

## General Description

The MAX77789 evaluation kit (EV kit) is a fully assembled and tested printed circuit board (PCB) that evaluates the MAX77789, standalone 3.15A USB Type-C® and I<sup>2</sup>C configurable charger in WLP Package.

The MAX77789 EV kit includes the IC evaluation board, USB micro-B cable, and MAXUSB\_INTERFACE# board. The MAXUSB\_INTERFACE# board allows the use of Windows® based graphical user interface (GUI) software with the EV kit and can be downloaded from Maxim's website at [www.analog.com/en/products/MAX77789.html](http://www.analog.com/en/products/MAX77789.html) (under the *Design & Development* tab). Windows 7 or newer Windows operating system is required to use the EV kit software.

## Features

- Evaluates the MAX77789 USB Type-C Autonomous Charger for Single Cell Li-Ion Battery
- 4.6V to 13.4V Input Operating Range
- Supports Charging Current Up to 3.15A
- Demonstrates 5V, 1.5A OTG Mode, and BYP Reverse Boost
- Includes On-Board Thermistor Options to Validate JEITA Compliance
- Demonstrates USB Type-C Power Source Detection and Sink Devices
- Demonstrates Spread Spectrum
- Easy Evaluation of Factory Ship Mode
- MAXUSB\_INTERFACE# Allows Easy Communication with a Windows PC
- GUI Software that Drives the I<sup>2</sup>C Serial Interface for Optional Software Control

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

## MAX77789 EV Kit Photo

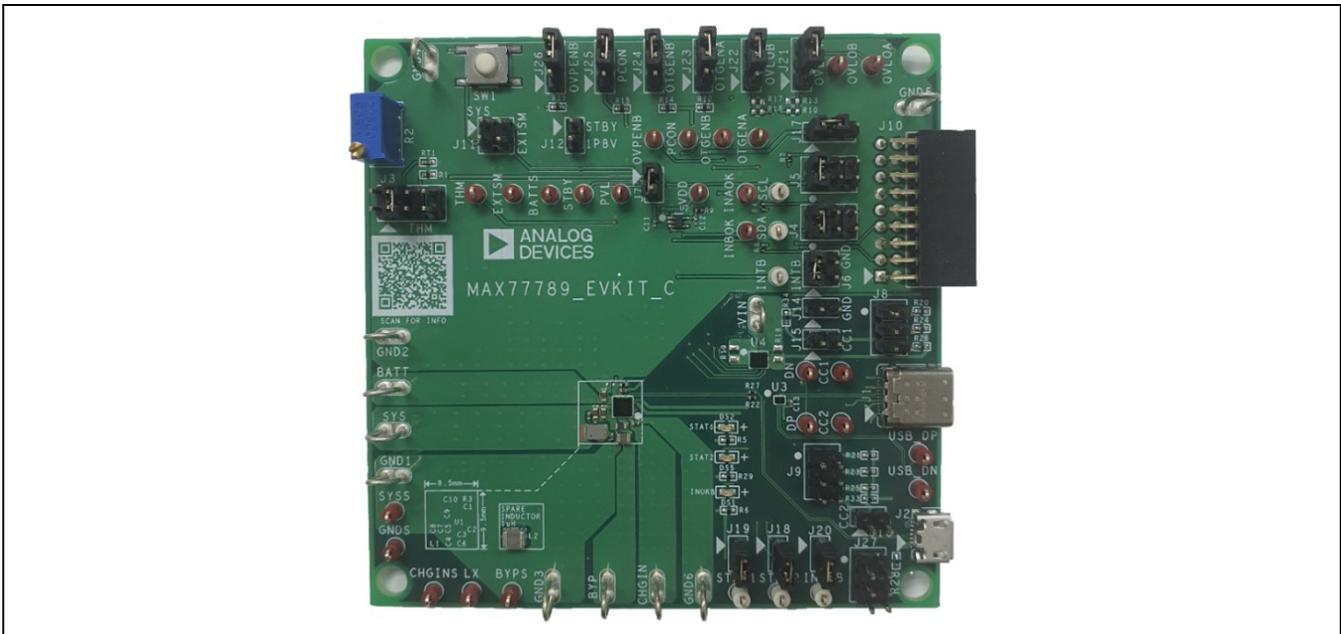


Figure 1. MAX77789 EV Kit Photo

USB Type-C is a registered trademark of USB Implementers Forum.

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

## MAX77789 EV Kit Files

SOFTWARE	DESCRIPTION
MAX77789GUISetupX.X.X.exe	Installs the EV kit software on PC

## MAX77789 EV Kit Component List

HARDWARE	QTY	DESCRIPTION
MAX77789 EV kit	1	MAX77789 evaluation kit
USB high-speed A-to-B cable	1	USB Micro-B cable
MAXUSB interface board	1	Interface for the MAX77789 EV kit software

## Quick Start

## Required Equipment

- MAX77789 evaluation kit
- USB Type-C travel adapter and cable
- USB Micro-B cable
- MAXUSB interface board
- PC with Windows 7 or newer operating system and USB port
- Battery or battery simulator
- Power supply
- Oscilloscope
- Multimeters

## Setup Overview

A typical bench setup for the MAX77789 EV kit is shown in [Figure 2](#).

## Procedure

The EV kit is fully assembled and tested. Follow the steps to verify the board operation. Use twisted wires that are as short as possible to connect the battery and power sources. Make sure the PC is connected to the internet throughout the process so that the USB driver can be automatically installed.

**Note:** Do not turn on the DC power supply until all connections are made.

- 1) Visit [www.maximintegrated.com/products/MAX77789](http://www.maximintegrated.com/products/MAX77789) under the *Design & Development* tab to download the latest version of the MAX77789 EV kit software. Save the software to a temporary folder and unpack the zip file.
- 2) Install the EV kit software on the computer by running the **MAX77789GUISetupX.X.X.exe** program inside the temporary folder. This copies the program files and creates an icon in the Windows **Start** menu. The software requires the .NET Framework 4.5 or later. If connected to the internet, Windows automatically updates the .NET Framework as needed.
- 3) The EV kit software launches automatically after installation, and it can be launched by clicking on its icon in the Windows **Start** menu.
- 4) Make jumper connections based on the default position column in [Table 1](#). Change it later when evaluating more features.
- 5) Plug in the MAXUSB interface board into the connector J10 on the EV kit.
- 6) Use the USB Micro B cable provided with the EV kit to connect the MAXUSB interface board to the PC's USB port.  
Connect a 1-cell battery or simulated battery to the connectors labeled BATT and GND2. Connect a DC power supply to the connectors labeled CHGIN and GND6. Note that CHGIN can come from three sources (the Micro-USB connector, the USB Type-C connector, or the CHGIN loop), but only one of these sources should be connected at any time. Take note that if CHGIN comes from the CHGIN loop, the GUI must be connected, and the BC1.2 dependency register under the BC/CC control tab must be written to 1, then the EV kit can be powered up successfully, whereby the STAT1 and INOKB LEDs lit up. This is not required for the Micro-USB connector or the USB Type-C connector.  
BC1.2 dependency from Type C  1 = BC1.2 is now independent of type C
- 7) Launch the MAX77789 GUI software.
- 8) Select **Device**→**Connect** from the window options to connect to the EV kit.

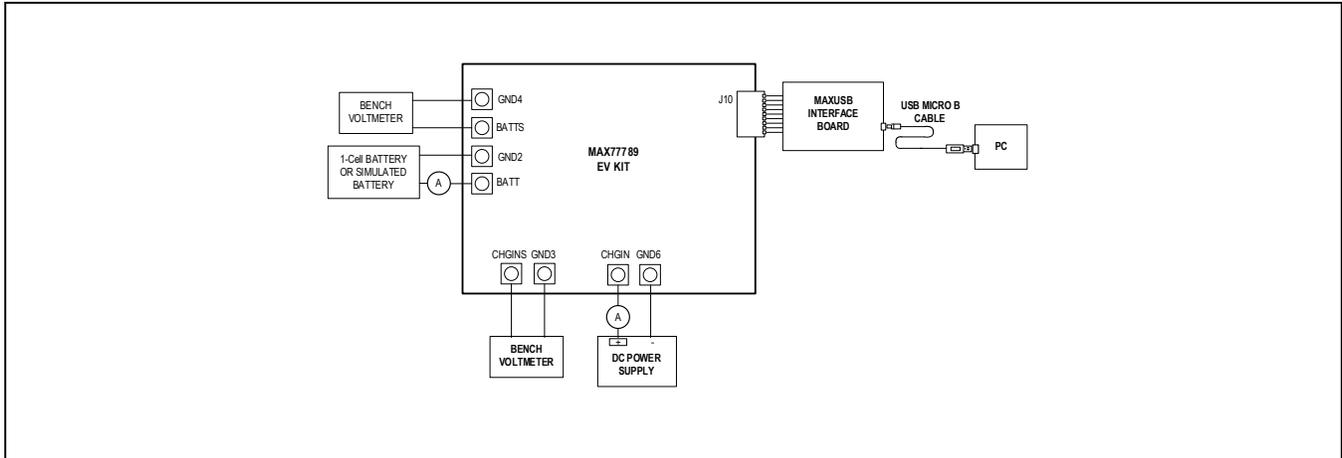


Figure 2. MAX77789 EV Kit Board Connections

**Table 1. Jumper Connection Guide**

JUMPER NUMBER	DEFAULT POSITION	FUNCTION
J3	Short 3-4	Short 1-2: Connect THM pin to a variable resistor
		Short 3-4: Connect THM pin to a thermistor
		Short 5-6: Connect THM pin to a fixed value resistor 10K
		Short 7-8: Connect THM pin to GND
J4, J5	Short 1-2	Short 1-2: Connect SDA, SCL pins to MAXUSB interface module
		Short 3-4: Connect SDA, SCL pins to VCC18
		Short 5-6: Connect SDA, SCL pins to GND
J6	Short 3-4	Short 1-2: Connect INTB pin to MAXUSB interface module
		Short 3-4: Connect INTB pin to VCC18
		Short 5-6: Connect INTB pin to GND
J7	Short 1-2	Short 1-2: Connect on-board LDO input to BATT
J8	Open	Short 1-2: Connect CC1 to 10K pull-up resistor
		Short 3-4: Connect CC1 to 22K pull-up resistor
		Short 5-6: Connect CC1 to 56K pull-up resistor
J9	Open	Short 1-2: Connect CC2 to 10K pull-up resistor
		Short 3-4: Connect CC2 to 22K pull-up resistor
		Short 5-6: Connect CC2 to 56K pull-up resistor
J11	Open	Short 1-2: Connect EXTSM pin to SYS
		Short 3-4: Connect EXTSM pushbutton to BATT
J12	Short 5-6	Short 1-2: Connect STBY pin to VCC18 (for USB suspend mode)
J13	Open	Short 1-2: Connect CC2 pin to 5.1K pull-down resistor
J14	Open	Short 1-2: Connect 5.1K pull-down resistors to GND
J15	Open	Short 1-2: Connect CC1 pin to 5.1K pull-down resistor
J17	Short 2-3	Short 1-2: Connect VCC18 to MAXUSB interface module
		Short 2-3: Connect VCC18 to on-board LDO output
J18	Short 1-2	Short 1-2: Connect STAT2 pin to LED and pull-up resistor
J19	Short 1-2	Short 1-2: Connect STAT1 pin to LED and pull-up resistor
J20	Short 1-2	Short 1-2: Connect INOKB pin to LED and pull-up resistor
J21	Short 2-3	Short 1-2: Connect OVLOA pin to resistor divider
		Short 2-3: Connect OVLOA pin to GND
J22	Short 2-3	Short 1-2: Connect OVLOB pin to pull-up resistor
		Short 2-3: Connect OVLOB pin to GND
J23	Short 2-3	Short 1-2: Connect OTG_ENA pin to pull-up resistor
		Short 2-3: Connect OTG_ENA pin to GND

J24	Short 2-3	Short 1-2: Connect OTG_ENB pin to pull-up resistor
		Short 2-3: Connect OTG_ENB pin to GND
J25	Short 2-3	Short 1-2: Connect PCON pin to pull-up resistor
		Short 2-3: Connect PCON pin to GND
J26	Short 2-3	Short 1-2: Connect OVP_ENB pin to pull-up resistor
		Short 2-3: Connect OVP_ENB pin to GND
J27	Short 5-6	Short 1-2: Connect VCCEN pin to pull-up resistor
		Short 3-4: Connect VCCEN pin to STAT2
		Short 5-6: Connect VCCEN pin to GND

### Detailed Description of Software

The MAX77789 GUI software provides an easy-to-use interface to control the function blocks of the IC.

#### Software Installation

Double-click the **MAX77789GUISetupX.X.X.exe** icon to begin the installation process. Follow the prompts to complete the installation. The evaluation software can be uninstalled in the **Add/Remove Programs** tool in the **Control Panel**. After the installation is complete, open the **Analog Devices/MAX77789** folder and run **MAX77789.exe** or select it from the program menu. [Figure 3](#) shows a splash screen containing information about the evaluation kit that appears while the program is loading.

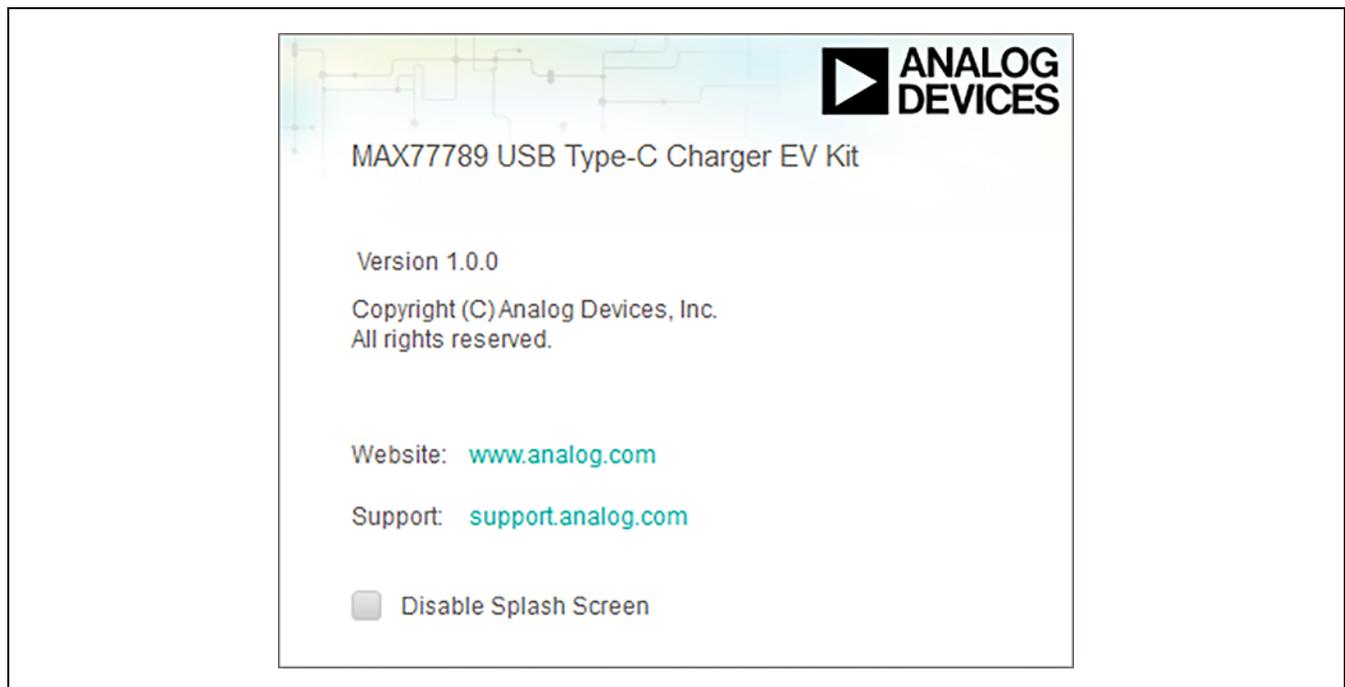


Figure 3. Splash Screen

### Establish Communication

Power up the MAX77789 by connecting a 1-cell battery or simulated battery at BATT/GND. Open the GUI software and select **Device**→**Connect**. A window should pop up showing that a slave address 0xD2 has been found. If not, check the USB connection and power. Choose **Read and Close** and the status bar displays “Connected” to signify active communication. An example of a successful connection is shown in [Figure 4](#).

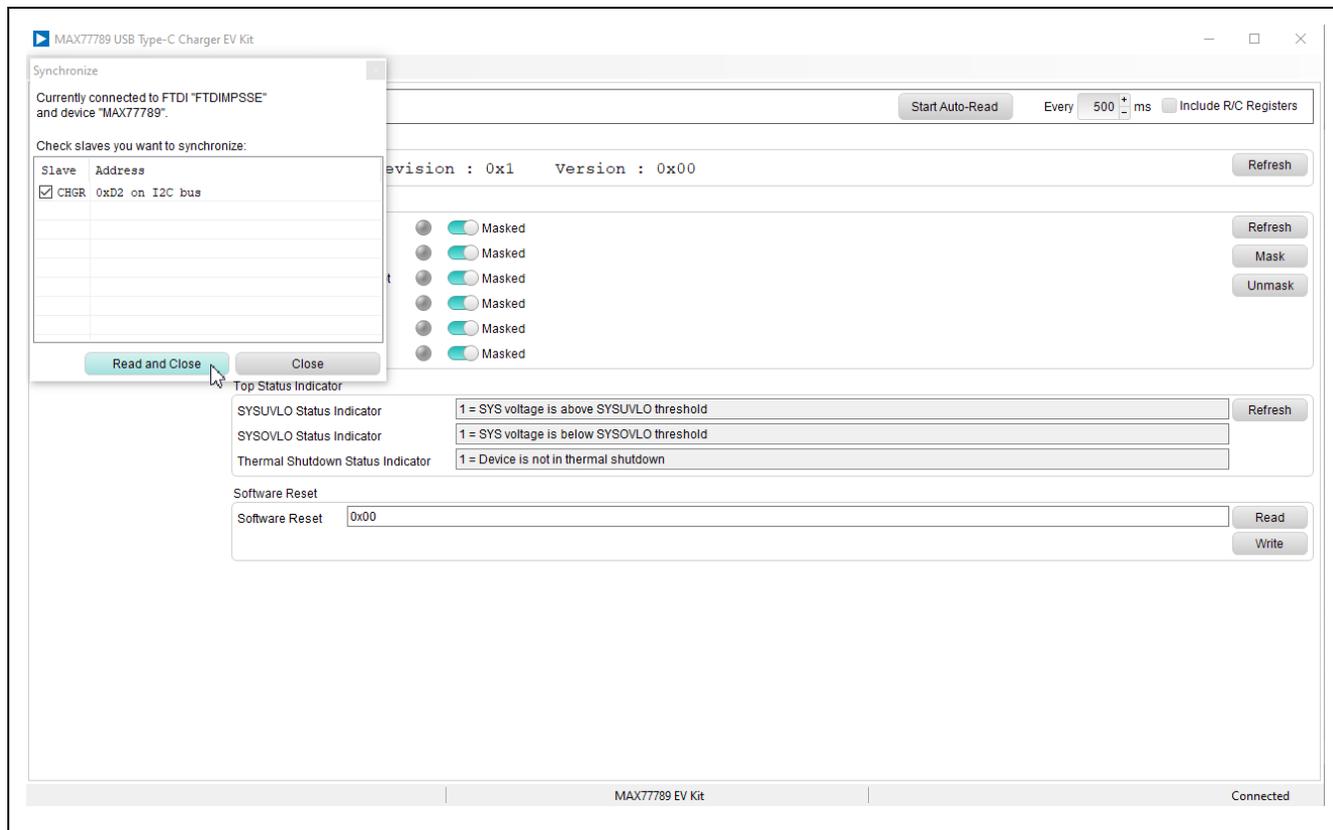


Figure 4. Communication Window

### Main Display

Status bits and programmable functions of the charger can be accessed through the interface tabs in the left column of the window as shown in [Figure 5](#). Follow the guidance on the MAX77789 IC data sheet for the usage of each register.

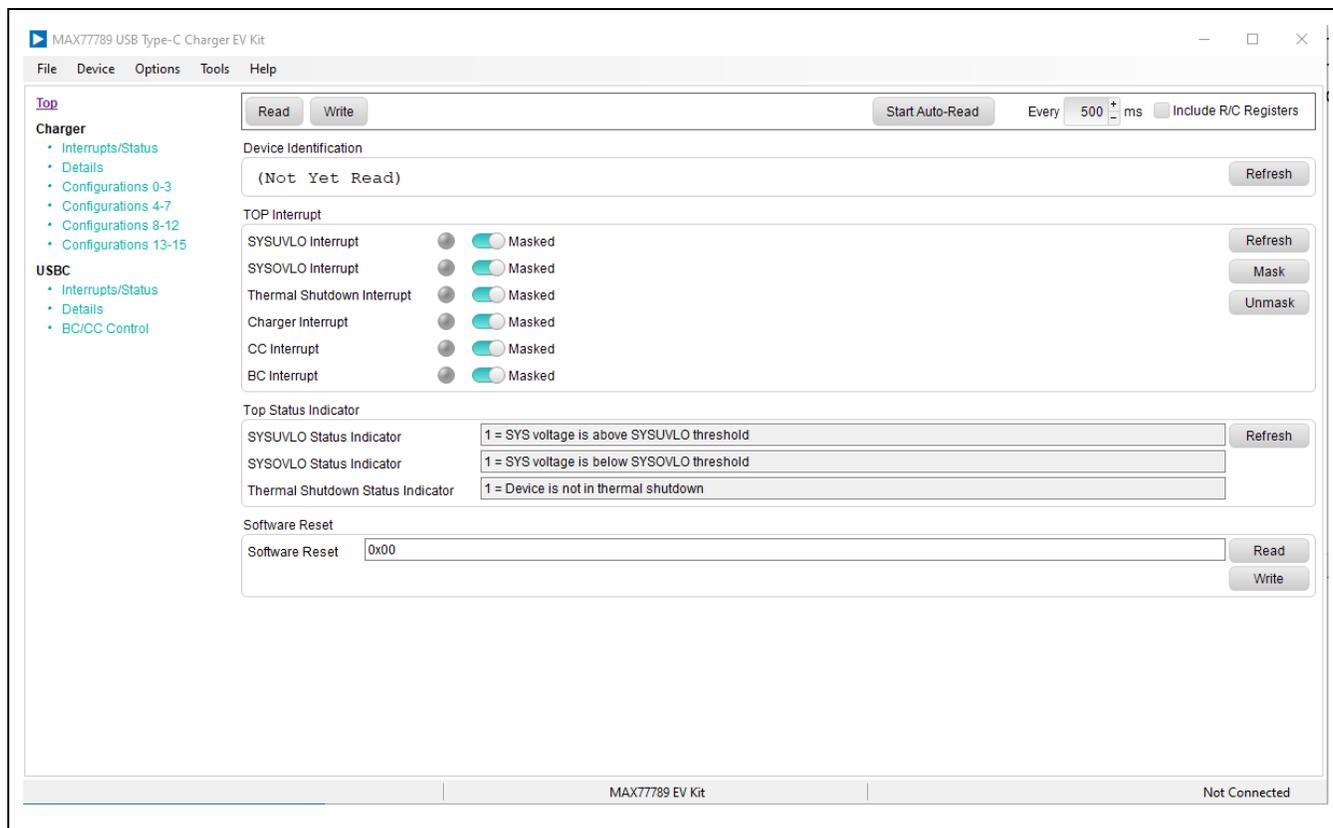


Figure 5. Top-Level Registers

### Register Explorer

To view the ICs register map, select the **Tools**→**Register Explorer** menu from the main window. The value of all control registers is displayed and updated automatically when changes are made using the GUI.

Double-click on register or bit names to open the selection to manually program the ICs registers. Writeable registers are indicated with a teal-colored background in the **Meaning** column as shown in [Figure 6](#).

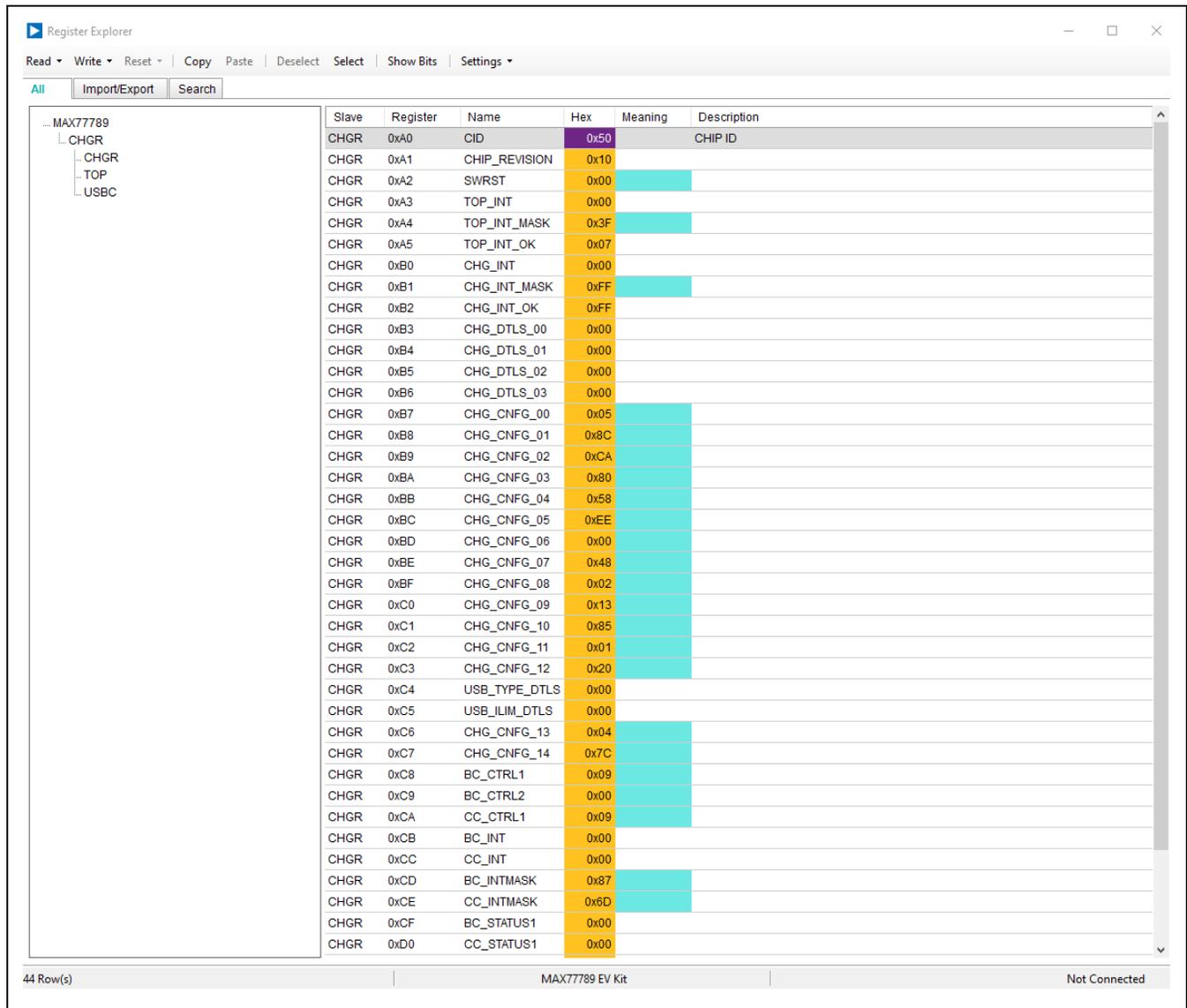


Figure 6. Register Explorer

### Register Dashboard

A **Register Dashboard** is also provided under **Tools**→**Register Dashboard**. In this interface, clicking on the empty slots allows the user to display specific registers of interest and their values in a compact window, as shown in [Figure 7](#).

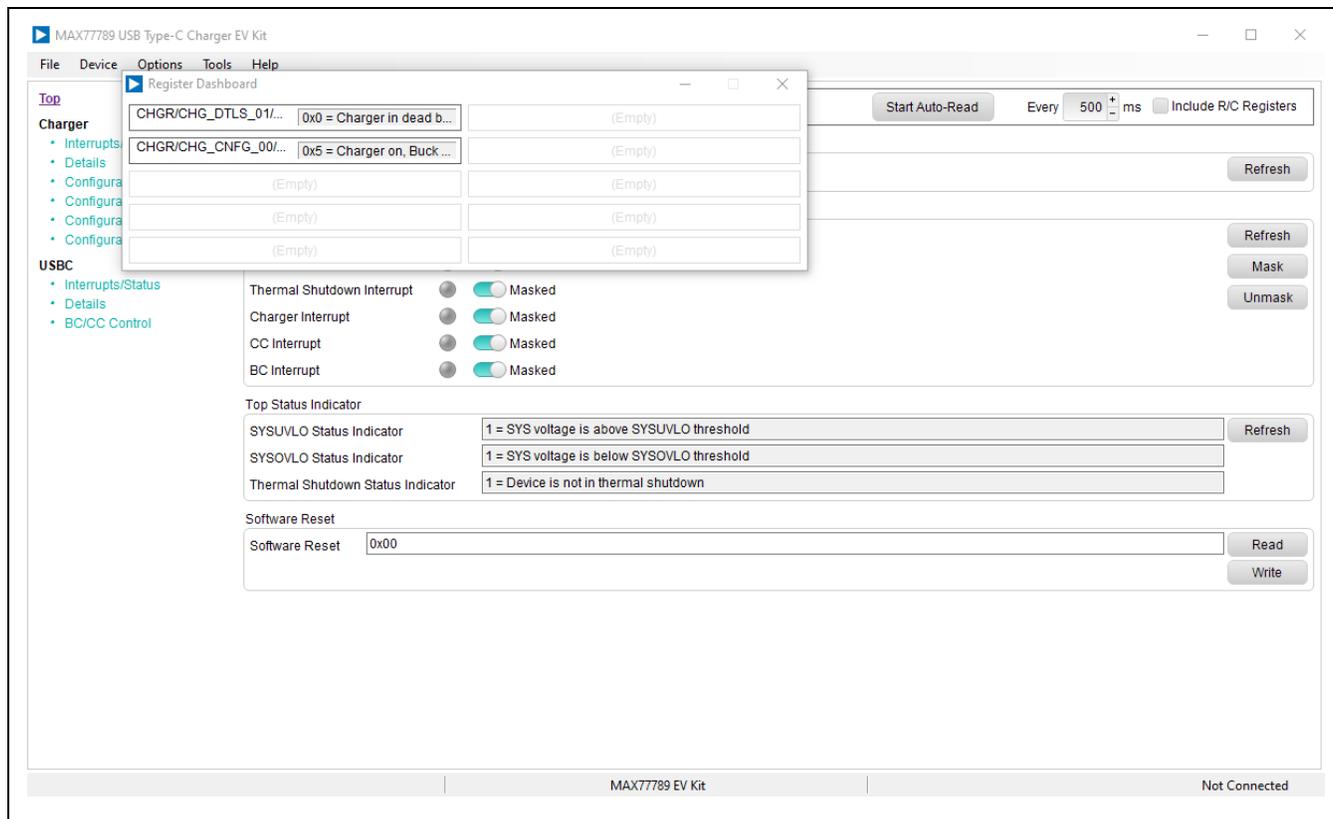
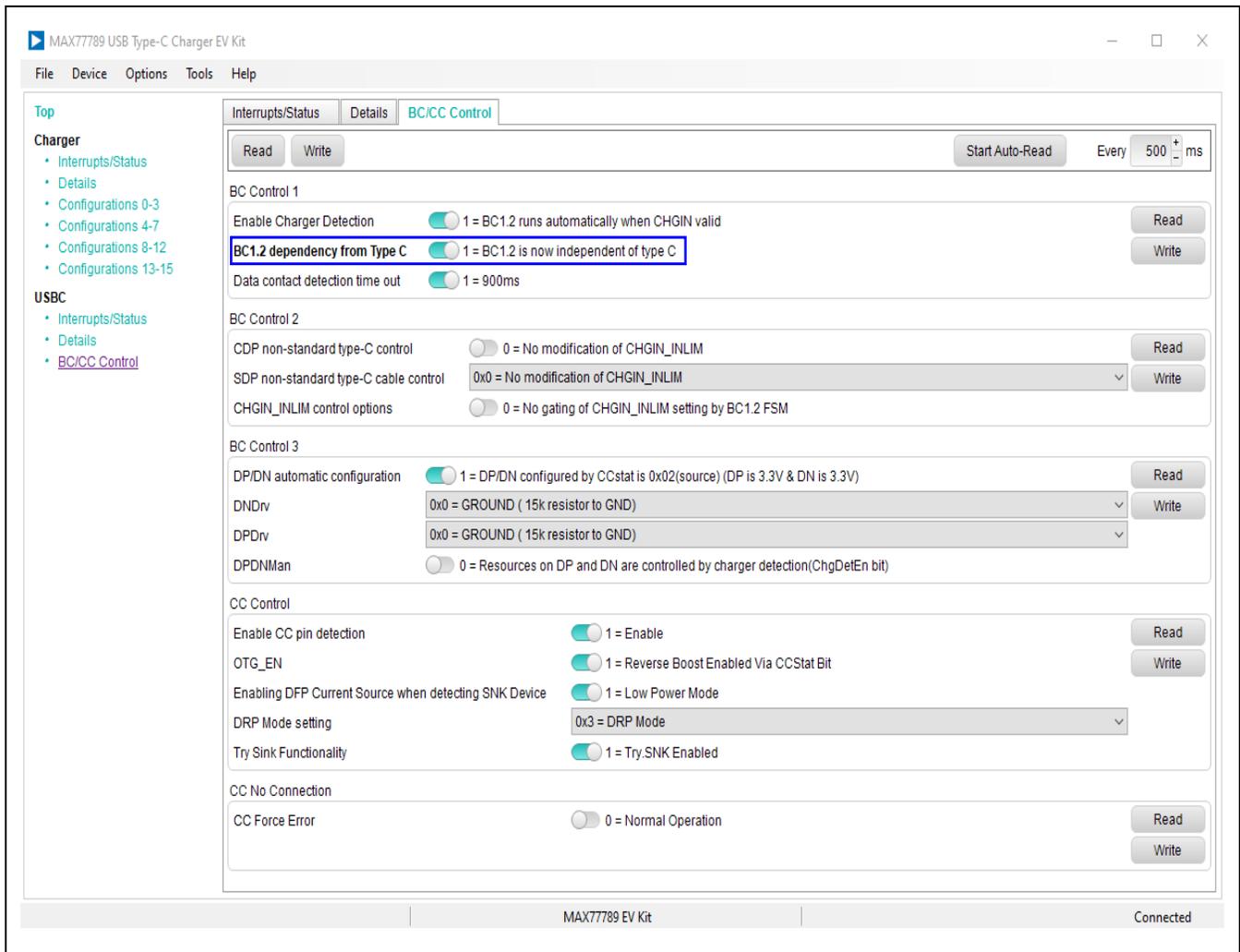


Figure 7. Register Dashboard

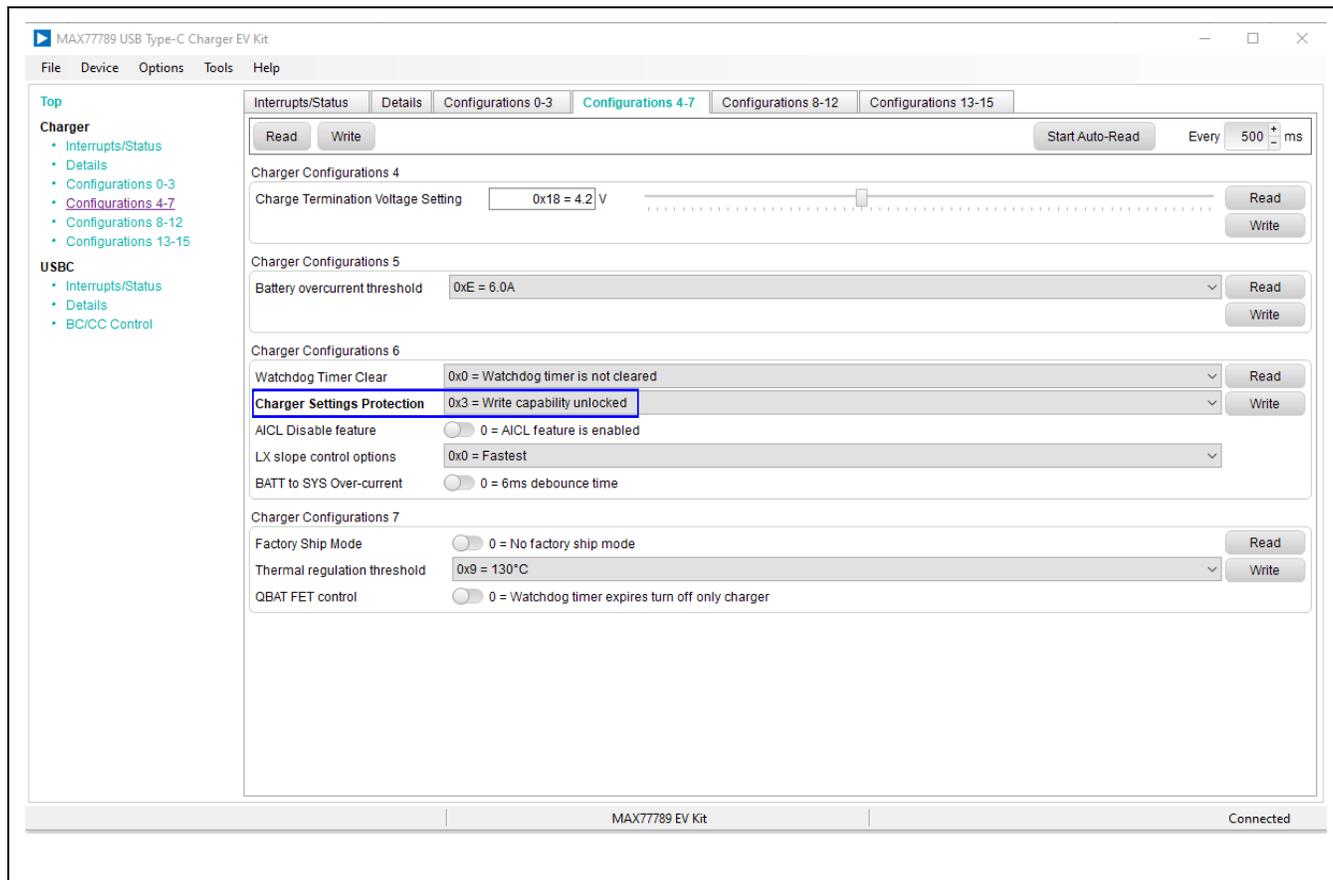
## Detailed Description of Hardware

### Battery Charger Test Setup

1. Connect a 1-cell battery pack or simulated battery between BATT and GND2. For the battery simulator, adjust the voltage to 3.8V with a 3.5A current limit, and turn it on.  
**Note:** Only use a battery pack with a charge termination voltage that matches the setting on the board (see step 8).
2. Connect the MAXUSB interface board to J10 on the EV kit. Then connect the MAXUSB interface board to the PC with a USB Micro-B cable.
3. Connect the DC power supply between CHGIN and GND6 on the EV kit board.
4. Adjust voltage and current limits of the DC power supply to 5.0V and 3.5A. Output of the power supply is off.
5. Open the EV kit software and connect to the EV kit (**Device**→**Connect**).
6. In this case, since CHGIN is coming from the CHGIN loop, set **BC1.2 dependency from Type C** under the **BC/CC Control** tab. Then click **Write** to send the command. If CHGIN come from a USBC or Micro USB source, then this step can be skipped.

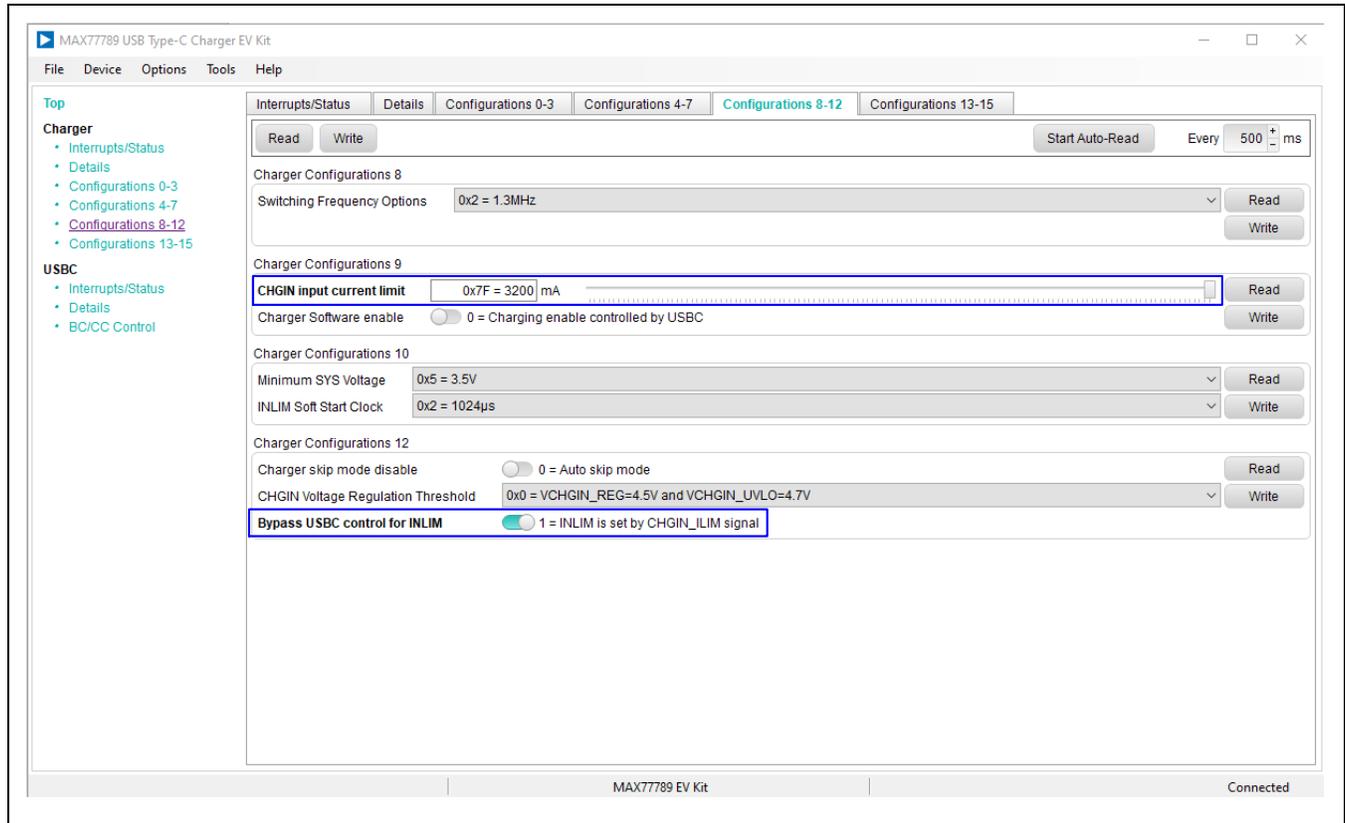


7. Set **Charger Settings Protection** under the **Configuration 4-7** tab to **0x3 = Write capability unlocked**. Click **Write** to send the command. Note that 0x3 must be written to unlock the charger register setting.



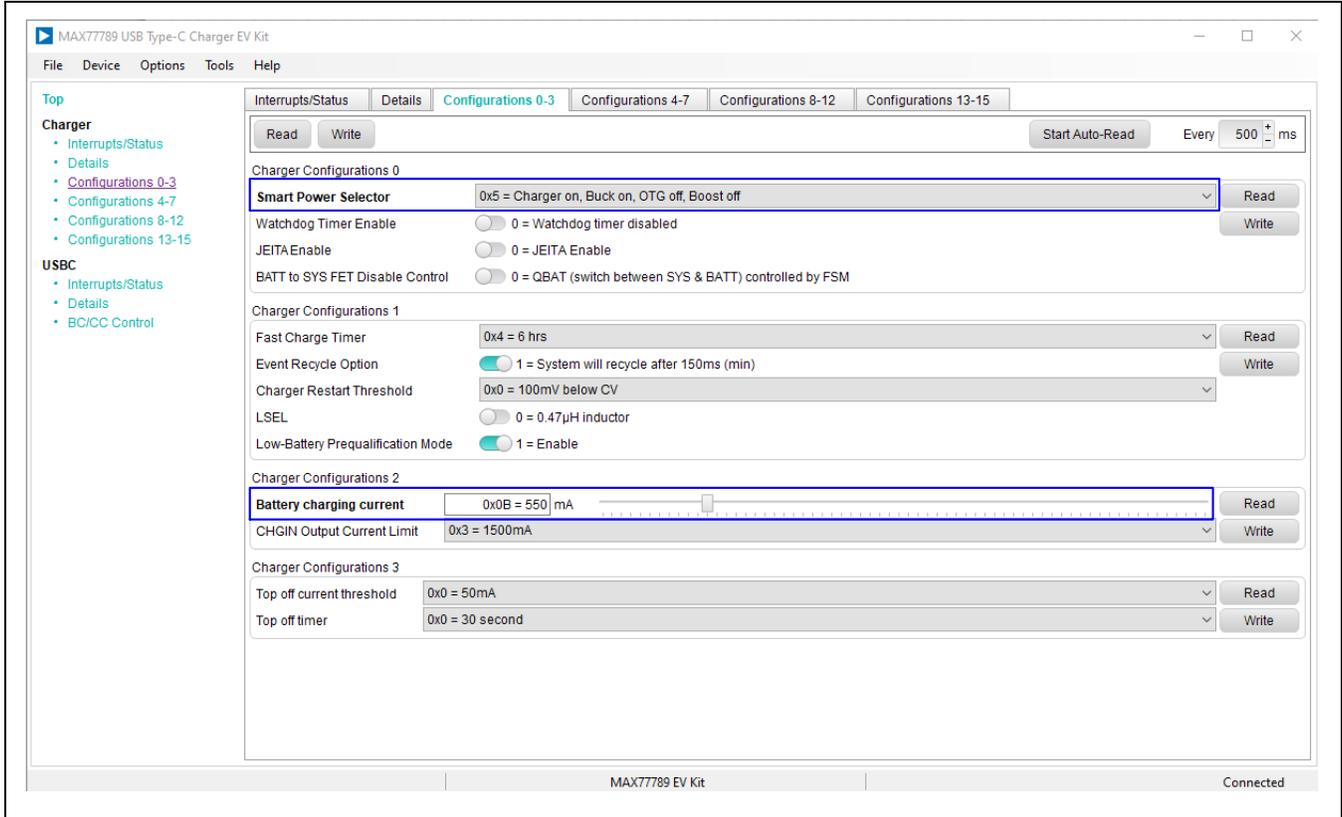
8. Program the appropriate charger settings for your system. CHGIN input current limit can be programmed with **CHGIN\_ILIM** by setting **Bypass USBC control for INLIM** to 1.

In the **Configuration 8-12** tab, set **CHGIN input current limit (CHGIN\_ILIM)** in the **Charger Configurations 9** register. Click **Write** to send the command to the charger. Note that the maximum setting of the **CHGIN input current limit** for the MAX77789 is **0x7F = 3200mA**.

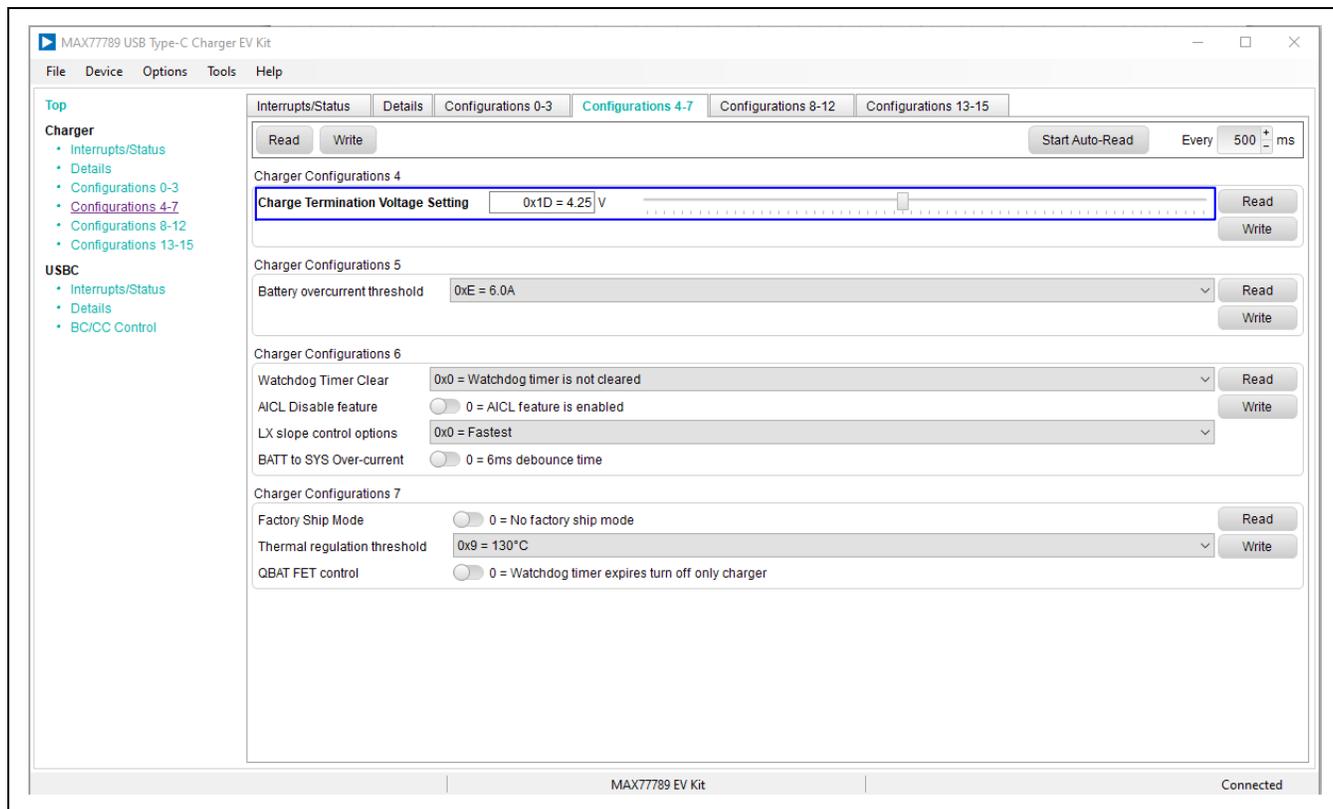


9. In the **Configuration 0-3** tab, set **Battery Charging Current** in the **Charger Configurations 2** register. Click **Write** to send the command to the charger. Note that the maximum setting of **Fast Charge Current** for the MAX77789 is **0x3F = 3150mA**.

At the same time, set **Smart Power Selector** to **0x5 = Charger = On, Buck = On, OTG = Off, and Boost = Off** and click **Write** to enable charger mode.



10. In the **Configuration 4-7** tab, set **Charge Termination Voltage Setting** in the **Charger Configurations 4 register**. Click **Write** to send the command to the charger. Note that the maximum setting of **Charge Termination Voltage setting** for the MAX77789 is 0x3F = 4.55V.



11. Turn on the DC power supply's output to enable charging.

12. Use data log equipment to log the charge current and battery voltage profile while charging a 1-cell battery.

## BC1.2 and CC Detection Setup

1. Connect a 1-cell battery pack or simulated battery between BATT and GND2. For the battery simulator, adjust the voltage to 3.8V with a 3.5A current limit, and turn it on.
2. Set Charger Settings Protection under Configuration 4-7 tab to 0x3 = write capability unlocked. Click Write to send the command. Note that 0x3 must be written to unlock the charger register setting.
3. For the input current limit, which is set by USB, set **Bypass USBC control for INLIM** to **0**.

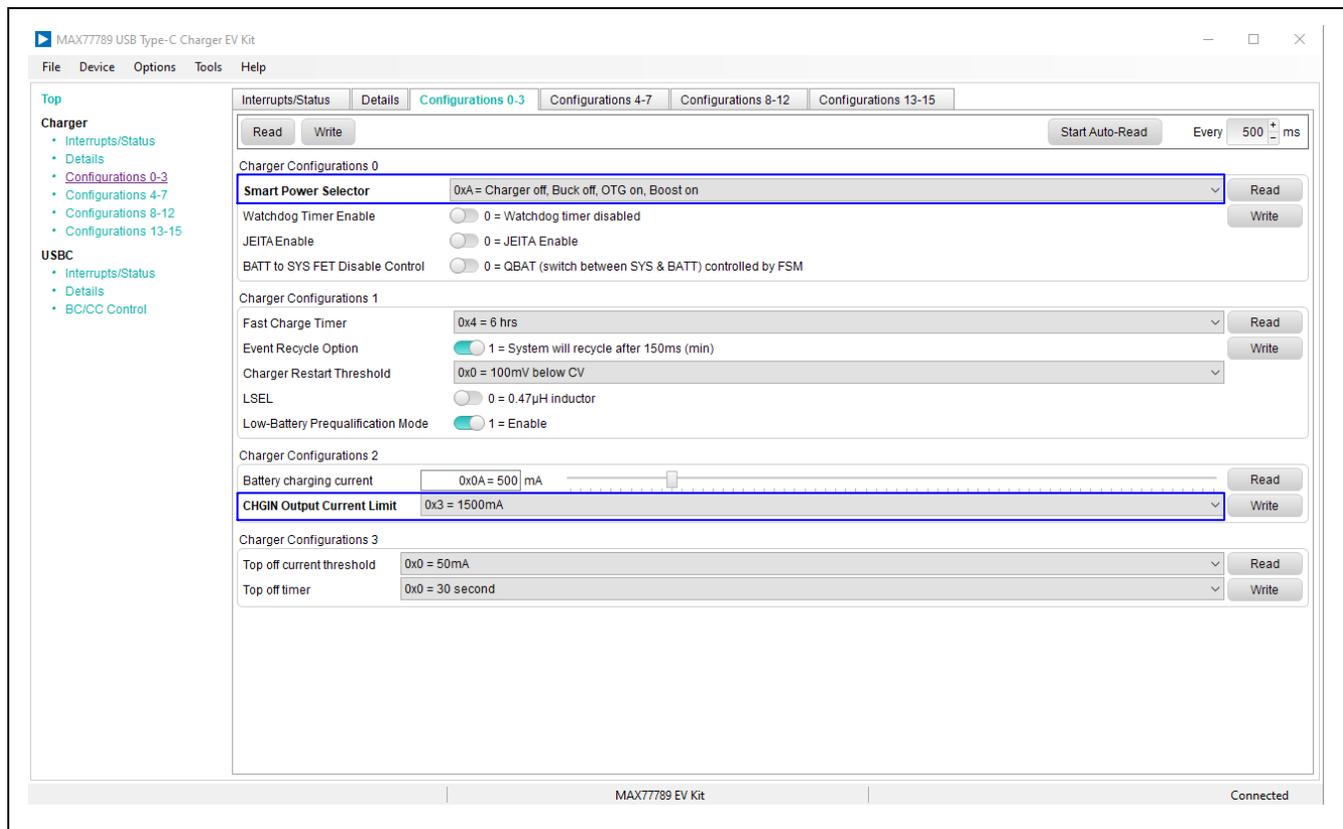
The screenshot shows the MAX77789 USB Type-C Charger EV Kit software interface. The 'Configurations 8-12' tab is active. The 'Charger Configurations 9' section is expanded, showing the 'Bypass USBC control for INLIM' option set to '0 = INLIM is set by USB'. Other settings in this section include 'CHGIN input current limit' at 500mA and 'Charger Software enable' set to '0 = Charging enable controlled by USB'. The 'Charger Configurations 10' section shows 'Minimum SYS Voltage' at 3.5V and 'INLIM Soft Start Clock' at 1024µs. The 'Charger Configurations 12' section shows 'Charger skip mode disable' set to '0 = Auto skip mode' and 'CHGIN Voltage Regulation Threshold' at 0x0 = VCHGIN\_REG=4.5V and VCHGIN\_UVLO=4.7V.

4. In the **Configuration 0-3** tab, set **Battery Charging Current** to **0x3F (3150mA)** in the **Charger Configurations 2** register. Click **Write** to send the command to the charger.  
At the same time, set **Smart Power Selector** to **0x5 = Charger = On, Buck = On, OTG = Off, and Boost = Off** and click **Write** to enable charger mode.
5. Plug in USB Type-C cable from travel adaptor/PC to J1 connector on the MAX77789 EV kit.
6. The MAX77789 automatically sets the CHGIN input current limit based on the charger type detection results. If the input source is not a standard power source described by BC1.2, USB Type-C, or a proprietary charger type that the MAX77789 can detect, the MAX77789 sets the input current limit according to I<sup>2</sup>C register CHGIN\_ILIM (0xC0).

### OTG Reverse Boost Setup

1. Connect the power supply between BATT and GND2, adjust the voltage to 3.8V with 3.5A current limit, and turn it on.
2. Set Charger Settings Protection under Configuration 4-7 tab to 0x3 = write capability unlocked. Click Write to send the command. Note that 0x3 must be written to unlock charger register setting.
3. In the **Configuration 0-3** tab, set **Smart Power Selector** to **0xA** in the **Charger Configurations 0** register. Click **Write** to send the command to the charger. This enables the OTG mode.

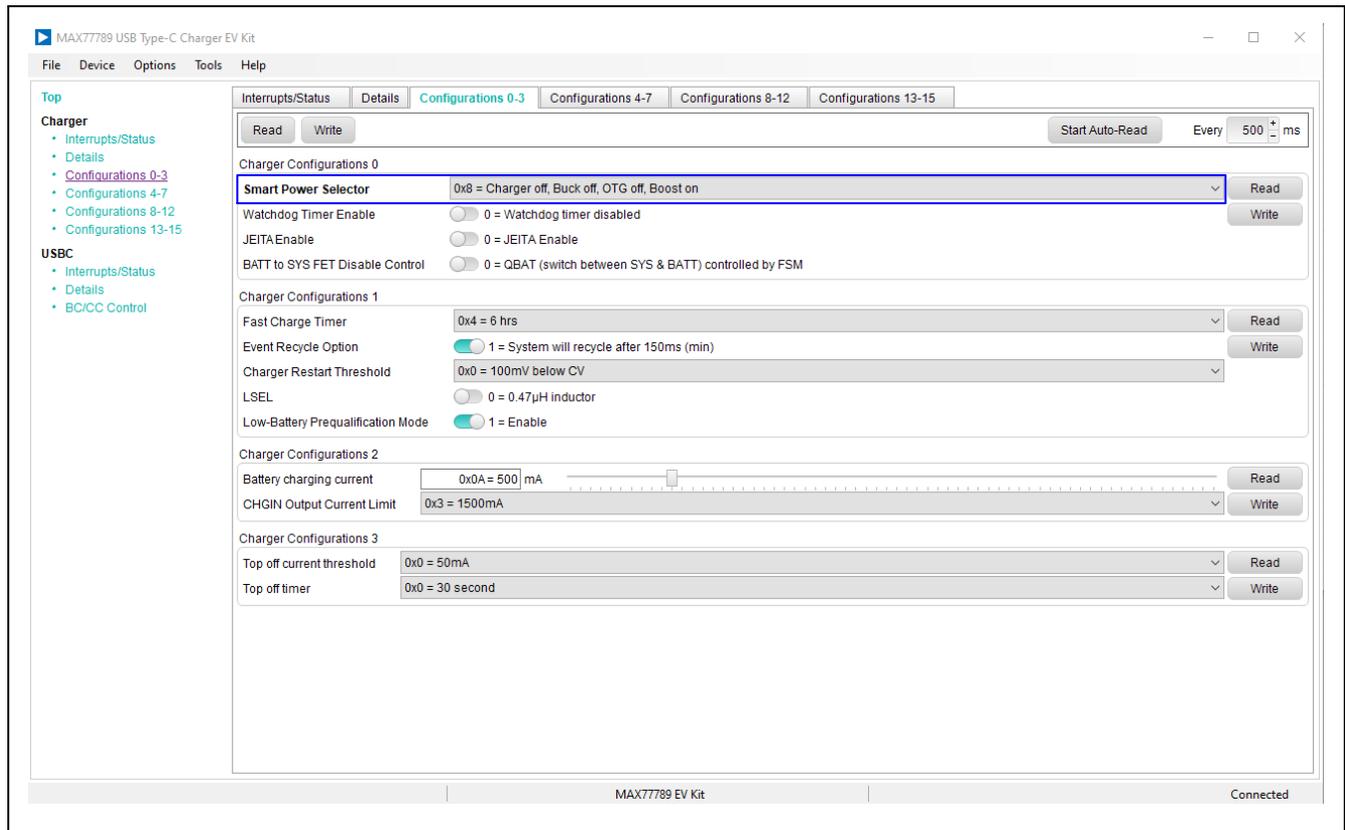
Set **CHGIN Output Current Limit** to **0x3** for maximum output current limit 1.5A.



4. Monitor the voltage of CHGIN at the CHGINS test point and see whether it equals 5.1V. Note that VCHGIN must be lower than 0.7V for OTG mode; otherwise, CHGIN does not supply current when OTG mode is enabled.

**BYP Reverse Boost Test Setup**

1. Connect the power supply between BATT and GND, adjust the voltage to 3.8V with a 3.5A current limit, and turn it on.
2. Set Charger Settings Protection under Configuration 4-7 tab to 0x3 = write capability is unlocked. Click Write to send the command. Note that 0x3 must be written to unlock charger register setting.
3. In the **Configuration 0-3** tab, set **Smart Power Selector** to **0x8** in the **Charger Configurations 0 register**. Click **Write** to send the command to the charger. This enables the reverse boost BYP mode.
4. Monitor the voltage of BYP at BYPS test point and check that it equals 5.1V.



**LED Indicator**

1. Three LED indicators are installed on the EV kit: DS1 is for INOKB, DS2 is for the STAT1, and DS5 is for STAT2.
2. The STAT1 pin is an open-drain and active-low output that indicates charge status. See [Table 2](#) details.

**Table 2. STAT1 Output with Charging Status**

CHARGING STATUS	STAT1	LOGIC STATE	CHARGE STATUS LED
No Input	High Impedance	High	Off
Trickle, Precharge, Fast Charge	Repeat Low and High Impedance with 1Hz, 50% duty cycle	After an external diode and a capacitor rectifier, High	Blinking with 1Hz, 50% duty cycle
Top-Off and Done	Low	Low	Solid On
Faults	High Impedance	High	Off

3. INOKB is an open-drain and active-low output that indicates the input status. If a valid input source is inserted and the buck converter starts switching, INOKB pulls low. When the reverse boost is enabled, INOKB pulls low to indicate the 5V output from CHGIN.
4. STAT2 is an open-drain and active low output. There is an option to display either the Fault indication or the Charger Type detection done indication by setting the register **STAT2 PIN Usage** in the **Configuration 13-15** tab. See [Table 3](#) for details. The STAT2 pin also has options to be controlled by either a state machine or an external MCU. Options can be selected by the setting of the register **STAT2 PIN Control** in the **Configuration 13-15** tab.

**Table 3. STAT2 Output with Fault Indication or Charger Type Detection**

USAGE	INPUT	INITIAL STATE	AFTER STATE	STATUS LED (AFTER STATE)
Fault Indication	Charger Timer Fault Thermal Shutdown SYS OVLO/UVLO	High	Low	Solid On
Charger Type Detection Done	DCP	Low	Low	Solid On
	SDP/CDP	Low	High	Off

**EXTSM Pin**

1. The EXTSM pin is an active-high input. When the EXTSM pin is pulled high, the MAX77789 is operating in three ways based on the status of the IC. See [Table 4](#) for details.

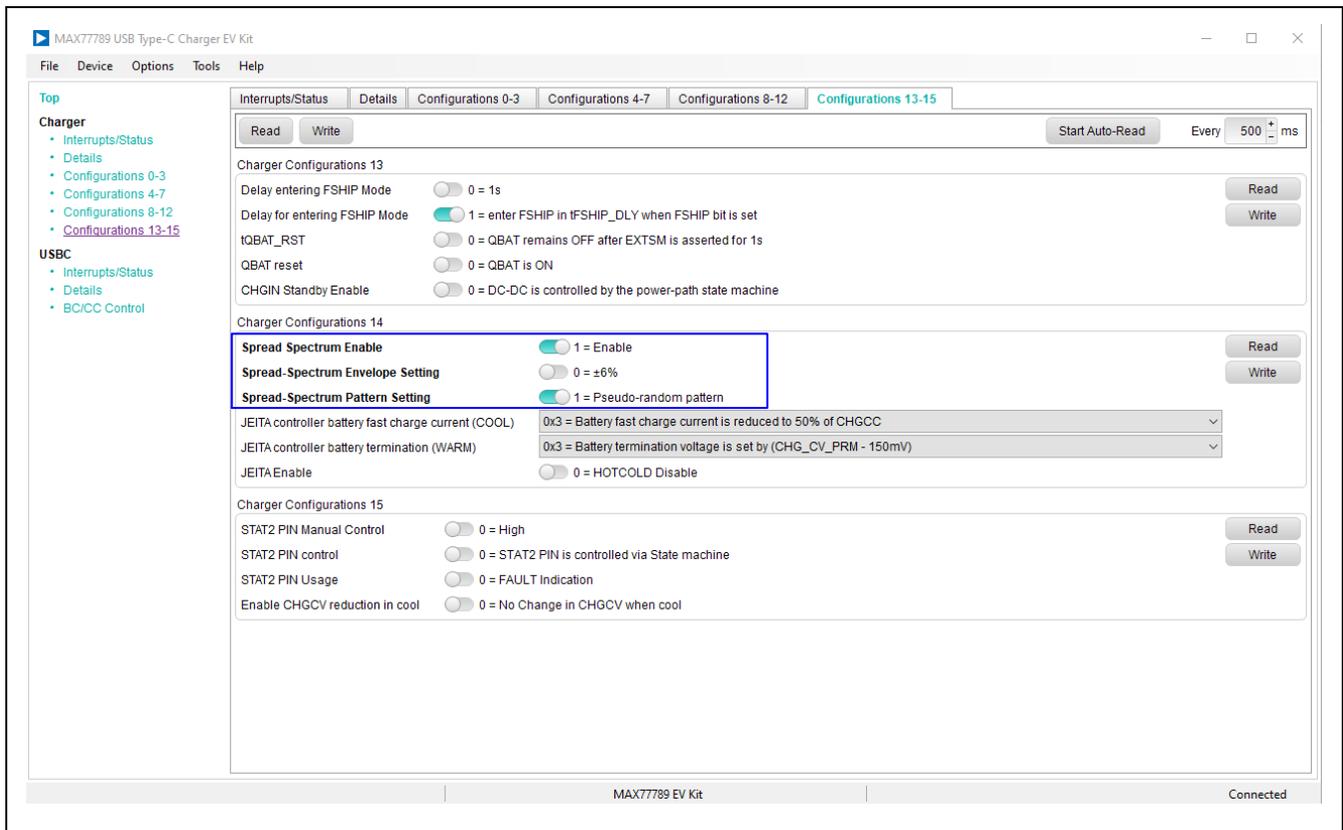
**Note:** In the **Configuration 4-7** tab, **Factory Ship Mode (FSHIP\_MODE)** in the **Charger Configurations 7** register makes MAX77789 enter factory ship mode or non-factory ship mode.

**Table 4. EXTSM Pin Function**

PIN	INITIAL STATE	FUNCTIONS
EXTSM	Factory ship mode (FSHIP_MODE = 1)	Pull EXTSM pin high by pressing the pushbutton SW1 for 10ms forces the MAX77789 to <b>exit from Ship Mode</b> .
	Non-factory ship mode (FSHIP_MODE = 0), QBAT_RST = 0 and CHGIN invalid	Pull EXTSM pin high by pressing the pushbutton SW1 for 10s forces MAX77789 <b>enter the System Reset mode</b> . After releasing EXTSM pin, QBAT is turning ON to provide power to SYS.
	Battery charging and FSHIP_MODE = 0, QBAT_RST = 0 and CHGIN is valid	Pull EXTSM pin high by connecting J11 (short 3–4). This makes the MAX77789 <b>stop charging</b> the battery and QBAT is off.

**Spread Spectrum**

1. The spread-spectrum modulation can be enabled/disabled by setting the **Spread Spectrum Enable** to 1 or 0 in **Charger Configurations 13-15** tab.
2. Set Charger Settings Protection under Configuration 4-7 tab to 0x3 = write capability unlocked. Click Write to send the command. Note that 0x3 must be written to unlock charger register setting.
3. Spread-spectrum modulation pattern is programmable either pseudo-random or triangular by the **Spread-Spectrum Pattern Setting** in **Charger Configuration 13-15** tab.



**Ordering Information**

PART NUMBER	IC	TYPE
MAX77789EVKIT#	MAX77789EWX+	EV Kit

#Denotes RoHS-compliance.

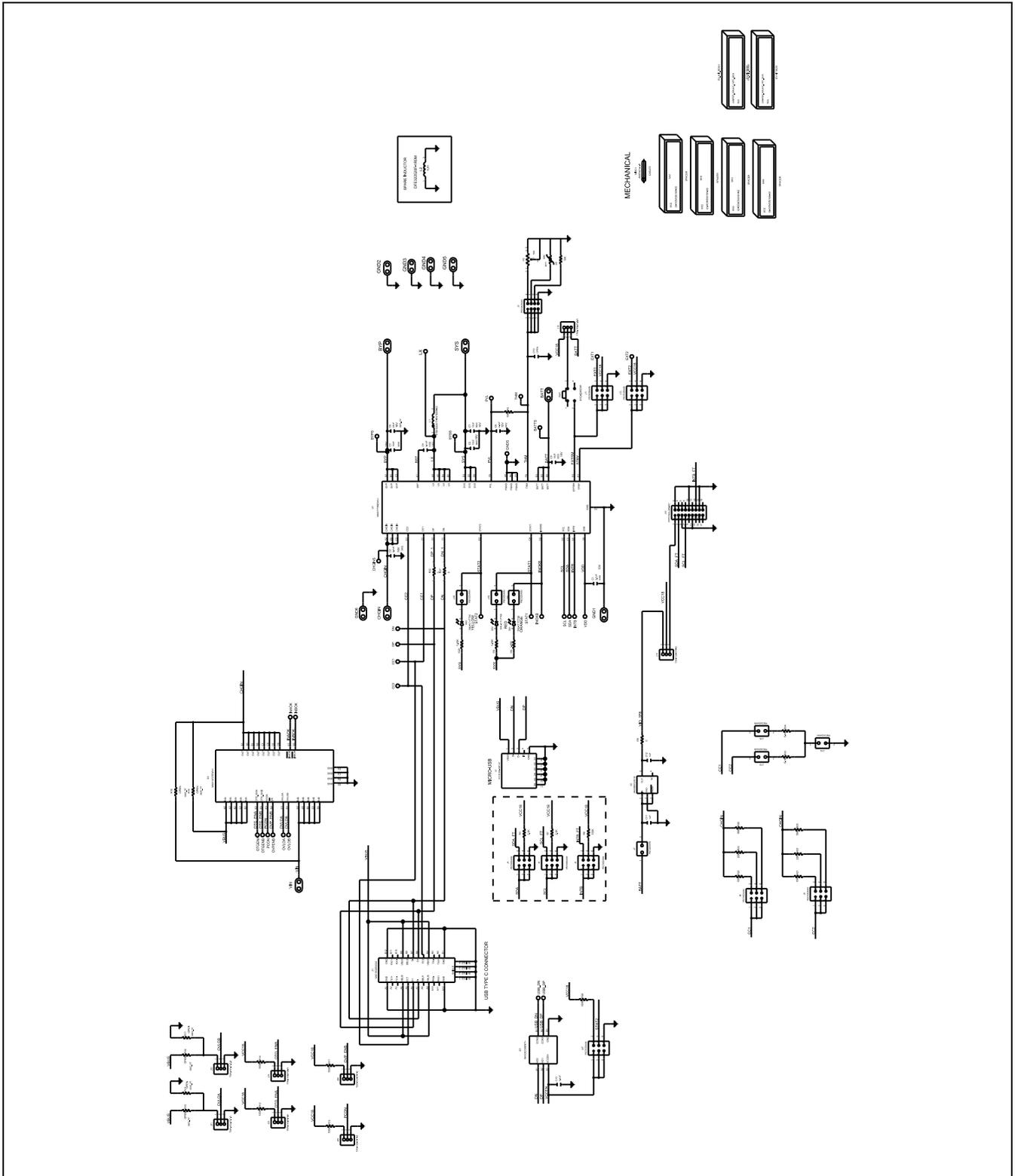
## MAX77789 EV Kit Bill of Materials

QTY	REF DES	MFG PART#	MANUFACTURER	VALUE
<b>MINIMAL BILL OF MATERIALS FOR MAX77789 AUTONOMOUS CHARGER WITH JEITA</b>				
2	C1, C8	C1005X5R1A225K050BC	TDK	2.2µF; 10%; 10V; X5R; SMT (0402); CERAMIC
1	C2	EMK105ABJ225MV; GRM155R61C225ME11	TAIYO YUDEN; KEMET	2.2µF; 20%; 16V; X5R; SMT (0402); CERAMIC
1	C3	C1608JB1C106M080AB	TDK	10µF; 20%; 16V; JB; SMT (0603); CERAMIC
1	C4	GRM155R61C104KA88	MURATA	0.1µF; 10%; 16V; X5R; SMT (0402); CERAMIC
3	C5, C7, C9	C1608X5R1A106K080AC	TDK	10µF; 10%; 10V; X5R; SMT (0603); CERAMIC
1	C6	ANY	ANY	22µF; 16V; 10%; X5R; SMT (0805); CERAMIC
1	L1	HTEH25201T-R47MSR-63	CYNTEC	0.47µH; ±20%; 5.6A
1	RT1	NCP15XH103F03	MURATA	10KΩ; ±1%; SMT (0402); THERMISTOR; THICK FILM
1	R3	RC0402FR-0710KL	YAGEO PHICOMP	10KΩ; 1%; SMT (0402); ±100PPM/°C; 0.063W
1	U1	MAX77789	ANALOG DEVICES	MAX77789EWX+
<b>OTHER COMPONENTS FOR EVALUATION KIT</b>				
0	C10	N/A	N/A	NOT INSTALLED
2	C11, C12	C0402X5R100-105KNE; GRM155R61A105KE15	VENKEL LTD; MURATA	1µF; 10V; 10%; X5R; SMT (0402); CERAMIC
1	C13	GRM155R71E104ME14	MURATA	0.1µF; 25V; 20%; X7R; SMT (0402); CERAMIC
3	R1, R3, R20, R21	RC0402FR-0710KL	YAGEO PHICOMP	10KΩ; 1%; SMT (0402); ±100PPM/°C; 0.063W
1	R2	3296Y-1-503LF	BOURNS	50KΩ; 10%; THROUGH-HOLE-RADIAL LEAD; 0.5W
2	R4, R7	CRCW04022K20JN	VISHAY DALE	2.2KΩ; ±5%; SMT (0402); ±200PPM/K; 0.063W
3	R5, R6, R29	CR0402-16W-1651FT	VENKEL LTD.	1.65KΩ; ±1%; SMT (0402); ±100PPM/°C; 0.063W
6	R8, R11, R12, R14, R15, R28	ERJ-2RKF1003	PANASONIC	100KΩ; ±1%; SMT (0402); ±100PPM/°C; 0.1W

QTY	REF DES	MFG PART#	MANUFACTURER	VALUE
3	R9, R22, R27	RC0402JR-070RL; CR0402-16W-000RJT	YAGEO PHYCOMP; VENKEL LTD.	0Ω; ±5%; SMT (0402); JUMPER; 0.063W
2	R23, R24	ERJ-2RKF2202	PANASONIC	22KΩ; ±1%; SMT (0402); ±100PPM/°C; 0.1W
2	R25, R26	ERJ-2GEJ563	PANASONIC	56KΩ; ±5%; SMT (0402); ±200PPM/°C; 0.1W
1	R28	ERJ-S02F2401	PANASONIC	RES; SMT (0402); 2.4K; 1%; +/- 200PPM/DEGK; 0.1000W
2	R33, R34	CRCW04025K10FK	VISHAY DALE	5.1KΩ; ±1%; SMT (0402); ±100PPM/°C; 0.063W
0	R10, R13, R16, R17	N/A	N/A	0603; NOT INSTALLED
0	R18, R19	N/A	N/A	0805; NOT INSTALLED
1	L2	DFE322520F-1R0M	MURATA	1μH; ±20%; 6.3A
1	J1	12401832E402A	AMPHENOL	FEMALE; USB TYPE C CONNECTOR; 24 PINS
1	J2	10118193-0001LF	FCI CONNECT	FEMALE; MICRO USB B TYPE RECEPTACLE; 5 PINS
1	J3	PEC04DAAN	SULLINS ELECTRONICS CORP.	CONNECTOR; MALE; THROUGH HOLE; STRAIGHT; 8 PINS
8	J4, J5, J8, J9, J27	PEC03DAAN	SULLINS ELECTRONICS CORP.	CONNECTOR; MALE; THROUGH HOLE; STRAIGHT; 6 PINS
2	J6, J11	PEC02DAAN	SULLINS ELECTRONICS CORP.	CONNECTOR; MALE; THROUGH HOLE; STRAIGHT; 4 PINS
7	J7, J12-J15, J18-J20	PBC02SAAN	SULLINS ELECTRONICS CORP.	CONNECTOR; MALE; THROUGH HOLE; STRAIGHT; 2 PINS
1	J10	PPPC092LJBN-RC	SULLINS ELECTRONICS CORP.	CONNECTOR; FEMALE; THROUGH HOLE; RIGHT ANGLE; 18 PINS
8	J17, J21-J26	TSW-103-07-T-S	SAMTEC	CONNECTOR; THROUGH HOLE; STRAIGHT; 3 PINS
11	BATT, BYP, CHGIN, GND1-GND6, SYS, VIN	9020 BUSS	WEICO WIRE	MAXIM PAD; WIRE; SOLID; 20AWG

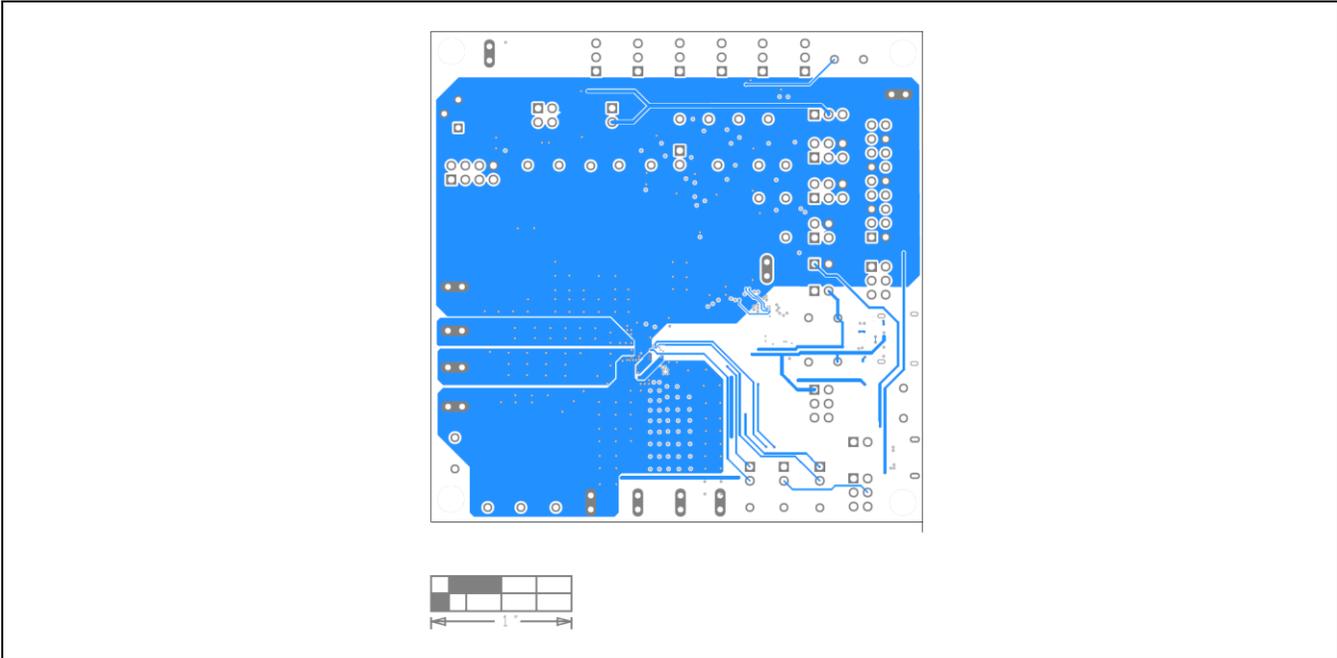
QTY	REF DES	MFG PART#	MANUFACTURER	VALUE
25	BATTS, BYPS, CC1, CC2, CHGINS, DN, DP, EXT1, EXT2, GNDS, INAOK, INBOK, LX, OTGENA, OTGENB, OVLOA, OVLOB, OVPENB, PCON, PVL, SYSS, THM, USB_DN, USB_DP, VDD	5000	KEYSTONE	TEST POINT; RED
6	INOKB, INTB, SCL, SDA, STAT1, STAT2	5002	KEYSTONE	TEST POINT; WHITE
3	DS1, DS2, DS5	SML-311UT	ROHM	LED; SMT (0603); RED; VF = 1.8V; IF =0.02A; -30°C to +85°C
4	MH1-MH4	9032	KEYSTONE	ROUND-THRU HOLE SPACER; NYLON
1	MISC1	AK67421-1-R	ASSMANN	USB2.0 MICRO CONNECTION CABLE
17	EV_KIT_BOX1, EV_KIT_BOX2	NPC02SXON-RC	SULLINS ELECTRONICS CORP.	JUMPER; MINI SHUNT; 0.100IN CC; 2 PINS
1	PCB	MAX77789	MAXIM	MAX77789EVKIT#
1	U2	MAX8891EXK18+	MAXIM	LOW DROP-OUT LINEAR REGULATOR
1	U3	MAX20336ENT+	MAXIM	DPST ANALOG SWITCH
1	U4	MAX14727EWV+	MAXIM	BIRECTIONAL OVERVOLTAGE PROTECTOR
1	SW1	EVQ-Q2K03W	PANASONIC	SWITCH; SPST; 15V; 0.02A; LIGHT TOUCH SWITCH

MAX77789 EV Kit Schematic





MAX77789 EV Kit PCB Layouts (continued)



MAX77789 EV Kit PCB Layout—Bottom

**Revision History**

<b>REVISION NUMBER</b>	<b>REVISION DATE</b>	<b>DESCRIPTION</b>	<b>PAGES CHANGED</b>
0	4/23	Initial release	—

