*Click **here** to ask about the production status of specific part numbers.*

MAX20340 Evaluation Kit

Evaluates: MAX20340

General Description

The MAX20340 evaluation kit (EV kit) is a fully assembled and tested PCB that evaluates the MAX20340 bidirectional powerline communication (PLC) management integrated circuit. The EV kit obtains power from an external power source or the MAX32625PICO microcontroller that contains the firmware necessary to use the EV kit GUI program. Installed with two MAX20340s (one Master and one Slave), the EV kit features a master/slave mode PLC with flexible configurations. The EV kit ships with jumpers installed and supply voltages set to typical operating values.

Features

- USB-Powered Operation
- Compact and Simple Solution for PLC
- Flexible Configuration
- On-Board Regulator and Battery-Charging Circuitry
- Windows® 8/10-Compatible GUI Software
- Fully Assembled and Tested

Evaluation Kit Contents

- MAX20340 EV Kit
- Two USB A to micro-USB Cables

MAX20340 EV Kit Files

FILE	DECRIPTION
MAX20340EVKit.exe	PC GUI Program

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

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

Quick Start

Required Equipment

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

- MAX20340 EV kit
- Two USB A to micro-USB cables
- Windows PC with USB ports

Procedure

The EV kit is fully assembled and tested. Use the following steps to verify board operation. **Caution: Do not turn on the power supply until all connections are completed.**

1) Visit **https://www.maximintegrated.com** to download the latest version of the EV kit software, **MAX20340EVKitSetupVxxx.ZIP** located on the MAX20340 EV kit web page. Download the EV kit software to a temporary folder and unzip the ZIP file.
2) Install the EV kit software on your computer by running the **MAX20340EVKitSetupVxxx.EXE** program inside the temporary folder.
3) Verify that all jumpers are in their default positions, as shown in Table 1.
4) Connect the micro-USB end of a cable to USB1 port of the EV kit and the type-A end to the PC.

319-100481; Rev 1; 4/20

maxim integrated™

5) Connect the micro-USB end of a cable to the USB port of the MA32625PICO microcontroller and the type-A end to the PC.
6) The LED on the MA32625PICO microcontroller flashes blue.
7) The MAX20340 EV kit board must be installed with the latest firmware. Follow the Firmware Update procedure to install the latest firmware.
8) Start the MAX20340 EV kit GUI. The EV kit software main window appears, as shown in Figure 1.
9) If connection is successfully established, the status bar the bottom displays **Connected**.
10) Verify the status of the master: **Slave Found Charging** on the left **Master** panel and the status of the slave: **Master Found Comm. Enabled** on the right **Slave** panel.
11) The EV kit is now ready for additional evaluations.

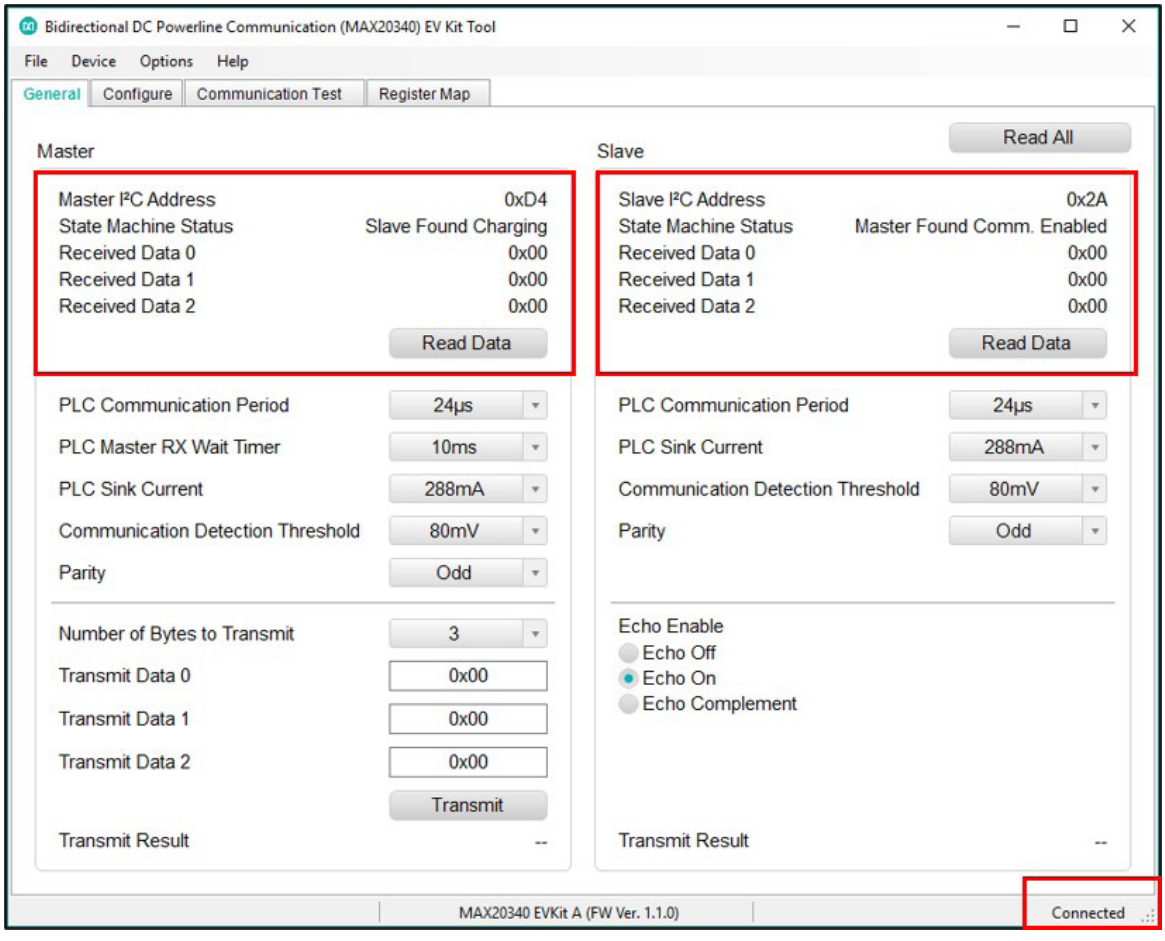


Figure 1. The Status of the GUI Shows Connected Ready for Further Evaluations.

Detailed Description of Software

Software Startup

Upon starting the program, the EV kit software automatically searches for the USB interface circuit and then for the IC device addresses. The EV kit enters the normal operating mode when the connection is established and addresses are found. If the USB connection is not detected, the status bar displays **Not Connected**. If the USB connection is detected, but the MAX20340 is not found, the **Master** or **Slave** panel in the **General** tab shows **Not Found**.

ToolStrip Menu Bar

The ToolStrip menu bar (Figure 2) is located at the top of the GUI window. This bar comprises **File**, **Device**, **Options**, and **Help** menus whose functions are detailed in the following sections.

File Menu

The **File** menu contains the option to exit out of the GUI program.

Device Menu

The Device menu provides the ability to connect or disconnect the EV kit to the GUI. If a board is disconnected while the GUI is open the GUI displays **Disconnected** in the lower right corner. If the device is then plugged back in, the bottom right corner of the GUI displays **Connected**.

Options Menu

The **Options** menu provides several settings to access more features offered by the GUI. The **Disable polling** option lets the user read the registers manually instead of getting automatically frequent register updates from the IC. **MAX20343** option allows the user to reset, enable, or disable the buck-boost regulator on the EV kit. The user can view the **Serial Log** of reading or writing registers in the **Advanced** option. Also, the **I2C Read/Write** in the **Advanced** option allows the user to read from or write to a selected register with a specified slave address

Help Menu

The **Help** menu contains the **About** option, which displays the GUI splash screen indicative of the GUI version being used.

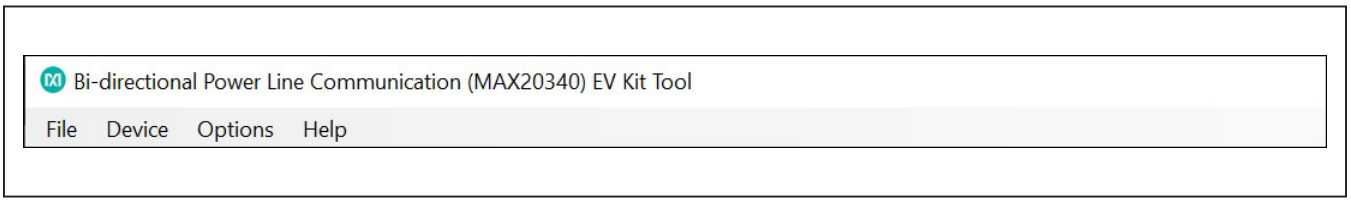


Figure 2. The ToolStrip Menu Items

Tab Controls

The MAX20340 EV kit software GUI provides a convenient way to test the features of the MAX20340. Each tab contains controls relevant to various blocks of the device. Changing these interactive controls triggers a write operation to the MAX20340 to update the register contents.

General Tab

The **General** tab (Figure 3) provides all important information and options to set up the MAX20340 master and slave modes. The **Master** block (on the left side) and **Slave** block (on the right side) display I²C addresses and allow the user to choose parameters for each setting in powerline communication.

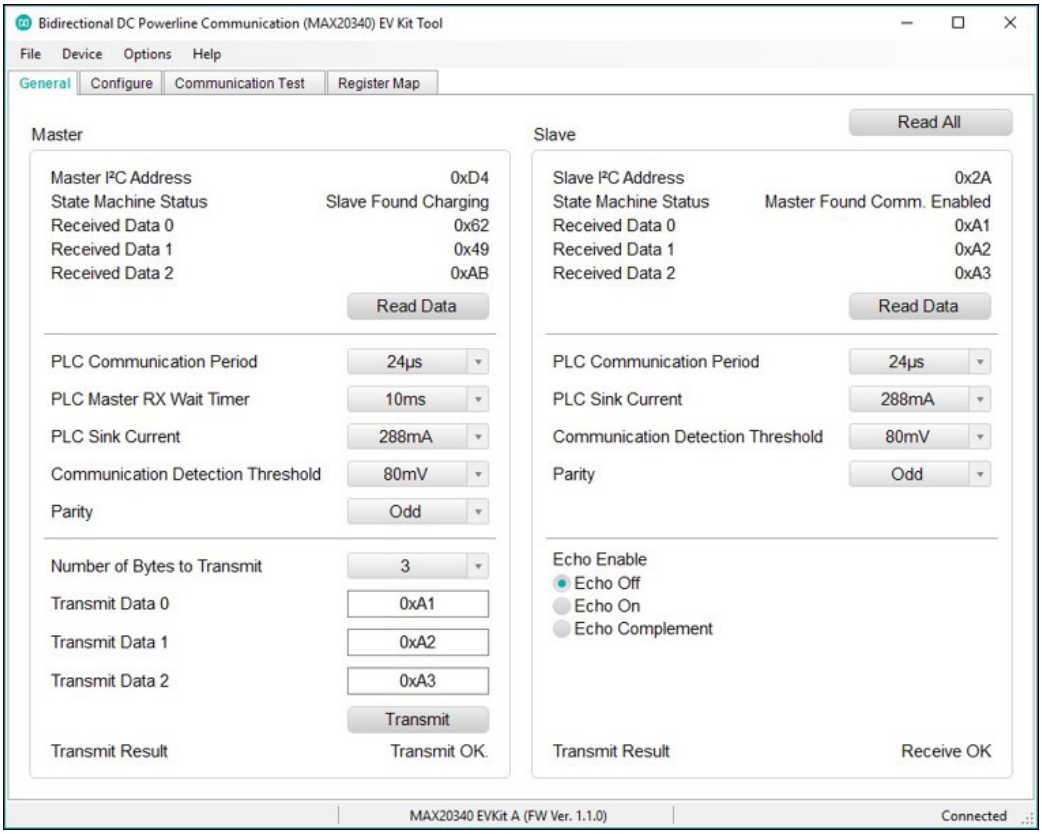


Figure 3. General Tab

Configure Tab

The **Configure** tab (Figure 4) configures the Master and Slave sides with more unique settings such as **Transmit Filter**, **Charge Timer**, and **LDO Voltage**.

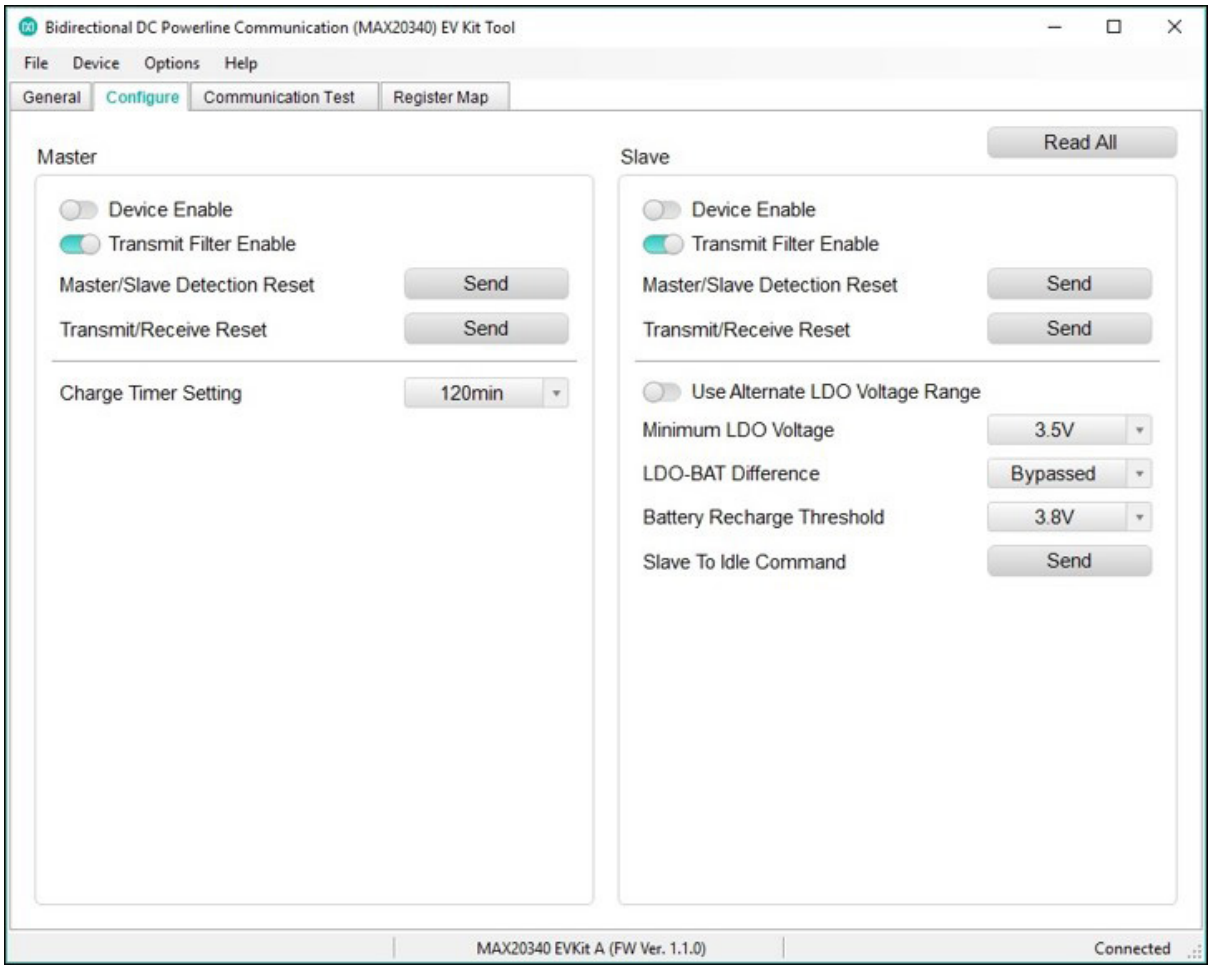


Figure 4. Configure Tab

Communication Test Tab

The **Communication Test** tab (Figure 5) hosts the settings for powerline communication tests. The user can specify transmit data in hex values and run the test with either single or continuous transmission. The **Results** block, on the right side, shows all statistics, specifically errors and error rate, when the test ends.

During a test, each transmission consists of three bytes. It is not possible to send less than three bytes per transmission using the communication test tool.

To start a test, input the data to transmit in the **Transmit Data** 0 to 2 text boxes or select **Use Random Data** to use a pseudorandom set of three bytes. Clicking the **Transmit** button transmits a single set of three bytes. To start continuous transmission test, click **Start Test** button. It is not possible to modify settings on other tabs while a transmission is in progress.

Click **Stop Test** to end the communication test. A set of **Pause Test…** buttons can be selected to stop the test whenever a corresponding transmit or receive error is detected. Click the **Clear Results** button any time to clear the results.

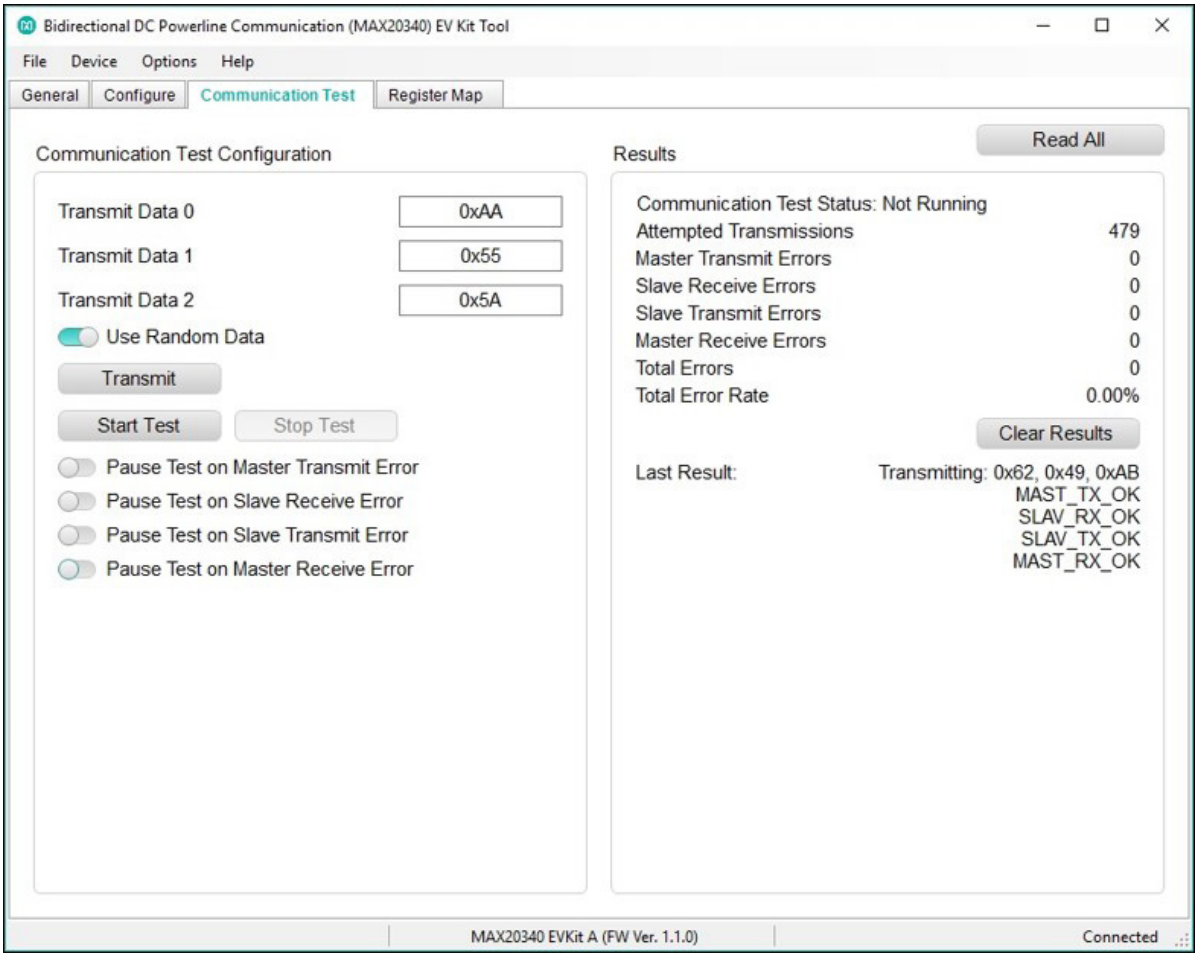


Figure 5. Communication Test Tab

Register Map Tab

The **Register Map** tab (Figure 6) provides all names and values of MAX20340 registers. The user can click **Read All** on the top right corner to perform a burst read of all registers. Master and slave registers can be read and written individually.

The left table shows the register to be read from or written to. The right table contains descriptions for each register field of the selected 8-bit register. All bits, along with their field names, are displayed at the bottom of the page.

To set a bit, click the bit label. **Bold** text represents logic 1 and regular text represents logic 0. To configure the changes to the device, click the **Write** button at the bottom right.

When configuring PLC settings through the register map, some settings, such as **PLC Communication Frequency**, must be the same on the master and slave. To simplify writing settings to both devices, toggle **the Duplicate Writes on Both Devices** button. When enabled, all writes are committed to both the master and slave.

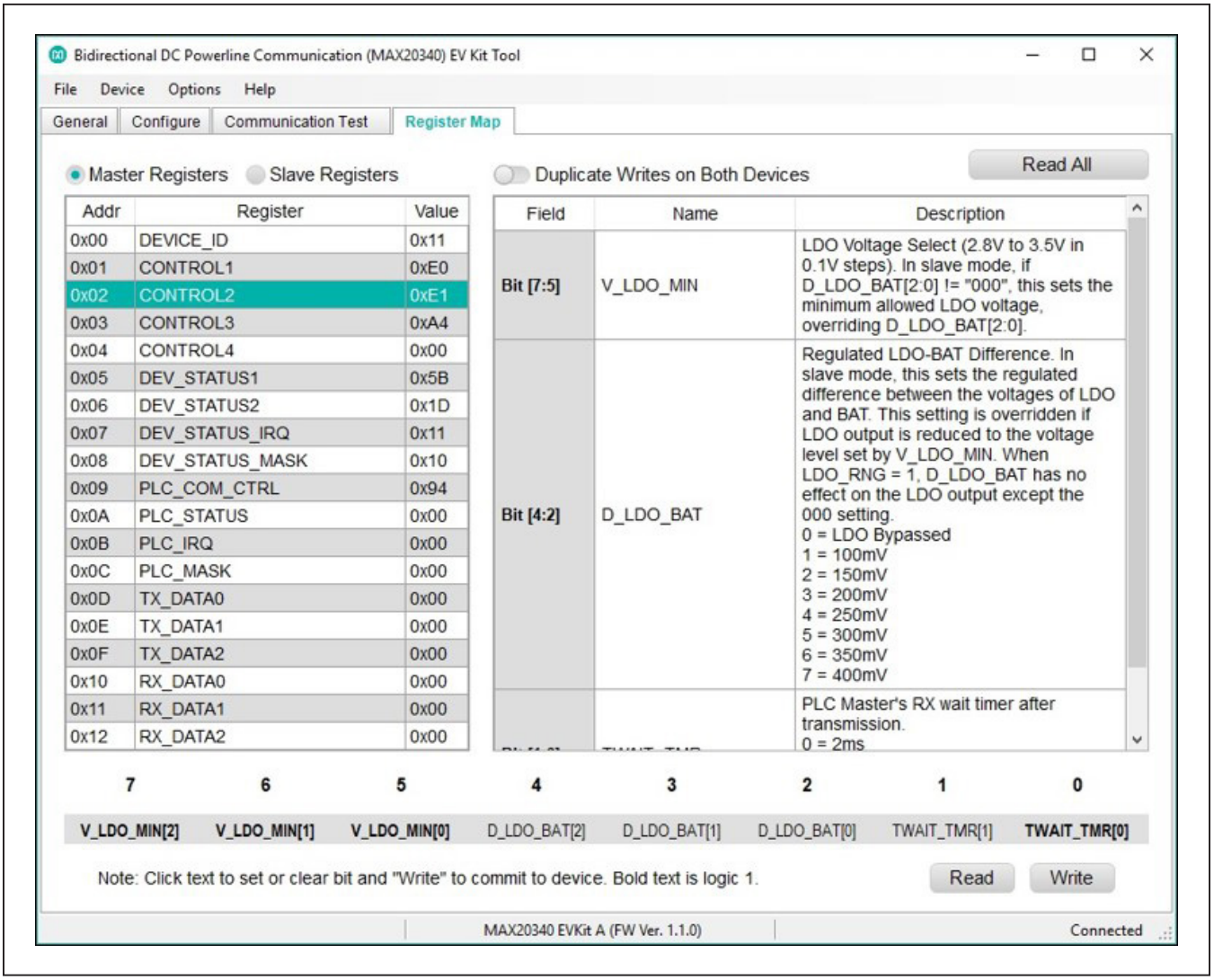


Figure 6. Register Map Tab

Detailed Description of Hardware

The MAX20340 EV kit evaluates the MAX20340 bidirectional powerline communication management integrated circuit, which communicates over the I2C interface. The EV kit demonstrates the IC features such as different charging states, master/slave mode, I2C addresses, dual/single PLC slave mode, and PLC slave addresses. The EV kit uses the IC in a 9-bump (1.358mm x 1.358mm) wafer-level package (WLP) on a proven, four-layer PCB design. The EV kit operates from the USB +5V DC, and therefore, does not require an external power supply. Alternatively, the EV kit can be powered with an external power supply using VEXT TP4.

Table 1. Jumper Table (JU1-JU26)

JUMPER	SHUNT POSITION	DESCRIPTION
JU1	1-2*	Connect SDA of U2 to SDA of MAX32625PICO. (Assuming a shunt is installed on JU12)
JU2	1-2*	Connect SCL of U2 to SCL of MAX32625PICO. (Assuming a shunt is installed on JU13)
JU3	1-2*	Connect SDA of U1 to SDA of MAX32625PICO. (Assuming a shunt is installed on JU12)
JU4	1-2*	Connect SCL of U1 to SCL of MAX32625PICO. (Assuming a shunt is installed on JU13)
JU5	1-2	Connect VCC2 of U2 to external power supply applied at VEXT.
	2-3*	Connect VCC2 of U2 to BBOUT of U6.
JU6	Open*	Disconnect VCC1 of U1 to CHGIN of U5.
	Closed	Connect VCC1 of U1 to CHGIN of U5.
JU7	1-2	Connect VBAT1 of U1 to external power supply applied at VEXT.
	2-3	Connect VBAT1 of U1 to VBAT of U5.
JU8	1-2	Connect VBAT2 of U2 to external power supply applied at VEXT.
	2-3*	Connect VBAT2 of U2 to BBOUT of U6.
JU9	1-2*	Connect VIO to 3.3V of MAX32625PICO.
JU10	1-2*	Connect INT2 of U2 to LED indicator.
JU11	1-2*	Connect INT1 of U1 to LED indicator.
JU12	1-2*	Connect SDA line to MAX32625PICO.
JU13	1-2*	Connect SCL line to MAX32625PICO.
JU14	Open	Pull $\overline{EN}$ of U1 high to VIO to put it in low power shutdown state.
	1-2	Connect $\overline{EN}$ of U1 to GPIO of the MAX32625PICO.
	2-3*	Connect $\overline{EN}$ of U1 to ground to exit low power shutdown state.
JU15	Open	Pull $\overline{EN}$ of U2 high to VIO to put it in low power shutdown state.
	1-2	Connect $\overline{EN}$ of U2 to GPIO of the MAX32625PICO.
	2-3*	Connect $\overline{EN}$ of U2 to ground to exit low power shutdown state.
JU16	1-2*	Connect PLC line between U1 and U2.
JU17	1-2*	Select 19.1KΩ resistor for RSEL of U1.
	3-4	Select 24.9KΩ resistor for RSEL of U1.
	5-6	Select 31.6KΩ resistor for RSEL of U1.
	7-8	Select 43KΩ resistor for RSEL of U1.

Table 1. Jumper Table (JU1-JU26) (continued)

JUMPER	SHUNT POSITION	DESCRIPTION
JU18	1-2	Select 3.9kΩ resistor for RSEL of U2.
	3-4	Select 6.65kΩ resistor for RSEL of U2.
	5-6	Select 10.2kΩ resistor for RSEL of U2.
	7-8*	Select 14.3kΩ resistor for RSEL of U2.
JU19	1-2*	Connect BBIN of U6 to external power supply applied at VEXT.
	2-3	Connect BBIN of U6 to MAX32625PICO 5V.
JU20	1-2	Connect FAST to CAP pin of U6.
JU21	1-2	Do not install a shunt on JU21. It is for connecting an optional external battery pack to the MAX20335 battery charger.
JU23	1-2*	Connect VBUS of USB1 to external power supply applied at VEXT.
JU24	1-2	Connect 2.2µF capacitor to CHGIN of U5.
JU25	1-2*	Connect the fixed-value R8 to form the bottom resistor of the resistor divider between VBAT of U5 and AIN2 of MAX32625PICO.
	2-3	Connect the potentiometer to form the bottom resistor of the resistor divider between VBAT of U5 and AIN2 of MAX32625PICO.
JU26	1-2	Connect output capacitor C1 to VCC1 of U1. Install this shunt if LDO of U1 is enabled.

**Default position.*

Dual Slave Mode

This section covers the procedure to evaluate Dual Slave Mode with the MAX20340 EV kit and the MAX20340 EV kit GUI.

Required Equipment

- Windows 8/10 PC with an available USB port and the latest MAX20340 EV kit GUI application installed
- Two MAX20340_EV kit_A boards programmed with the latest firmware*
- Two USB A to USB Micro-B cables

*Note: If the latest firmware is not installed. Follow the **Firmware Update** procedure.

Setup

To evaluate dual slave mode, two EV kits and two MAX20340 EV kit GUIs are used. One board is configured with one master and one slave, and the other is configured with one slave and no master. Use the following steps to setup the two MAX20340 EV kits:

1) Install jumper shunts on both boards as shown in teal in Figure 7.
2) Connect the PLC and GND pins of the two boards by inserting the J2 pins of the “Slave Only” board into the J1 connector of the “Master and Slave” board as shown in Figure 7.

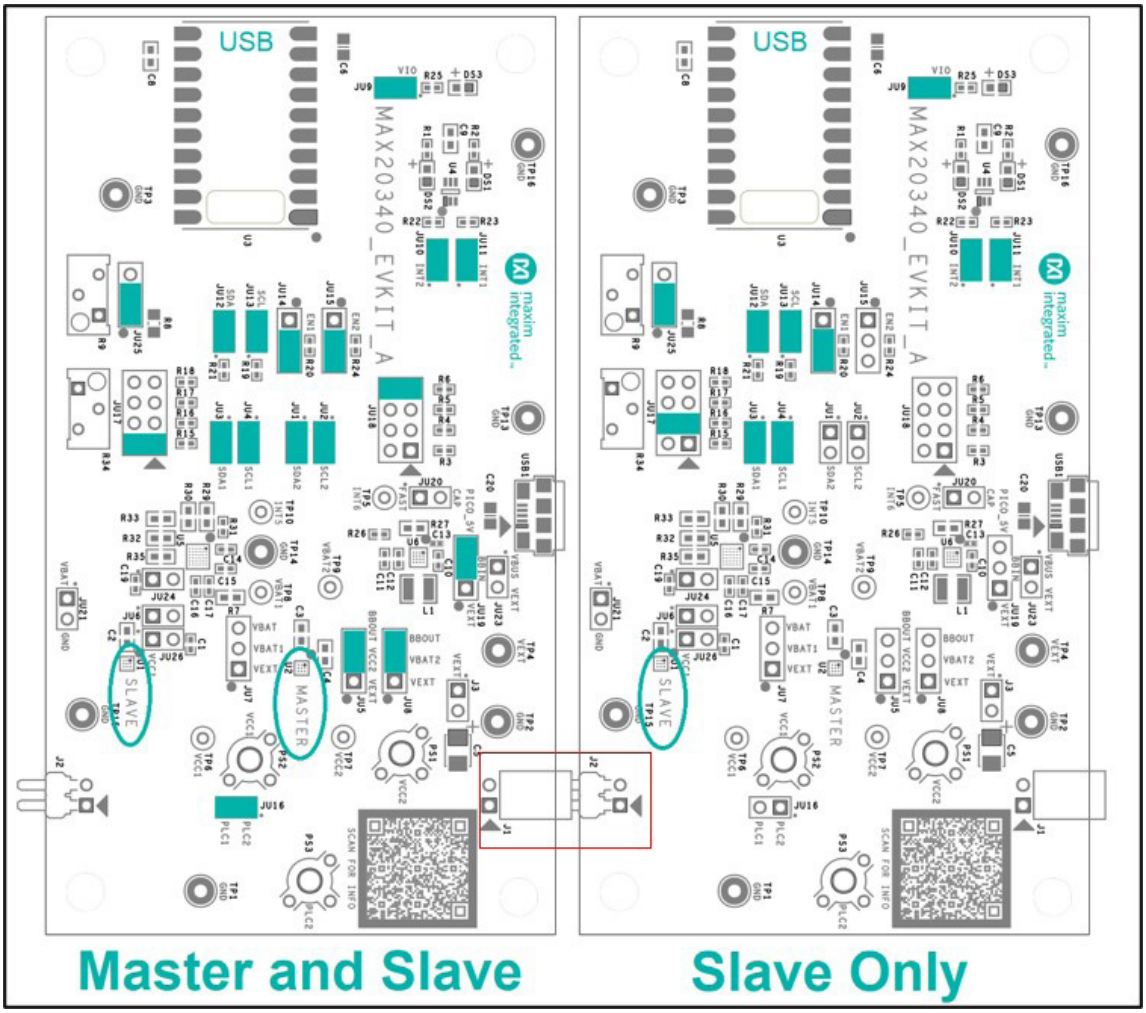


Figure 7. Jumper Configuration for Dual Slave Mode.

3) Connect the USB A-to-micro-B cable to the PC and to the “Master and Slave” board USB Micro-B port located at U3.

4) Run the MAX20340 EV kit GUI. The GUI automatically connects to the “Master and Slave” board and the master and slave are both found automatically (see Figure 8).

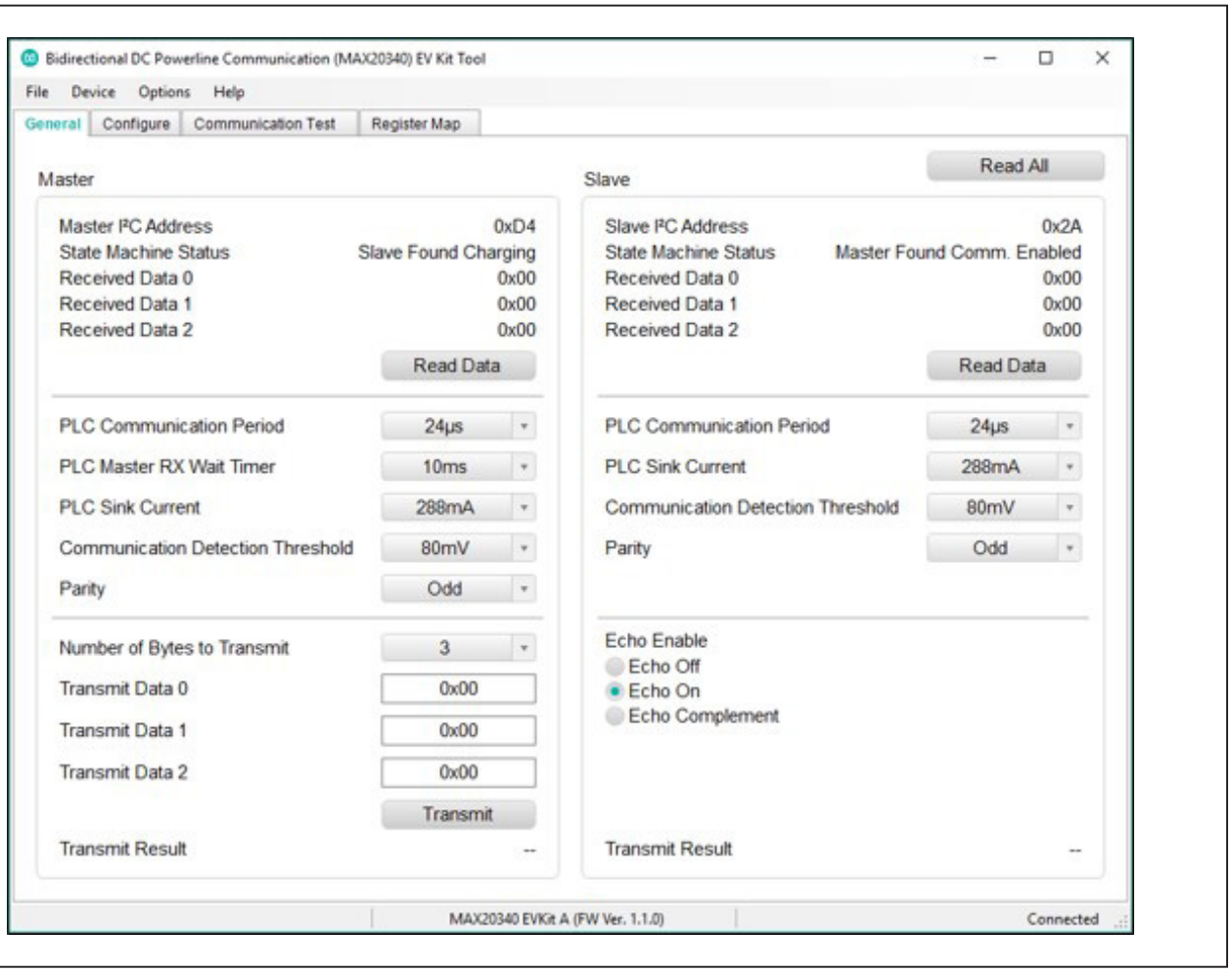


Figure 8. MAX20340 EV Kit GUI Connected to the Master and Slave Board.

5) Connect the USB A to Micro-B cable to the PC and to the “Slave Only” board’s USB Micro-B port located at U3.

6) Run another instance of the MAX20340 EV kit GUI. Do not close the GUI that is connected to the “Master and Slave” board. The GUI automatically connects to the “Slave Only” board and the single slave is found automatically. Since there is no master connected to the PLC and GND pins on this board, the GUI shows “Not Found” for the master. The application should appear as shown in Figure 9.

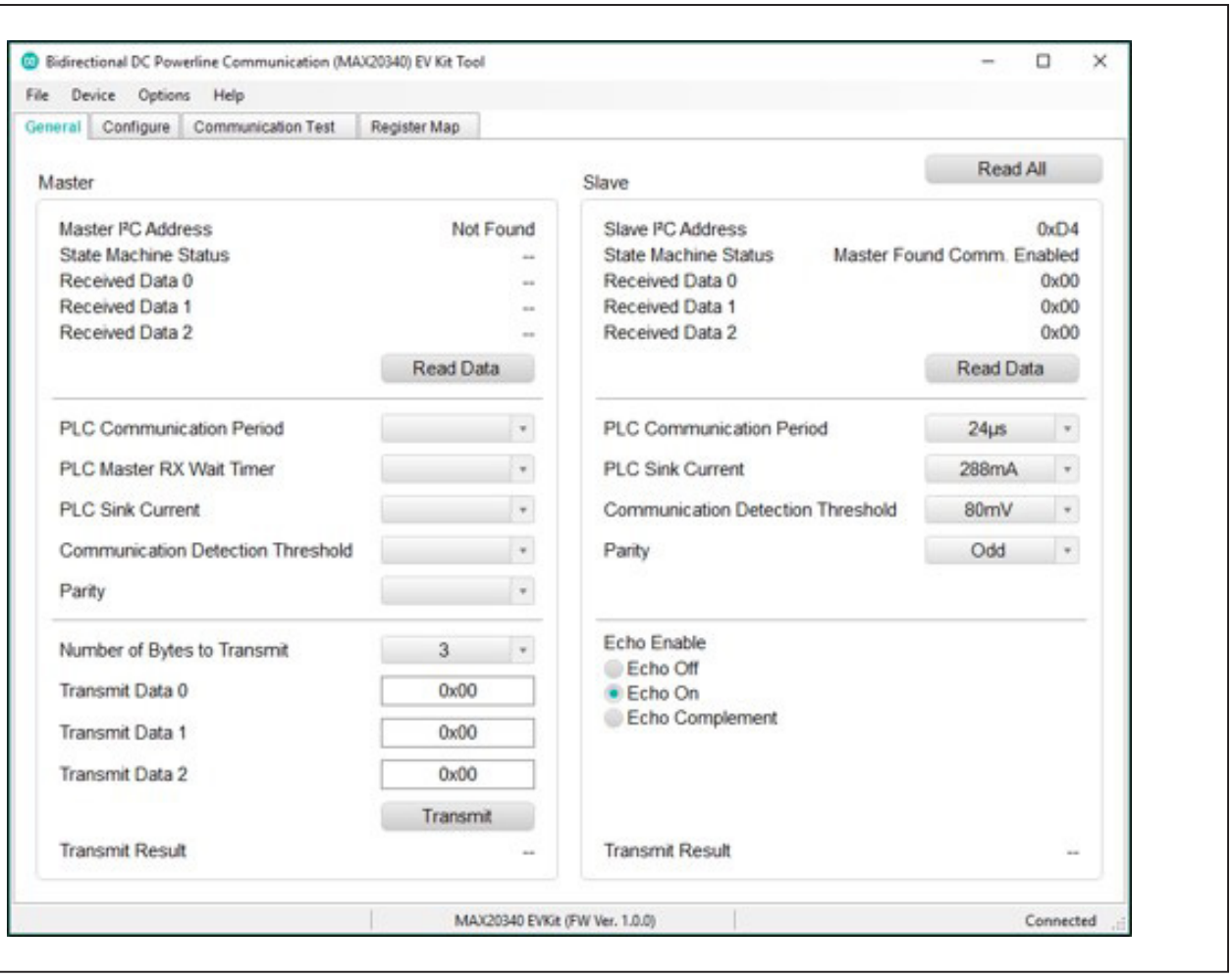


Figure 9. MAX20340 EV Kit GUI Connected to the Slave Only Board.

7) If the setup steps were followed correctly, the two GUIs should appear as shown in Figure 10.

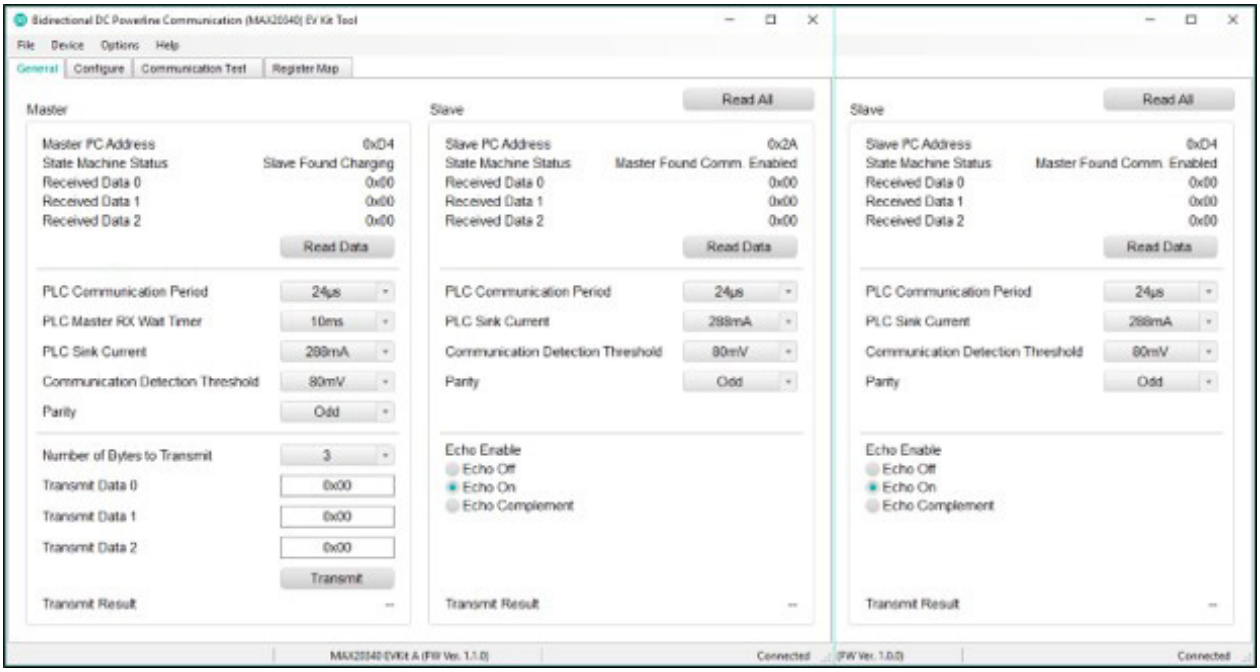


Figure 10. Two MAX20340 EV Kit GUIs Connected to Both Boards.

8) If the setup steps were followed correctly, the two boards should be connected to the PC using two USB cables and set up as shown in Figure 11.

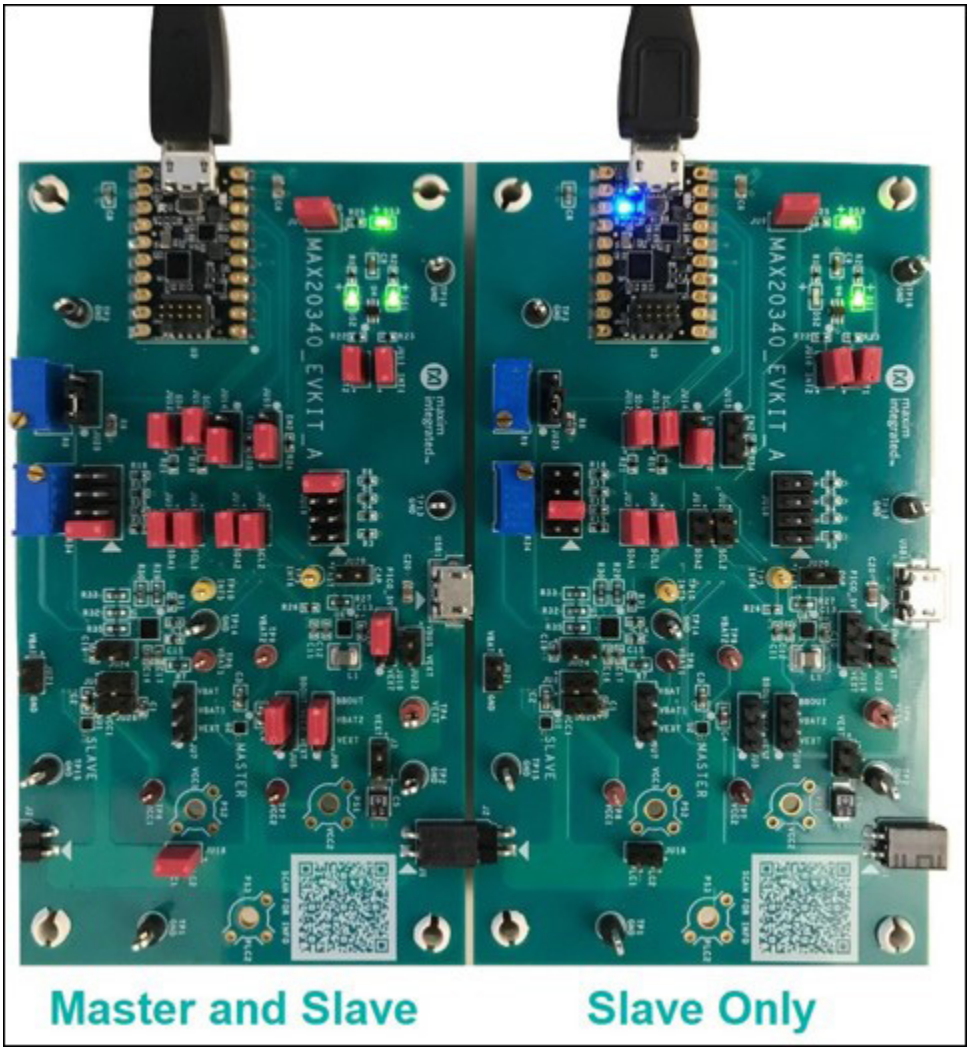


Figure 11. Two MAX20340 EV Kit Boards Setup for Dual Slave Mode.

Transmitting Data

To transmit data from the master to the two slaves:

1) Disable slave echo on both slaves by selecting Echo Off in the Slave section of the General tab on each GUI.
2) On the “Master and Slave” GUI, select the number of bytes to transmit in the dropdown in the Master section of the General tab.
3) Enter the data to be transmitted (in hexadecimal) into the Transmit Data 0-2 text boxes.
4) Click “Transmit”.

The “Transmit Result” updates on the “Master and Slave” GUI and shows “Transmit OK” and “Receive OK” if the transmission is successful.

If the transmission is successful, the transmitted data is available in the RX_DATA registers of each slave. Click the “Read Data” button in the Slave section to read the contents of the RX_DATA registers. The GUI automatically reads the RX_DATA registers of the slave on the “Master and Slave” board when the “Transmit” button is clicked, but a manual read is needed on the GUI connected to the single slave board.

Firmware Update

To stay up to date with the latest software releases, the MAX32625PICO firmware might need to be updated. The firmware image file (.bin) is located in the zip file downloaded from the **Quick Start** section. Follow the steps below to program a firmware image file (.bin) onto the MAX32625PICO board:

1) Put the board in maintenance mode by holding the button while the board is being connected to the computer. It might be easier to hold the button while inserting the USB cable at the computer end rather than the micro-USB connector end (see Figure 12).
2) If the board enters bootloader mode successfully, the LED on the board turns red and the board appears to the computer as a USB drive named “MAINTENANCE.”
3) Drag and drop the firmware image file (.bin) into the MAINTENANCE drive and the board installs the new firmware.

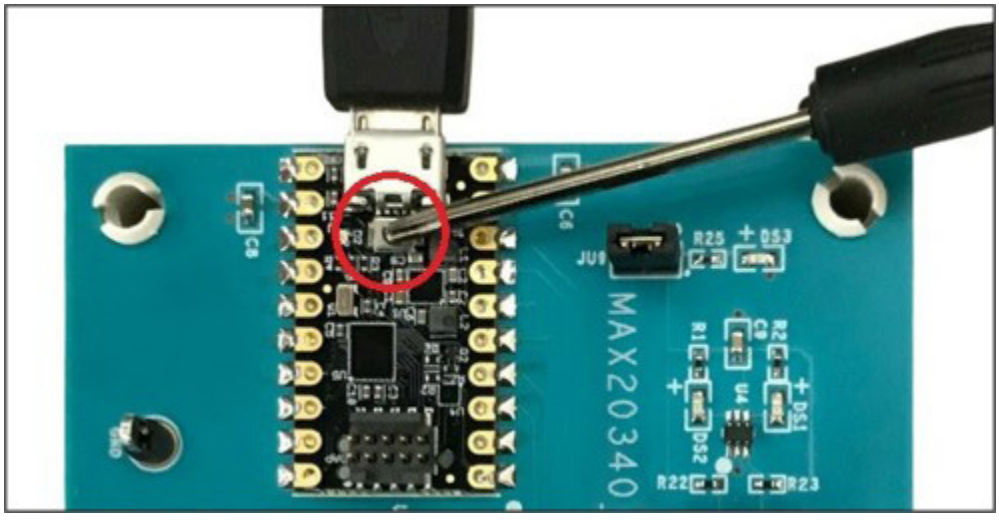


Figure 12. Enter maintenance mode on the MAX32625PICO.

Ordering Information

PART	TYPE
MAX20340EVKIT#	EV Kit

#Denotes RoHS compliance.

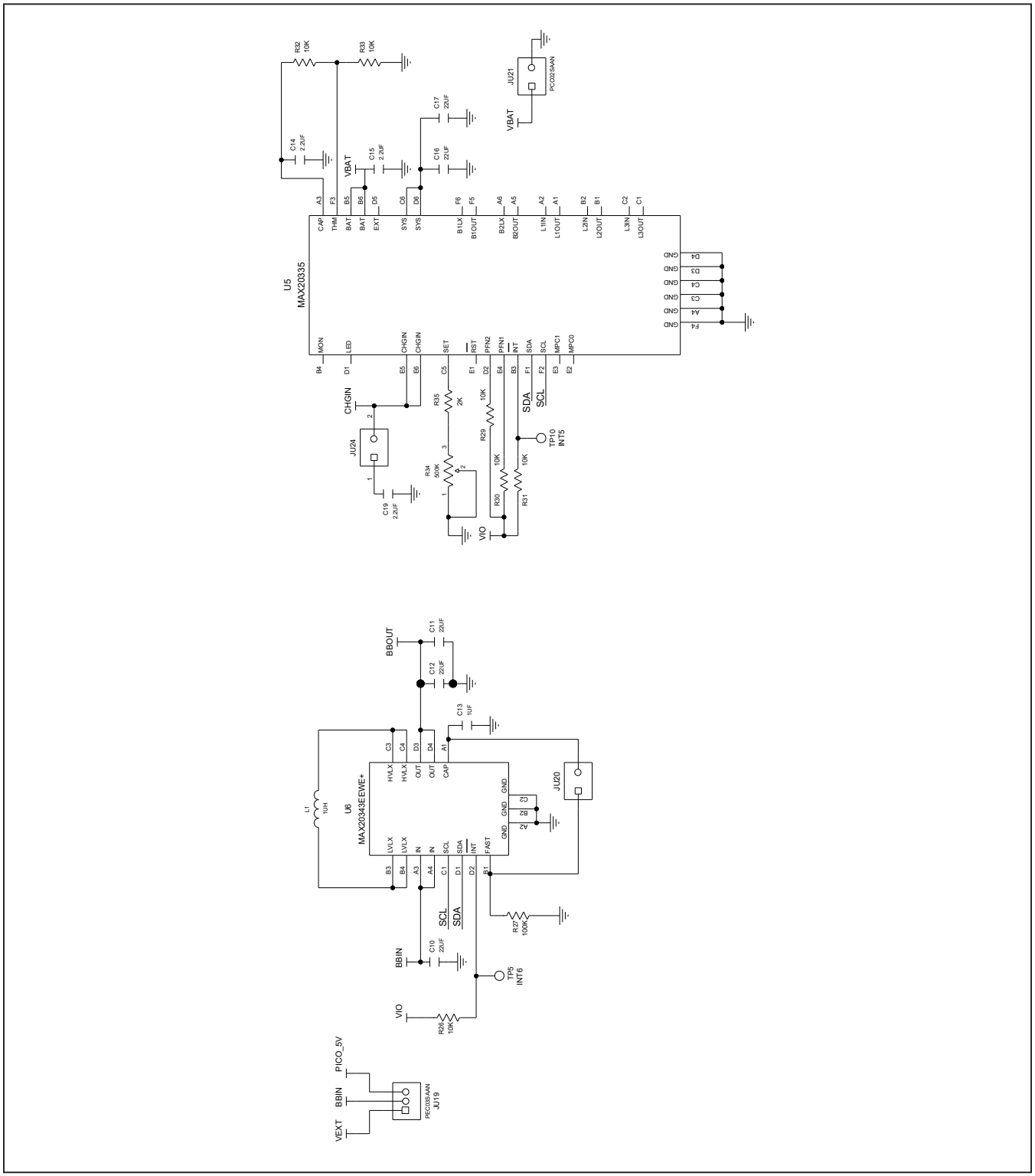
MAX20340 EV Kit Bill of Materials

ITEM	REF_DES	DNI/DNP	QTY	MFG PART #	MANUFACTURER	VALUE	DESCRIPTION
1	C1, C10-C12, C16, C17	-	6	GRM155R60J226ME11	MURATA	22UF	CAPACITOR; SMT (0402); CERAMIC CHIP; 22UF; 6.3V; TOL=20%; TC=X5R ;
2	C2-C4, C8	-	4	0603ZC105KAT2A	AVX	1UF	CAP; SMT (0603); 1UF; 10%; 10V; X7R; CERAMIC CHIP
3	C5	-	1	6TPE220MAZB	PANASONIC	220UF	CAP; SMT (CASE_B2); 220UF; 20%; 6.3V; TANTALUM CHIP
4	C6, C20	-	2	GRM21BR61A106KE19; ECJ-2FB1A106; CL21A106KPCLQNC; GRM219R61A106KE44	MURATA;PANASONIC; SAMSUNG ELECTRONICS; MURATA	10UF	CAPACITOR; SMT (0805); CERAMIC CHIP; 10UF; 10V; TOL=10%; MODEL=; TG=-55 DEGC TO +85 DEGC; TC=X5R
5	C9	-	1	C1608X5R1H104K080AA	TDK	0.1UF	CAPACITOR; SMT (0603); CERAMIC CHIP; 0.1UF; 50V; TOL=10%; MODEL=C SERIES; TG=-55 DEGC TO +85 DEGC; TC=X5R
6	C13	-	1	GRM033R61A105ME15	MURATA	1UF	CAPACITOR; SMT (0201); CERAMIC CHIP; 1UF; 10V; TOL=20%; TG=-55 DEGC TO +85 DEGC; TC=X5R
7	C14, C15, C19	-	3	C1005X5R1V225M050BC	TDK	2.2UF	CAPACITOR; SMT (0402); CERAMIC CHIP; 2.2UF; 35V; TOL=20%; MODEL=C SERIES; TG=-55 DEGC TO +85 DEGC; TC=X5R
8	DS1-DS3	-	3	LG L29K-G2J1-24	OSRAM	LG L29K-G2J1-24	DIODE; LED; SMT (0603); Vf=1.7V; If(test)=0.002A; -40 DEGC TO +100 DEGC
9	J1	-	1	SSQ-102-02-T-S-RA	SAMTEC	SSQ-102-02-T-S-RA	CONNECTOR; FEMALE; THROUGH HOLE; 0.025IN SQUARE POST SOCKET; SSQ SERIES; RIGHT ANGLE; 2PINS
10	J2	-	1	M20-9960246	HARWIN	M20-9960246	CONNECTOR; MALE; THROUGH HOLE; PIN HEADER ASSEMBLY; M20 SERIES; RIGHT ANGLE; 2PINS
11	J3, JU1-JU4, JU6, JU9-JU13, JU16, JU20, JU21, JU23, JU24, JU26	-	17	PCC02SAAN	SULLINS	PCC02SAAN	CONNECTOR; MALE; THROUGH HOLE; BREAKAWAY; STRAIGHT THROUGH; 2PINS; -65 DEGC TO +125 DEGC
12	JU5, JU7, JU8, JU14, JU15, JU19, JU25	-	7	PEC03SAAN	SULLINS	PEC03SAAN	CONNECTOR; MALE; THROUGH HOLE; BREAKAWAY; STRAIGHT; 3PINS
13	JU17, JU18	-	2	PEC04DAAN	SULLINS ELECTRONICS CORP.	PEC04DAAN	CONNECTOR; MALE; THROUGH HOLE; BREAKAWAY; STRAIGHT; 8PINS
14	L1	-	1	DFE252012F-1R0M=P2; DFE252012F-1R0M	MURATA;MURATA	1UH	INDUCTOR; SMT (1008); METAL; 1UH; 20%; 3.3A
15	MH1-MH4	-	4	9032	KEYSTONE	9032	MACHINE FABRICATED; ROUND-THRU HOLE SPACER; NO THREAD; M3.5; 5/8IN; NYLON
16	R1, R2, R25	-	3	CRCW0402499RFK	VISHAY DALE	499	RESISTOR; 0402; 499 OHM; 1%; 100PPM; 0.0625W; THICK FILM
17	R3	-	1	ERA-2AEB392	PANASONIC	3.9K	RESISTOR; 0402; 3.9K OHM; 0.1%; 25PPM; 0.063W; THICK FILM
18	R4	-	1	ERJ-2RKF6651	PANASONIC	6.65K	RESISTOR; 0402; 6.65K OHM; 1%; 100PPM; 0.10W; THICK FILM
19	R5	-	1	CRCW040210K2FK; CR0402-16W-1022	VISHAY DALE;VENKEL LTD	10.2K	RESISTOR; 0402; 10.2K OHM; 1%; 100PPM; 0.063W; THICK FILM
20	R6	-	1	CRCW040214K3FK	VISHAY DALE	14.3K	RESISTOR, 0402, 14.3K OHM, 1%, 100PPM, 0.0625W, THICK FILM
21	R7	-	1	CRCW06031M50FK	VISHAY DALE	1.5M	RESISTOR, 0603, 1.5M OHM, 1%, 100PPM, 0.10W, THICK FILM
22	R8	-	1	ERJ-PB6D4993	PANASONIC	499K	RES; SMT (0805); 499K; 0.5%; +/-50PPM/DEGC; 0.25W
23	R9, R34	-	2	3296Y-1-504LF	BOURNS	500K	RESISTOR; THROUGH-HOLE-RADIAL LEAD; 500K OHM; 10%; 100PPM; 0.5W; SQUARE TRIMMING POTENTIOMETER
24	R15	-	1	CR0402-16W-1912FT; CRCW040219K1FK	VENKEL LTD.;VISHAY DALE	19.1K	RESISTOR; 0402; 19.1K OHM; 1%; 100PPM; 0.063W; THICK FILM
25	R16	-	1	ERJ-2RKF2492	PANASONIC	24.9K	RESISTOR; 0402; 24.9K OHM; 1%; 100PPM; 0.10W; THICK FILM
26	R17	-	1	CRCW040231K6FK	VISHAY DALE	31.6K	RESISTOR; 0402; 31.6K OHM; 1%; 100PPM; 0.063W; THICK FILM
27	R18	-	1	CRCW040243K0FK	VISHAY DALE	43K	RESISTOR; 0402; 43K OHM; 1%; 100PPM; 0.063W; THICK FILM
28	R19-R24	-	6	CRCW04024K70FK; MCR01MZPF4701	VISHAY DALE; ROHM SEMICONDUCTOR	4.7K	RESISTOR, 0402, 4.7K OHM, 1%, 100PPM, 0.0625W, THICK FILM
29	R26, R31	-	2	CRCW040210K0FK; RC0402FR-0710KL	VISHAY DALE;YAGEO PHICOMP	10K	RESISTOR; 0402; 10K; 1%; 100PPM; 0.0625W; THICK FILM
30	R27	-	1	ERA-3AEB104; AT0603BRD07100KL	PANASONIC;YAGEO	100K	RESISTOR; 0603; 100K OHM; 0.1%; 25PPM; 0.1W; THIN FILM

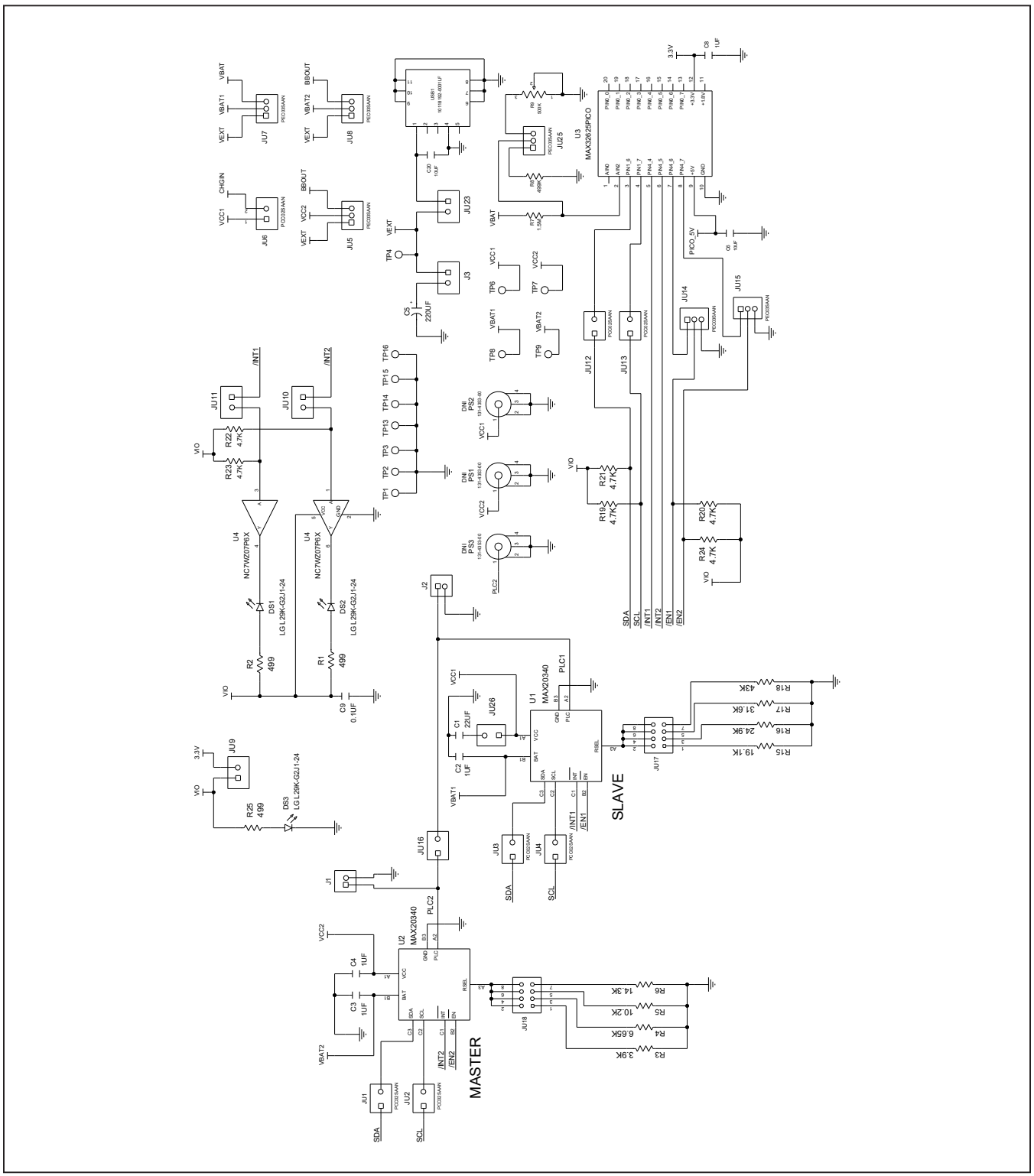
MAX20340 EV Kit Bill of Materials (continued)

ITEM	REF_DES	DNI/DNP	QTY	MFG PART #	MANUFACTURER	VALUE	DESCRIPTION
31	R29, R30, R32, R33	-	4	RC0603FR-0710KL; AC0603FR-0710KL	YAGEO;YAGEO	10K	RESISTOR; 0603; 10K OHM; 1%; 100PPM; 0.1W; THICK FILM
32	R35	-	1	RNCP0603FTD2K00	STACKPOLE ELECTRONICS INC.	2K	RESISTOR; 0603; 2K OHM; 1%; 100PPM; 0.125W; THICK FILM
33	SU1-SU19, SU23-SU25	-	22	S1100-B;SX1100-B; STC02SYAN	KYCON;KYCON; SULLINS ELECTRONICS CORP.	SX1100-B	TEST POINT; JUMPER; STR; TOTAL LENGTH=0.24IN; BLACK; INSULATION=PBT; PHOSPHOR BRONZE CONTACT=GOLD PLATED
34	TP1-TP3, TP13-TP16	-	7	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;
35	TP4	-	1	5010	KEYSTONE	N/A	TEST POINT; PIN DIA=0.125IN; TOTAL LENGTH=0.445IN; BOARD HOLE=0.063IN; RED; PHOSPHOR BRONZE WIRE SIL;
36	TP5, TP10	-	2	5004	KEYSTONE	N/A	TEST POINT; PIN DIA=0.1IN; TOTAL LENGTH=0.3IN; BOARD HOLE=0.04IN; YELLOW; PHOSPHOR BRONZE WIRE SILVER PLATE FINISH;
37	TP6-TP9	-	4	5000	KEYSTONE	N/A	TEST POINT; PIN DIA=0.1IN; TOTAL LENGTH=0.3IN; BOARD HOLE=0.04IN; RED; PHOSPHOR BRONZE WIRE SILVER PLATE FINISH;
38	U1, U2	-	2	MAX20340	MAXIM	MAX20340	EVKIT PART - IC; MAX20340; BI-DIRECTIONAL POWER LINE COMMUNICATION MANAGEMENT IC; WLP9; PACKAGE OUTLINE DRAWING: 21-100389; PACKAGE CODE: W91R1+1
39	U3	-	1	MAX32625PICO	MAXIM	MAX32625PICO	MODULE; BOARD; MAX32625PICO BOARD DESIGN FOR MAX32625 ARM CORTEX-M4F; BOARD; LAMINATED PLASTIC WITH COPPER CLAD;
40	U4	-	1	NC7WZ07P6X	FAIRCHILD SEMICONDUCTOR	NC7WZ07P6X	IC; BUF; TINY LOGIC ULTRA-HIGH SPEED DUAL BUFFER; SC70-6
41	U5	-	1	MAX20335	MAXIM	MAX20335	EVKIT PART - IC; PWRM; WEARABLE CHARGE MANAGEMENT SOLUTION; WLP36;
42	U6	-	1	MAX20343EEWE+	MAXIM	MAX20343EEWE+	EVKIT PART - IC; ULTRA-LOW QUIESCENT CURRENT; LOW NOISE 3.5W BUCKBOOST REGULATOR; WLP16; PACKAGE OUTLINE: 21-100328; PACKAGE CODE: W161C2+1
43	USB1	-	1	10118192-0001LF	FCI CONNECT	10118192-0001LF	CONNECTOR; FEMALE; SMT; MICRO USB B TYPE RECEPTACLE; RIGHT ANGLE; 5PINS
44	PCB	-	1	MAX20340	MAXIM	PCB	PCB:MAX20340
45	PS1-PS3	DNP	0	131-4353-00	TEKTRONICS	131-4353-00	CONNECTOR; WIREMOUNT; CIRCUIT BOARD TEST POINT MINIATURE PROBE; STRAIGHT; 4PINS
TOTAL			127				

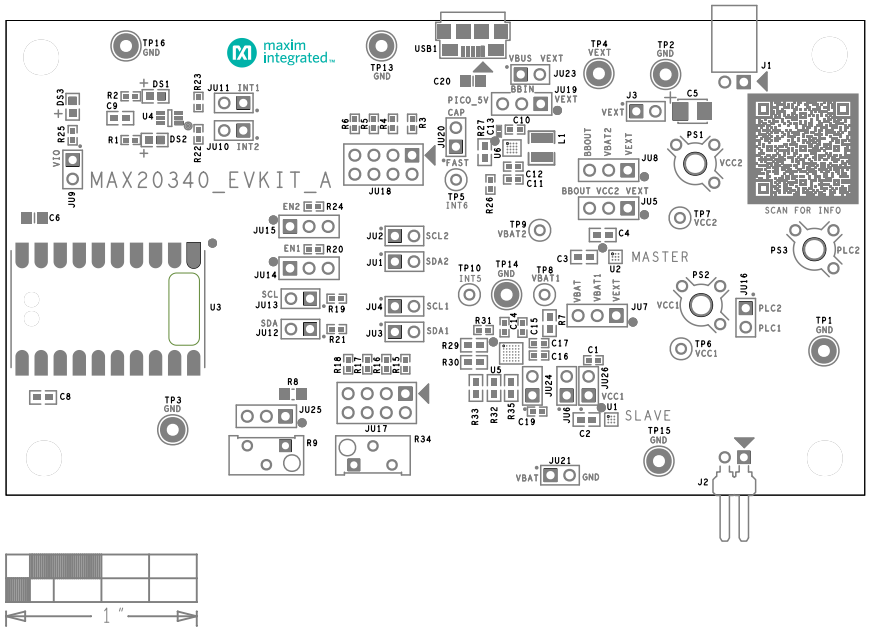
MAX20340 EV Kit Schematics



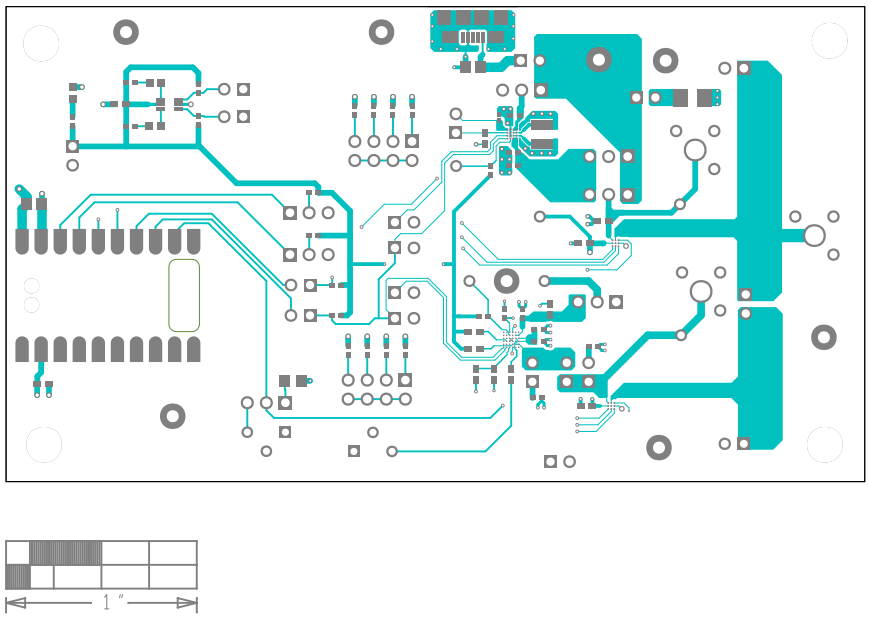
MAX20340 EV Kit Schematics (continued)



MAX20340 EV Kit PCB Layouts

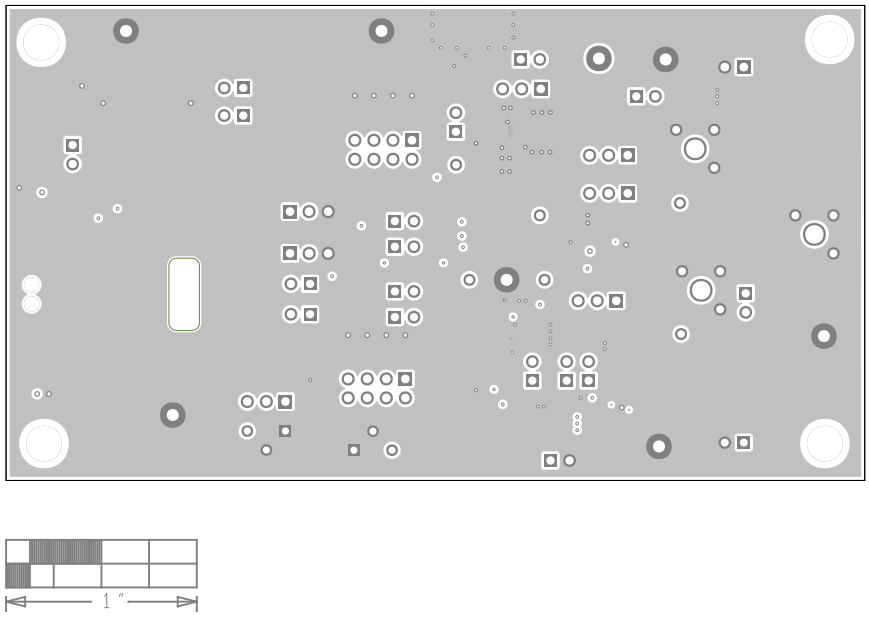


MAX20340 EV Kit PCB Layout—Silkscreen Top

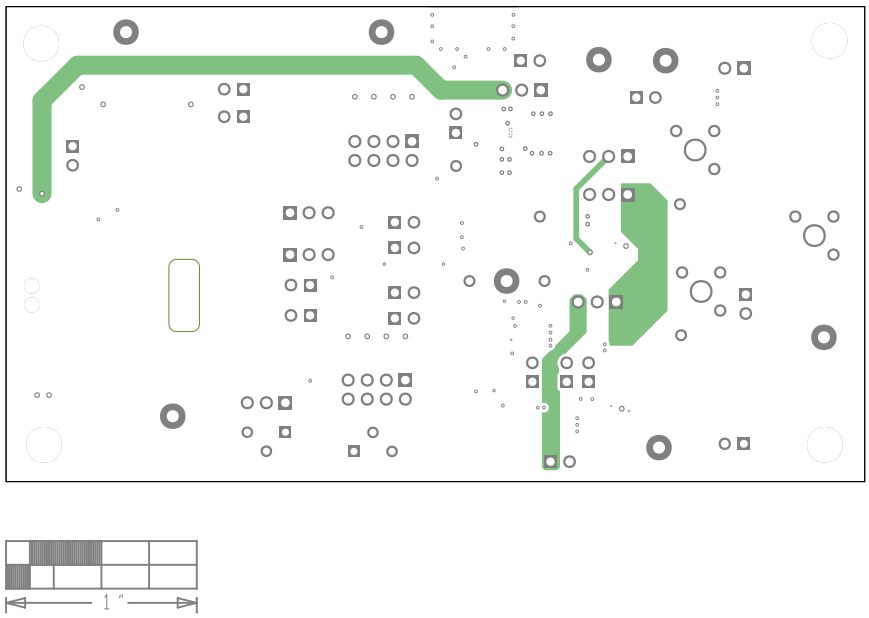


MAX20340 EV Kit PCB Layout—Top Layer

MAX20340 EV Kit PCB Layouts (continued)

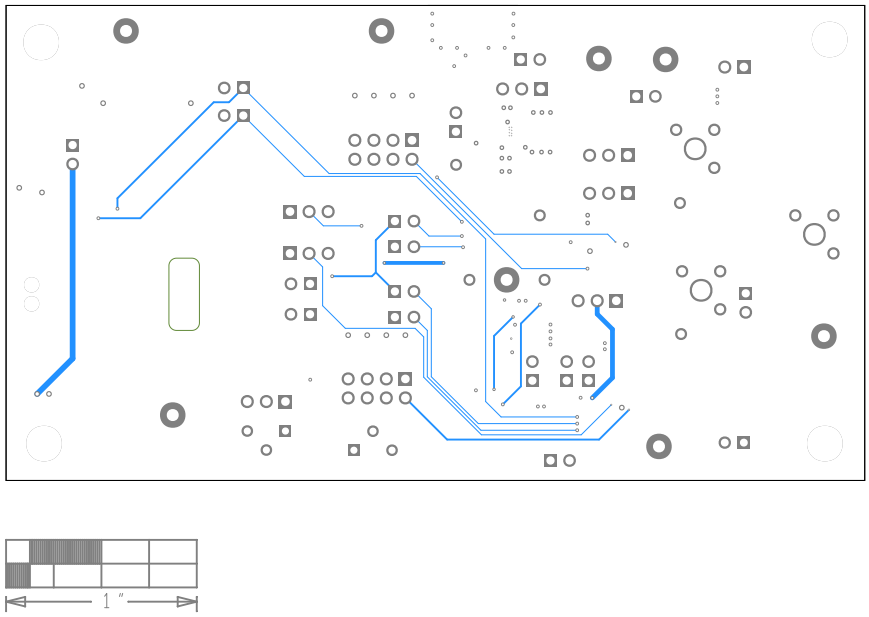


MAX20340 EV Kit PCB Layout—Internal Layer 2

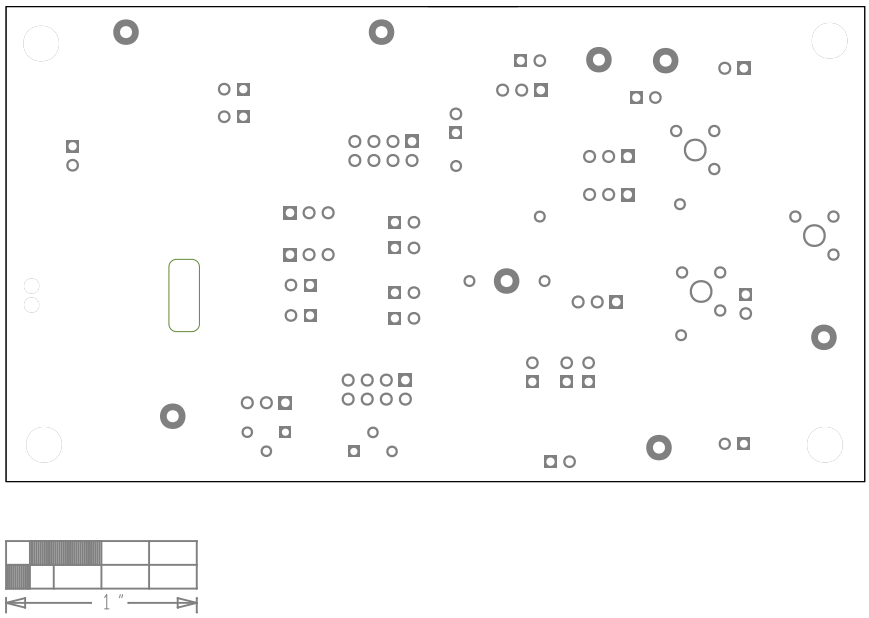


MAX20340 EV Kit PCB Layout—Internal Layer 3

MAX20340 EV Kit PCB Layouts (continued)



MAX20340 EV Kit PCB Layout—Bottom Layer



MAX20340 EV Kit PCB Layout—Silkscreen Bottom

Revision History

REVISION NUMBER	REVISION DATE	DESCRIPTION	PAGES CHANGED
0	12/19	Initial release	—
1	4/20	Updated the *General Description*, *Features*, *Procedure, Options Menu, Detailed Description of Hardware* sections; Replaced Figures 1–6; Added the *Dual Slave Mode* and *Firmware Update* sections, and Figures 7–12	1–9

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