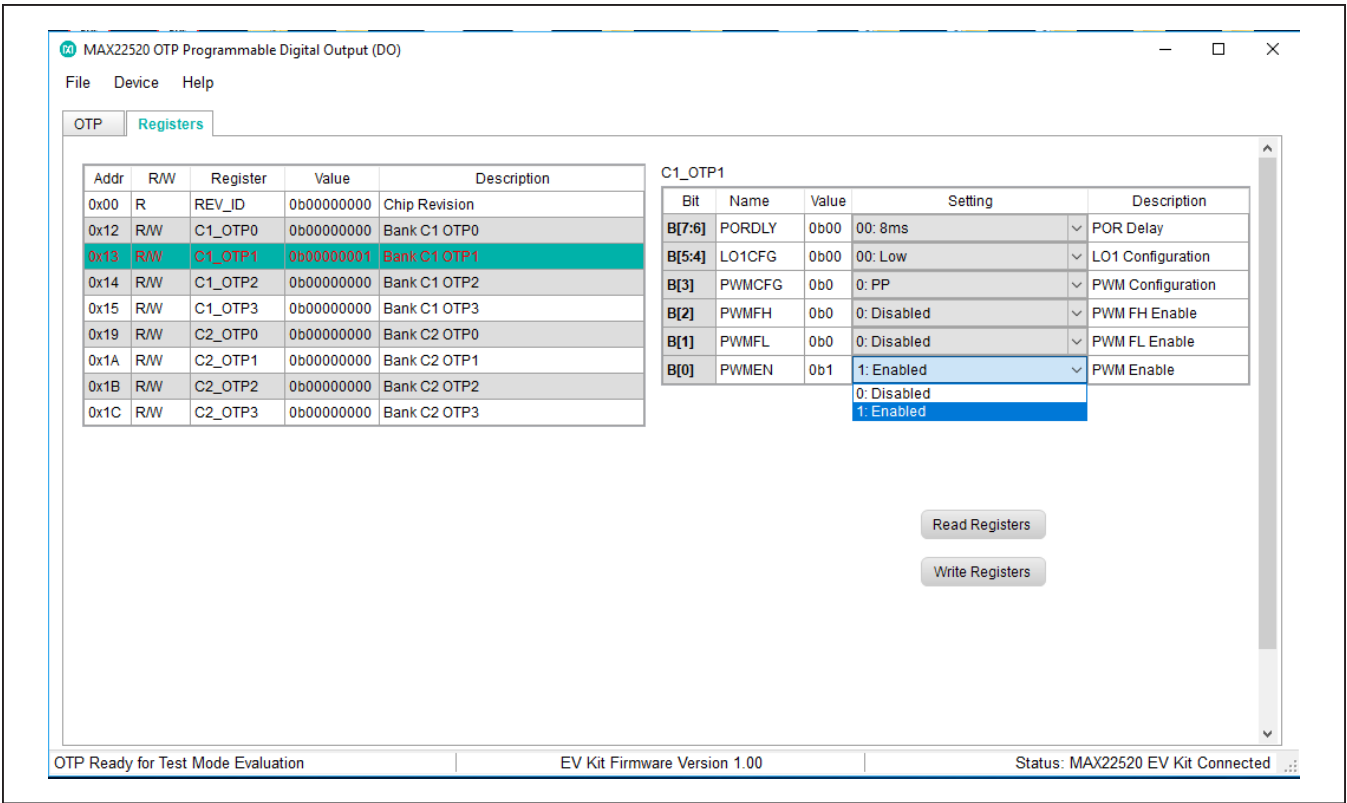


Figure 2. MAX22520 EV Kit Software, Interrupt Received

Table 1. Jumper Descriptions

JUMPER	SHUNT POSITON	DESCRIPTION
J2	Open	The on-board 1-Wire transceiver is not connected to DO.
	Closed*	The on-board 1-Wire transceiver is connected to DO. Use this configuration to access OTP registers.
J3	Open	The MAX22520 is not connected to the on-board power supplies.
	Closed*	The MAX22520 is connected to the on-board power supplies. Use this configuration to access OTP registers.
J4	Open	RT is not connected to V_{LDO} .
	Closed*	RT is connected to V_{LDO} .
J5	Open*	REGEN is unconnected.
	Closed	REGEN is connected to ground.
J6	Open	AIN is not connected to the on-board potentiometer (R21).
	Closed*	AIN is connected to the on-board potentiometer (R21).
J7	Open*	DO is not connected to an LED.
	Closed	DO is connected to an LED.
J8	Open	RB is not connected to ground.
	Closed*	RB is connected to ground.
J11	Open*	PWM output is not connected to an LED.
	Closed	PWM output is connected to an LED.

*Default position.

Ordering Information

PART	TYPE
MAX22520EVKIT#	EV Kit

#Denotes RoHS-compliance.

MAX22520 EV Kit Bill of Materials

ITEM	REF_DES	DNI/DNP	QTY	MFG PART #	MANUFACTURER	VALUE	DESCRIPTION
1	C1	-	1	NMC0402X7R103K16TRP; GRM155R71C103KA01; CC0402KRX7R7BB103; C0402C103K4RACAUTO	NIC COMPONENTS CORP.; MURATA;YAGEO; KEMET	0.01UF	CAPACITOR; SMT (0402); CERAMIC CHIP; 0.01UF; 16V; TOL=10%; MODEL=; TG=-55 DEGC TO +125 DEGC; TC=X7R
2	C2, C5, C6, C8, C9, C12, C15-C18, C24, C38, C39	-	13	C0402C104J4RAC; GCM155R71C104JA55	KEMET;MURATA	0.1UF	CAPACITOR; SMT (0402); CERAMIC CHIP; 0.1UF; 16V; TOL=5%; MODEL=; TG=-55 DEGC TO +125 DEGC; TC=X7R
3	C3	-	1	CL21A106KQNNN; GRM21BR61C106KE15; EMK212ABJ106KD	SAMSUNG ELECTRONICS; MURATA;TAIYO YUDEN	10UF	CAPACITOR; SMT (0805); CERAMIC CHIP; 10UF; 16V; TOL=10%; TG=-55 DEGC TO +85 DEGC; TC=X5R
4	C4	-	1	C0805C226M9PAC; GRM21BR60J226ME39; JMK212BJ226MG; CL21A226MQCLQN	KEMET;MURATA; TAIYO YUDEN; SAMSUNG EL	22UF	CAPACITOR; SMT (0805); CERAMIC CHIP; 22UF; 6.3V; TOL=20%; TG=-55 DEGC TO +125 DEGC; TC=X5R
5	C7, C13, C14	-	3	C1005X5R1A475K050	TDK	4.7UF	CAPACITOR; SMT (0402); CERAMIC CHIP; 4.7UF; 10V; TOL=10%; TG=-55 DEGC TO +85 DEGC; TC=X5R
6	C10, C11	-	2	C1005C0G1H330J050BA; GRM1555C1H330JA01	TDK;MURATA	33PF	CAPACITOR; SMT; 0402; CERAMIC; 33pF; 50V; 5%; C0G; - 55degC to + 125degC; 0 +/- 30PPM/degC
7	C19, C20, C28	-	3	C0603C475K8PAC; LMK107BJ475KA;CGB3B1X5R1A4 75K;C1608X5R1A475K080AC;CL1 0A475KP8NNN	KEMET;TAIYO YUDEN;TDK; TDK;SAMSUNG ELECTRONICS	4.7UF	CAPACITOR; SMT (0603); CERAMIC CHIP; 4.7UF; 10V; TOL=10%; TG=-55 DEGC TO +85 DEGC; TC=X5R
8	C21, C22, C30, C32	-	4	C0603C105K4RAC; GRM188R71C105KA12;C1608X7R 1C105K080AC;EMK107B7105KA; GCM188R71C105KA64;CGA3E1X 7R1C105K080AC	KEMET;MURATA;TDK; TAIYO YUDEN;MURATA;TDK	1UF	CAPACITOR; SMT (0603); CERAMIC CHIP; 1UF; 16V; TOL=10%; MODEL=; TG=-55 DEGC TO +125 DEGC; TC=X7R
9	C23	-	1	EMK107BJ333KA	TAIYO YUDEN	0.033UF	CAPACITOR; SMT (0603); CERAMIC CHIP; 0.033UF; 16V; TOL=10%; MODEL=M SERIES; TG=-55 DEGC TO +85 DEGC; TC=X5R
10	C25, C26	-	2	C1608X5R1E106M080AC; CL10A106MA8NRNC;GRM188R61 E106MA73;ZRB18AR61E106ME01 ,GRT188R61E106ME13	TDK;SAMSUNG ELECTRONICS; MURATA;;MURATA	10UF	CAPACITOR; SMT (0603); CERAMIC CHIP; 10UF; 25V; TOL=20%; TG=-55 DEGC TO +85 DEGC; TC=X5R
11	C27	-	1	C0402C561K5GAC	KEMET	560PF	CAPACITOR; SMT (0402); CERAMIC CHIP; 560PF; 50V; TOL=10%; MODEL=C0G; TG=-55 DEGC TO +125 DEGC; TC=+/-
12	C29, C31	-	2	GCJ188R71H104KA12; GCM188R71H104K; CGA3E2X7R1H104K080AA	MURATA;MURATA;TDK	0.1UF	CAPACITOR; SMT (0603); CERAMIC CHIP; 0.1UF; 50V; TOL=10%; TG=-55 DEGC TO +125 DEGC; TC=X7R; AUTO
13	C33	-	1	C0603C102K5RAC; GRM188R71H102KA01; C0603X7R500-102KNE	KEMET;MURATA;VENKEL	1000PF	CAPACITOR; SMT; 0603; CERAMIC; 1000pF; 50V; 10%; X7R; - 55degC to + 125degC; +/-15% from - 55degC to +125degC
14	C34	-	1	CGA2B3X7R1H104K050BB; C1005X7R1H104K050BB;GRM155 R71H104KE14;GCM155R71H104K E02;C1005X7R1H104K050BE;UM K105B7104KV- FR;CGA2B3X7R1H104K050BE	TDK;TDK;MURATA; MURATA;TDK;TAIYO YUDEN;TDK	0.1UF	CAPACITOR; SMT (0402); CERAMIC CHIP; 0.1UF; 50V; TOL=10%; TG=-55 DEGC TO +125 DEGC; TC=X7R
15	C35	-	1	C0402C105K8PAC; CC0402KRX5R6BB105	KEMET;YAGEO	1UF	CAPACITOR; SMT (0402); CERAMIC CHIP; 1UF; 10V; TOL=10%; TG=-55 DEGC TO +85 DEGC; TC=X5R
16	C37	-	1	GRM1885C1H102JA01; C1608C0G1H102J080AA; GCM1885C1H102JA16	MURATA;TDK;MURATA	1000PF	CAPACITOR; SMT (0603); CERAMIC CHIP; 1000PF; 50V; TOL=5%; TG=-55 DEGC TO +125 DEGC
17	D1	-	1	CMS03	TOSHIBA	CMS03	DIODE; SCH; SCHOTTKY BARRIER RECTIFIER; 3-4E1A; PIV=30V; IF=3A; -40 DEGC TO +150 DEGC
18	D2	-	1	PLVA650A	NXP	5V	DIODE; ZNR; SMT (SOT-23); VZ=5V; IZ=0.00025A; PD=0.25W

MAX22520 EV Kit Bill of Materials (continued)

ITEM	REF_DES	DNI/DNP	QTY	MFG PART #	MANUFACTURER	VALUE	DESCRIPTION
19	D3	-	1	MBR230S1F-7	DIODES INCORPORATED	MBR230S1F-7	DIODE; RECT; SMT (SOD-123F); PIV=30V; IF=2A
20	DS1-DS6	-	6	LY L29K-J1K2-26	OSRAM	LY L29K-J1K2-26	DIODE; LED; SMARTLED; GREEN; SMT (0603); VF=1.8V; IF=0.002A
21	J1	-	1	105017-0001	MOLEX	105017-0001	CONNECTOR; FEMALE; SMT; MICRO-USB B RECEPTACLE; RIGHT ANGLE; 5PINS
22	J2-J8, J11	-	8	TSW-102-07-T-S	SAMTEC	TSW-102-07-T-S	CONNECTOR; THROUGH HOLE; TSW SERIES; SINGLE ROW; STRAIGHT; 2PINS; -55 DEGC TO +105 DEGC
23	J9	-	1	1727010	PHOENIX CONTACT	1727010	CONNECTOR; FEMALE; THROUGH HOLE; GREEN TERMINAL BLOCK; RIGHT ANGLE; 2PINS
24	L1	-	1	BLM21AG601SN1	MURATA	600	INDUCTOR; SMT (0805); FERRITE-BEAD; 600; TOL=+/-25%; 0.2A
25	L2	-	1	1008CS-272XJL	COILCRAFT	2700NH	INDUCTOR; SMT (1008); CERAMIC CHIP; 2700NH; TOL=+/-5%; 0.29A; -40 DEGC TO +125 DEGC
26	L3, L4	-	2	BLM21PG331SN1	MURATA	330	INDUCTOR; SMT (0805); FERRITE-BEAD; 330; TOL=+/-25%; 1.5A
27	L5	-	1	B82432T1332K000	TDK	3.3UH	INDUCTOR; SMT (1812); FERRITE CORE; 3.3UH; TOL=+/-10%; 0.9A
28	MISC1	-	1	68784-0001	MOLEX	68784-0001	CONNECTOR; MALE; USB; USB A PLUG TO MICRO B PLUG CABLE ASSY; STRAIGHT; 4PINS-5PINS
29	R1, R5, R25-R27	-	5	CRCW040210K0FK; RC0402FR-0710KL	VISHAY DALE; YAGEO PHICOMP	10K	RESISTOR; 0402; 10K; 1%; 100PPM; 0.0625W; THICK FILM
30	R2	-	1	CRCW04022K20FK; RC0402FR-072K2L	VISHAY DALE; YAGEO PHICOMP	2.2K	RESISTOR; 0402; 2.2K OHM; 1%; 100PPM; 0.0625W; THICK FILM
31	R3, R4	-	2	ERJ-2RKF27R0X; RC0402FR-0727RL; CRCW040227R0FK	PANASONIC; YAGEO PHICOMP; VISHAY DALE	27	RESISTOR; 0402; 27 OHM; 1%; 100PPM; 0.0625W; THICK FILM
32	R6	-	1	CRCW040215K0FK	VISHAY DALE	15K	RESISTOR; 0402; 15K; 1%; 100PPM; 0.0625W; THICK FILM
33	R7	-	1	ERJ-2RKF1202	PANASONIC	12K	RESISTOR; 0402; 12K OHM; 1%; 100PPM; 0.1W; THICK FILM
34	R8	-	1	CRCW060310R0FK; MCR03EZPF10R0; ERJ-3EKF10R0	VISHAY DALE; ROHM	10	RESISTOR; 0603; 10 OHM; 1%; 100PPM; 0.10W; THICK FILM
35	R9, R10	-	2	CRCW06034K70FK	VISHAY DALE	4.7K	RESISTOR; 0603; 4.7K; 1%; 100PPM; 0.10W; THICK FILM
36	R11	-	1	RK73H1ETTP1204F	KOA SPEER ELECTRONICS INC.	1.2M	RESISTOR; 0402; 1.2M OHM; 1%; 100PPM; 0.0625W; THICK FILM
37	R12	-	1	CRCW040247K0FK	VISHAY DALE	47K	RESISTOR; 0402; 47K OHM; 1%; 100PPM; 0.0625W; THICK FILM
38	R13	-	1	CRCW04022M70FK	VISHAY DALE	2.7M	RESISTOR; 0402; 2.7M OHM; 1%; 100PPM; 0.0625W; THICK FILM
39	R15	-	1	CRCW040220K0FK	VISHAY DALE	20K	RESISTOR; 0402; 20K OHM; 1%; 100PPM; 0.063W; THICK FILM
40	R16	-	1	ERJ-2RKF2203	PANASONIC	220K	RESISTOR; 0402; 220K OHM; 1%; 100PPM; 0.1W; THICK FILM
41	R17-R20, R29	-	5	ERJ-2RKF5600	PANASONIC	560	RESISTOR; 0402; 560 OHM; 1%; 100PPM; 0.0625W; THICK FILM
42	R21	-	1	3361P-1-103GLF	BOURNS	10K	RESISTOR; SMT GULL-LEAD; 3361P SERIES; 10K OHM; 10%; 100PPM; 0.5W
43	R22	-	1	CRCW06030000ZS; MCR03EZPJ000; ERJ-3GEY0R00	VISHAY DALE; ROHM; PANASONIC	0	RESISTOR; 0603; 0 OHM; 0%; JUMPER; 0.10W; THICK FILM
44	R23	-	1	ERJ-3GEYJ242	PANASONIC	2.4K	RESISTOR; 0603; 2.4K OHM; 5%; 200PPM; 0.10W; THICK FILM
45	R28	-	1	CRCW0603100RFK; ERJ-3EKF1000; RC0603FR-07100RL	VISHAY DALE; PANASONIC	100	RESISTOR; 0603; 100 OHM; 1%; 100PPM; 0.10W; THICK FILM
46	TP1, TP2	-	2	5010	KEYSTONE	N/A	TEST POINT; PIN DIA=0.125IN; TOTAL LENGTH=0.445IN; BOARD HOLE=0.063IN; RED; PHOSPHOR BRONZE WIRE SIL;

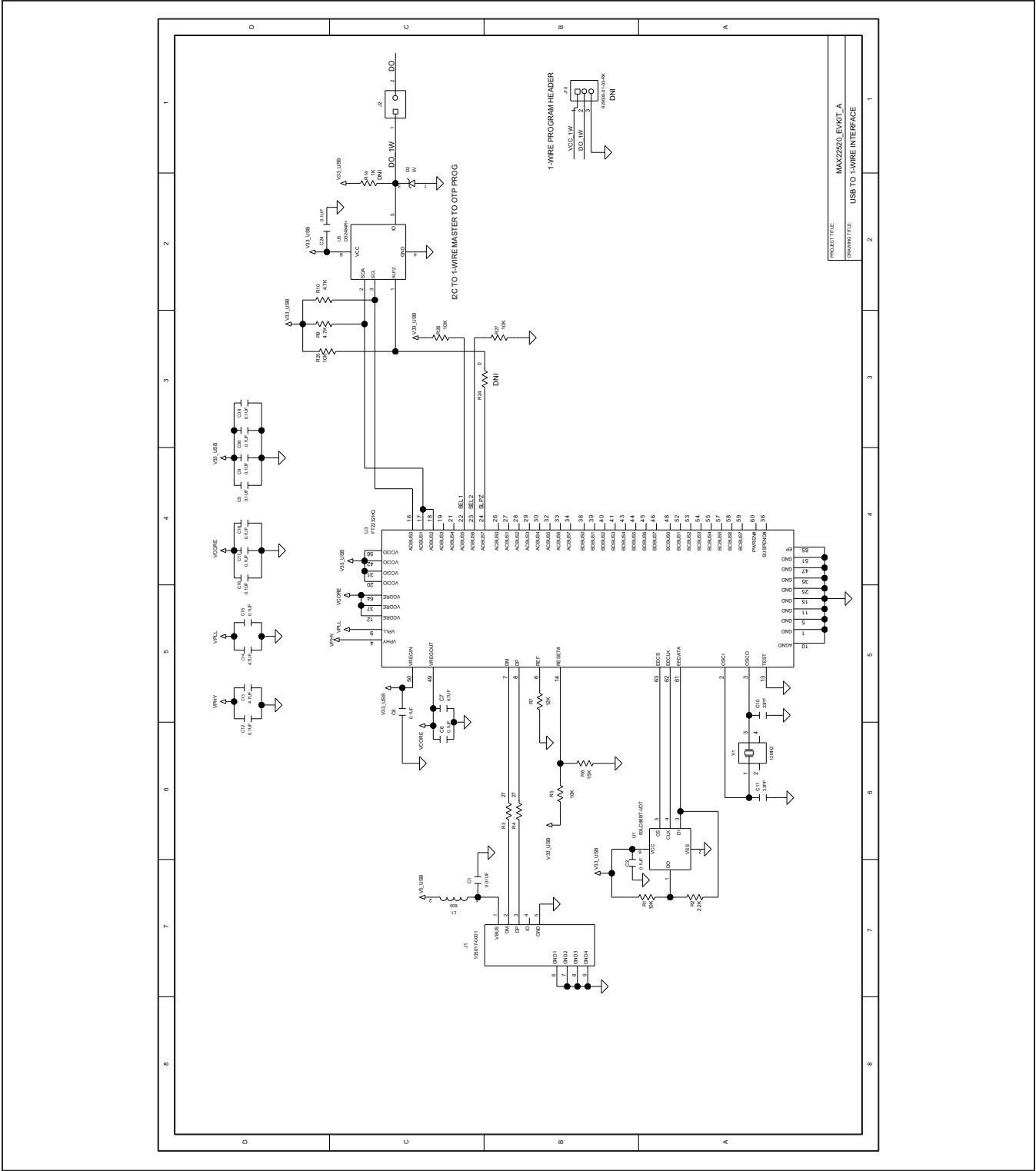
MAX22520 EV Kit Bill of Materials (continued)

ITEM	REF_DES	DN/DNP	QTY	MFG PART #	MANUFACTURER	VALUE	DESCRIPTION
47	TP4-TP7	-	4	5011	KEYSTONE	N/A	TEST POINT; PIN DIA=0.125IN; TOTAL LENGTH=0.445IN; BOARD HOLE=0.063IN; BLACK; PHOSPHOR BRONZE WIRE SILVER PLATE FINISH;
48	TP8-TP17	-	10	5014	KEYSTONE	N/A	TEST POINT; PIN DIA=0.125IN; TOTAL LENGTH=0.445IN; BOARD HOLE=0.063IN; YELLOW; PHOSPHOR BRONZE WIRE SILVER PLATE FINISH;
49	U1	-	1	93LC66BT-I/OT	MICROCHIP	93LC66BT-I/OT	IC; EPROM; 4K MICROWIRE SERIAL EEPROM; SOT23-6
50	U2	-	1	MAX1556ETB+	MAXIM	MAX1556ETB+	IC; CONV; PWM STEP-DOWN DC-DC CONVERTER; TDFN10-EP 3X3
51	U3	-	1	FT2232HQ	FUTURE TECHNOLOGY DEVICES INTL LTD.	FT2232HQ	IC; MMRY; DUAL HIGH SPEED USB TO MULTIPURPOSE UART/FIFO; QFN64-EP
52	U4	-	1	MAX8880EUT+	MAXIM	MAX8880EUT+	IC; VREG; ULTRA-LOW-IQ LOW-DROPOUT LINEAR REGULATOR WITH POK; SOT23-6
53	U5	-	1	DS2484R+	MAXIM	DS2484R+	IC; INFC; SINGLE-CHANNEL 1-WIRE MASTER WITH ADJUSTABLE TIMING AND SLEEP MODE; SOT23-6
54	U6	-	1	MAX17062ETB+	MAXIM	MAX17062ETB+	IC; CONV; STEP UP DC-TO-DC CONVERTER; TDFN-EP10; TDFN10-EP ;
55	U7	-	1	MAX14761ETB+	MAXIM	MAX14761ETB+	IC; ASW; ABOVE- AND BELOW-THE-RAILS LOW ON- RESISTANCE ANALOG SWITCH; TDFN10-EP
56	U9	-	1	MAX22520GWP+	MAXIM	MAX22520GWP+	EVKIT PART - IC; DRV; ONE-TIME PROGRAMMABLE INDUSTRIAL SENSOR OUTPUT DRIVER; PACKAGE OUTLINE DRAWING: 21-100314; PACKAGE CODE: W201K2+1; WLP20
57	Y1	-	1	ECS-120-20-33	ECS INC	12MHZ	CRYSTAL; SMT; 20PF; 12MHZ; +/-50PPM; +/-50PPM
58	PCB	-	1	MAX22520	MAXIM	PCB	PCB:MAX22520
59	C36	DNP	0	C1608C0G1E103J080AA	TDK	0.01UF	CAPACITOR; SMT (0603); CERAMIC CHIP; 0.01UF; 25V; TOL=5%; MODEL=; TG=-55 DEGC TO +125 DEGC; TC=C0G
60	J10	DNP	0	929500-01-03-RK	3M	929500-01-03-RK	CONNECTOR; MALE; THROUGH HOLE; PIN STRIP HEADER; RIGHT ANGLE; 3PINS
61	MH1-MH4	DNP	0	9032	KEYSTONE	9032	MACHINE FABRICATED; ROUND-THRU HOLE SPACER; NO THREAD; M3.5; 5/8IN; NYLON
62	R14	DNP	0	CRCW06031K00FK; ERJ-3EKF1001	VISHAY DALE;PANASONIC	1K	RESISTOR; 0603; 1K; 1%; 100PPM; 0.10W; THICK FILM
63	R24	DNP	0	RC0402JR-070RL; CR0402-16W-000RJT	YAGEO PHYCOMP;VENKEL LTD.	0	RESISTOR; 0402; 0 OHM; 5%; JUMPER; 0.063W; THICK FILM
TOTAL			116				

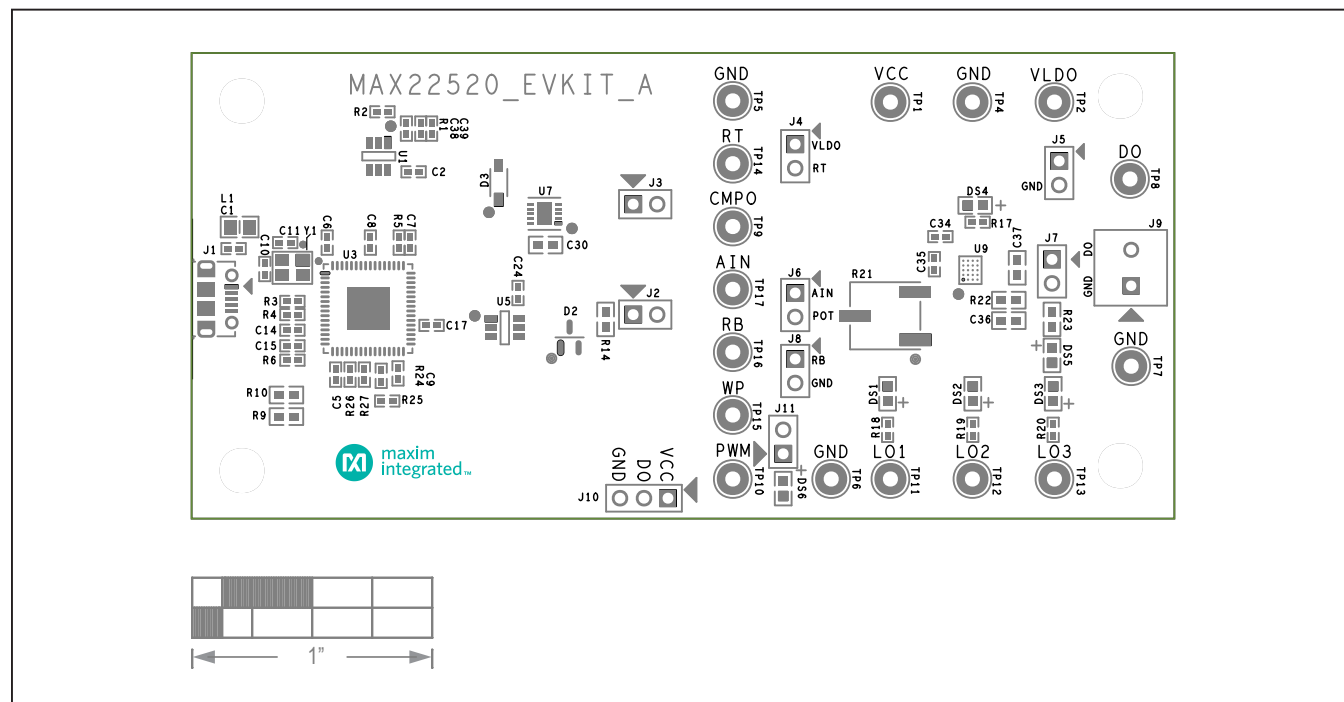
The figure contains four circuit diagrams for the MAX2250 EVKIT POWER:

- USB 5V TO 3.3V POWER:** A schematic showing the USB 5V input connected to a MAX2250EVKIT chip. The chip's VDD is connected to a 3.3V output, which is then connected to a 3.3V output filter capacitor (C33) and a 3.3V output terminal. The chip's GND is connected to a common ground.
- 4.3V TO ENTER TEST MODE:** A schematic showing a 4.3V input connected to a MAX2250EVKIT chip. The chip's VDD is connected to a 4.3V output, which is then connected to a 4.3V output filter capacitor (C33) and a 4.3V output terminal. The chip's GND is connected to a common ground.
- VOLTAGE SELECT FOR OTP MODE:** A schematic showing a MAX2250EVKIT chip with its VDD connected to a 1.5V output. The chip's GND is connected to a common ground. The chip's SEL pin is connected to a 1.5V output, which is then connected to a 1.5V output filter capacitor (C33) and a 1.5V output terminal.
- 15V TO PROG OTP MODE:** A schematic showing a 15V input connected to a MAX2250EVKIT chip. The chip's VDD is connected to a 15V output, which is then connected to a 15V output filter capacitor (C33) and a 15V output terminal. The chip's GND is connected to a common ground.

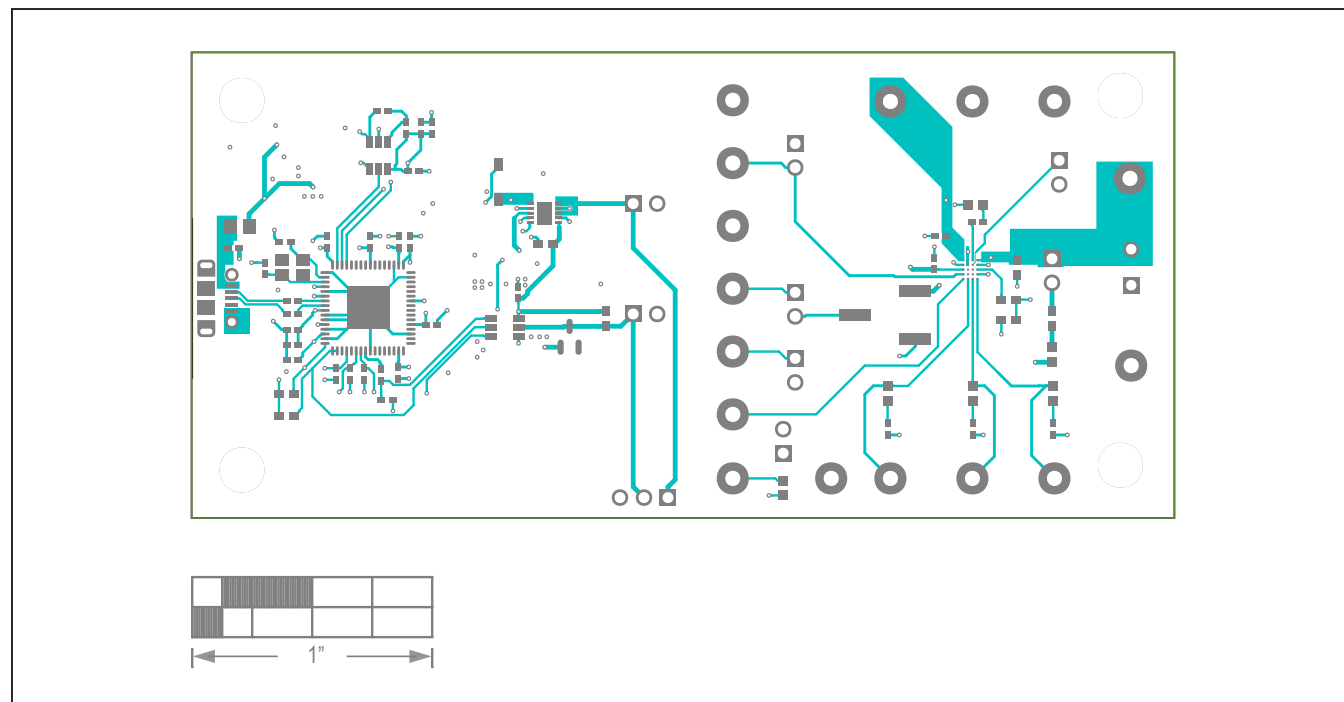
MAX22520 EV Kit Schematic (continued)



MAX22520 EV Kit PCB Layout Diagrams

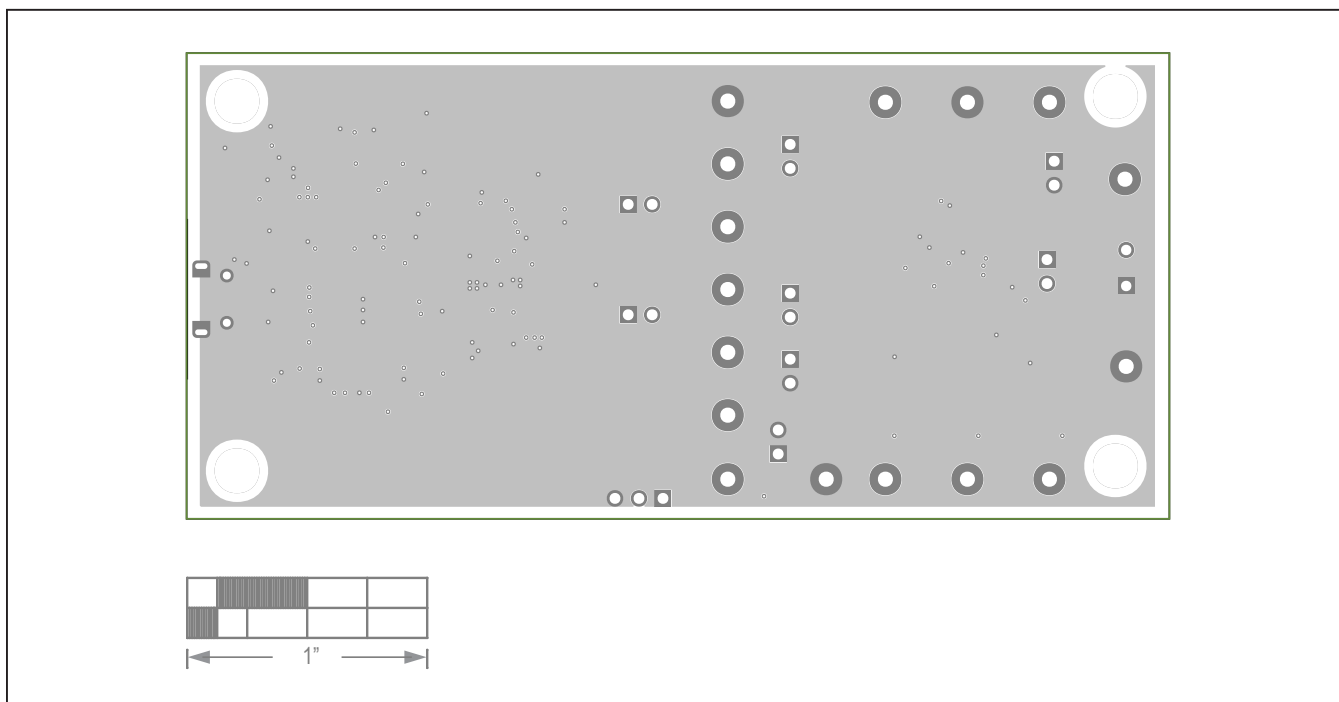


MAX22520 EV Kit PCB Layout—Top Silkscreen

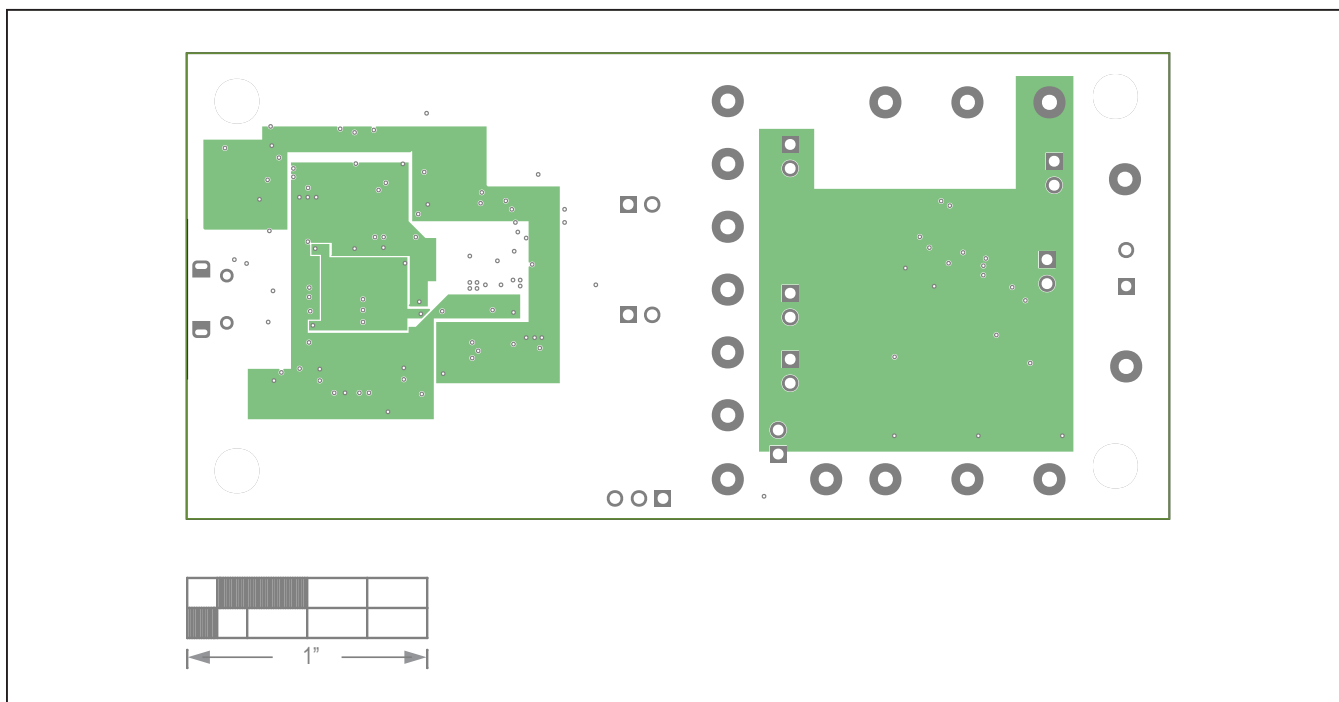


MAX22520 EV Kit PCB Layout—Top Layer

MAX22520 EV Kit PCB Layout Diagrams (continued)

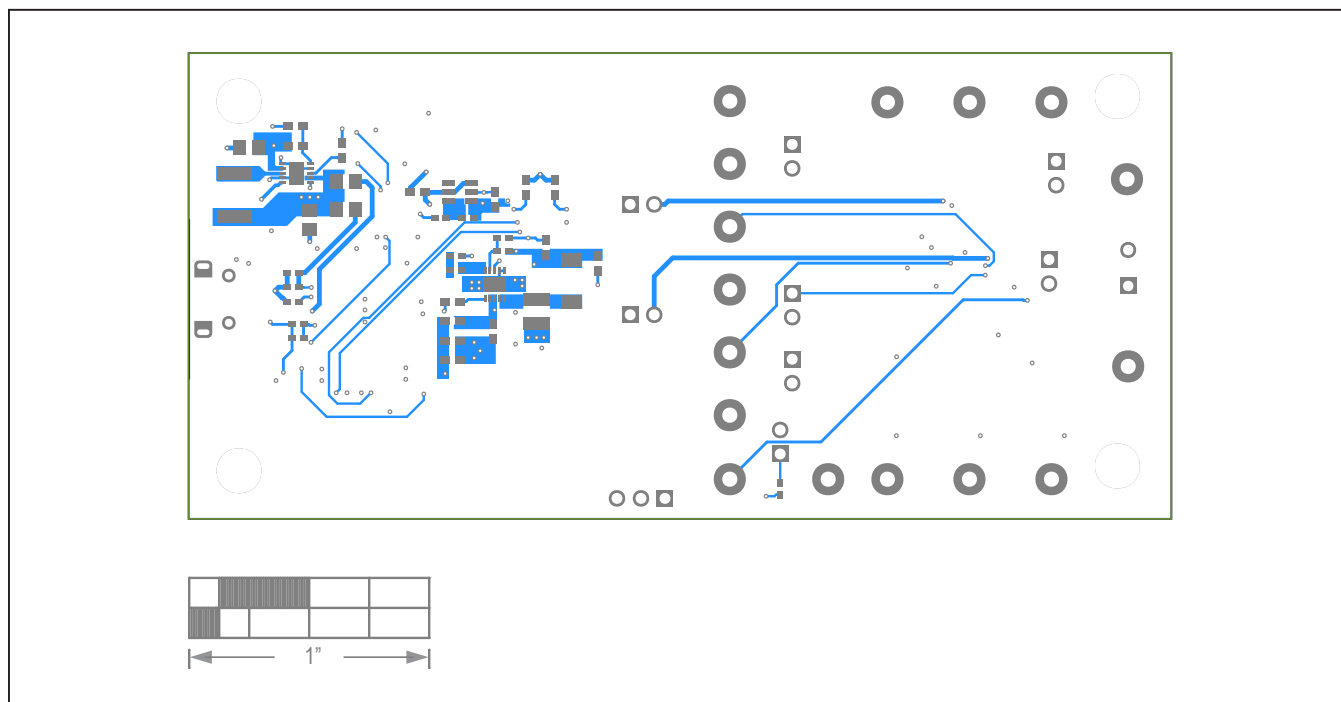


MAX22520 EV Kit—Ground Layer

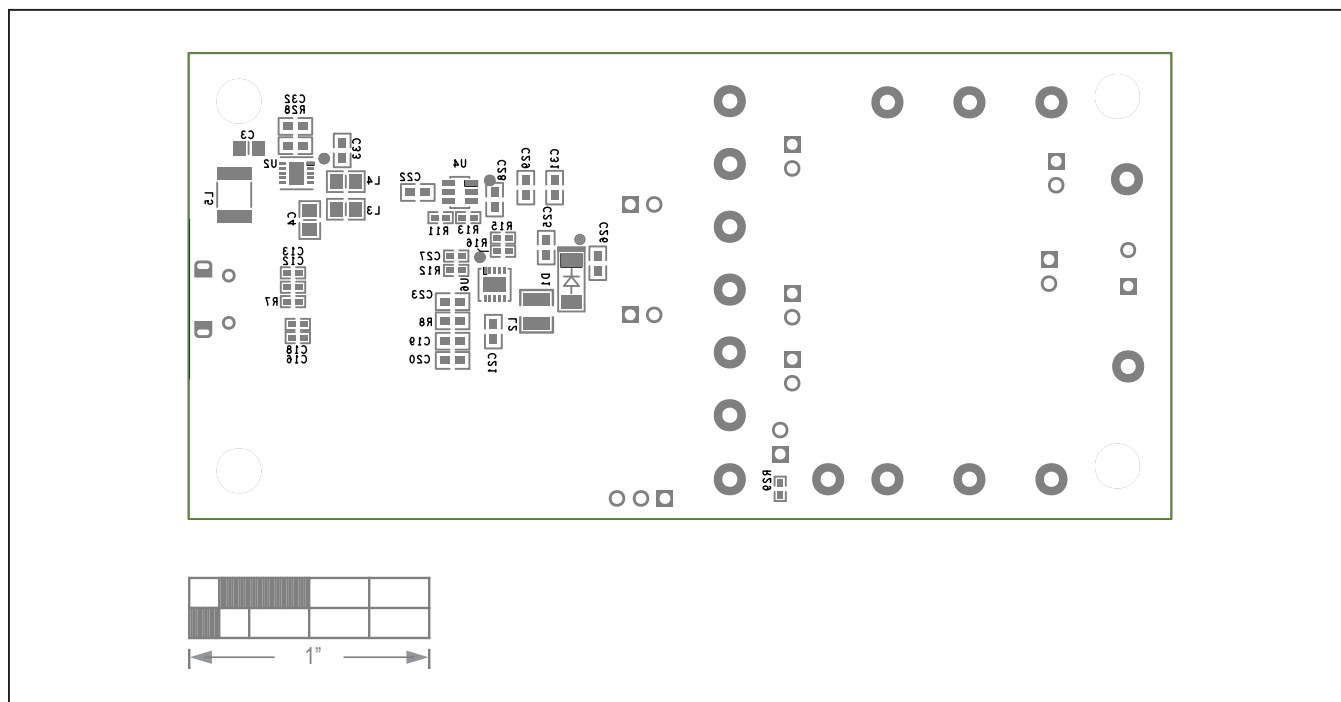


MAX22520 EV Kit—Power Layer

MAX22520 EV Kit PCB Layout Diagrams (continued)



MAX22520 EV Kit—Bottom Layer



MAX22520 EV Kit—Bottom Silkscreen

Revision History

REVISION NUMBER	REVISION DATE	DESCRIPTION	PAGES CHANGED
0	10/19	Initial release	—

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