

## Evaluates: MAX78000

## MAX78000 Evaluation Kit

### General Description

The MAX78000 evaluation kit (EV kit) provides a platform for leveraging the capabilities of the MAX78000 to build new generations of artificial intelligence (AI) devices.

Onboard hardware includes a digital microphone, a gyroscope/accelerometer, parallel camera module support and a 3.5in touch-enabled color TFT display. A secondary display is driven by a power accumulator for tracking device power consumption over time. Uncommitted GPIO as well as analog inputs are readily accessible through 0.1in pin headers. Primary system power as well as UART access is provided by a USB Micro-B connector. A USB to SPI bridge provides rapid access to onboard memory, allowing large networks or images to load quickly.

### EV Kit Contents

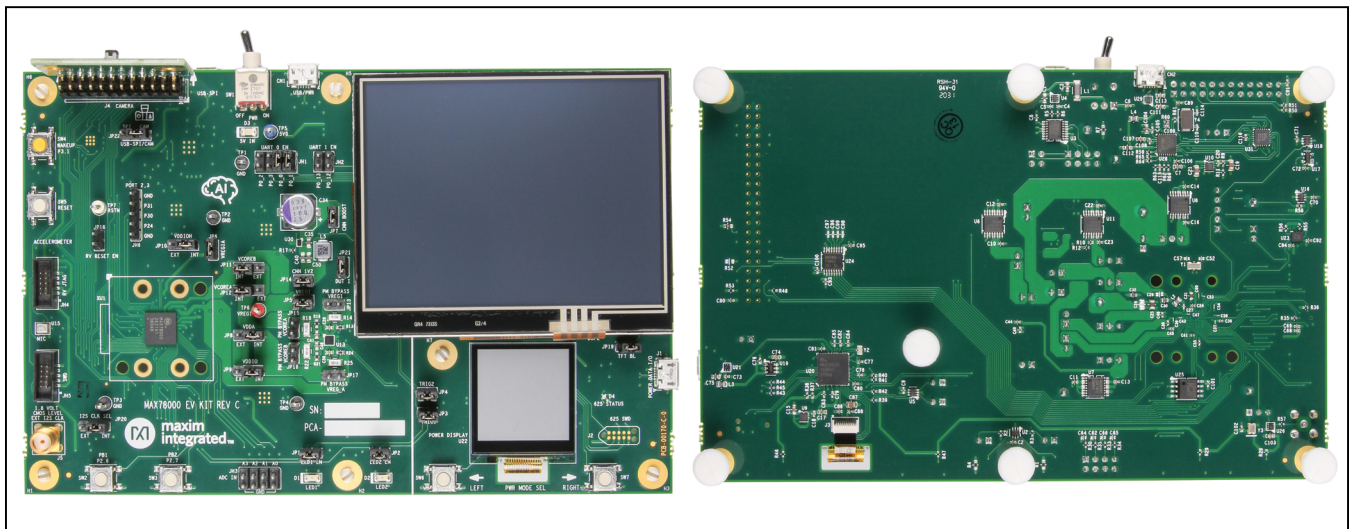
- EV Kit Board Featuring the MAX78000
- MAX32625PICO Debugger with Cables
- Olimex ARM-USB-OCD-H
- Olimex ARM-JTAG 20-10 Adapter
- Camera Module
- 2 USB Standard-A to USB Micro-B Cables
- 1 USB Standard-A to USB Standard-B Cable
- Extra Shunts

### Benefits and Features

- Power Accumulator with Dedicated Display to Track Device Power over Time
- Onboard Digital Microphone
- Onboard Accelerometer/Gyroscope
- SWD JTAG 10-Pin Header
- RISC-V Coprocessor JTAG 10-Pin Header
- 16MB QSPI Flash
- Select GPIOs Accessible through 0.1in Headers
- Four ADC Inputs with Optional AA Filter
- Touch-Enabled, 3.5in, 320 x 240 Color TFT Display
- UART Access through USB Bridge
- QSPI Memory Access through USB Bridge
- All IC Power Rails May Be Isolated by Jumpers for Individual Current Measurements
- Two General-Purpose LEDs and Two General-Purpose Pushbutton Switches

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

### MAX78000 EV Kit Board



319-100579; Rev 2; 5/22

## Quick Start

### Required Equipment

- MAX78000 EV Kit
- One USB Standard-A to USB Micro-B Cable

### Procedure

The MAX78000 EV kit comes with a MAX78000 device that has been preprogrammed with a sample application. This application blinks an LED and repeatedly outputs messages to its UART. Use this application to verify the hardware is connected and functioning properly. Follow the steps below to verify board operation:

- 1) While observing safe ESD practices, carefully remove the MAX78000 EV kit board out of its packaging. Inspect the board to ensure that no damage occurred during shipment. Jumpers/shunts are preinstalled prior to testing and packaging.
- 2) Begin by making sure the PWR switch (SW1) is in the “OFF” position.
- 3) Make sure that jumper JP1 is installed. This jumper enables LED, D1. Also, make sure that the P0\_0 and P0\_1 jumpers are installed on JH1. These two jumpers connect UART 0 RX and TX to the console output.
- 4) Connect a USB cable from the PC to the USB/PWR connector (CN1) of the EV kit. This cable will power the board and provide a virtual serial port connection to the MAX78000 UART.
- 5) On your PC, open a serial terminal application (such as minicom or gtkterm), and connect to the virtual serial port using a baud rate of 115200bps and 8-N-1 settings.
- 6) Move the PWR switch to the “ON” position.
- 7) You will see message from the MAX78000 appear in the terminal, and LED1 (D1) on the board will begin blinking at a steady rate. This verifies proper EV kit operation.

## Detailed Description of Hardware (or Software)

### Power Supply

The EV kit is powered by +5V sourced from VBUS on the USB Micro-B connector CN1. The IC features an integrated SIMO switching power supply, offering high efficiency and supporting low-power-drain operating modes. The CNN power boost circuit supplements the single-input multiple-output (SIMO), supporting the CNN core when peak computing speed is required.

### Current Monitoring

Two-pin jumper JP21 provides a convenient current monitoring point for total MAX78000 consumption. All device current passes through this jumper. In addition, jumpers JP8 through JP12 provide both current monitoring points on individual device power rails, plus a way to bypass the internal SIMO regulator with onboard LDO regulators.

### Power Accumulator

This specialized IC, U13, provides cumulative power consumption data on major internal blocks of the MAX78000. Raw data is formatted for display by the power data processor, U20, which drives an onboard OLED display. Operating mode options are selected with the LEFT and RIGHT power mode pushbuttons, which cycle through the available options using the OLED display.

### UART – USB Bridge

The EV kit includes an FTDI FT230X USB-to-UART bridge chip. This eliminates the requirement for a physical RS-232 COM port. Instead, the MAX78000 UARTs are accessed through a USB Micro-B connector, CN1. UART 0 and UART 1 are selected using JH1 and JH2, which also provide direct access to the MAX78000 UARTs, bypassing the bridge chip. Virtual COM port drivers and guides for installing Windows® drivers are available at the FTDI chip website.

### QSPI – USB Bridge

The EV kit includes an FTDI FT4222 QSPI-to-UART bridge chip. This provides rapid access to system memory for loading network and image data.

*Windows is a registered trademark of Microsoft Corporation.*

**I<sup>2</sup>S**

An onboard digital microphone is provided along with a low-jitter 12.288MHz clock oscillator and provisions for external I<sup>2</sup>S clocking using SMA connector J5.

**Color TFT Display with Touch Control**

The display provided is a 3.5in, 320 x 240 color TFT. It has three-wire serial control and a white LED backlight, and it uses a resistive touch-sensitive screen.

**RV JTAG/Arm<sup>®</sup> SWD (Serial Wire Debug) Support**

RISC V coprocessor JTAG is accessed through an Arm Cortex<sup>®</sup> standard 10-pin connector (JH4). Logic levels are set to VDDIO (1.8V). A hardware (HW) reset may be enabled using JP18, but this function is normally reserved for the Arm Cortex processor using SWD through an Arm Cortex standard 10-pin connector (JH5), also using VDDIO (1.8V) levels.

**Reset Pushbutton**

Pushbutton SW5 manually resets the MAX78000.

**Auxiliary LEDs**

The indicator LED1 (D1) is connected to GPIO P0.2. Indicator LED2 (D2) is connected to GPIO P0.3. These

GPIOs must be configured for VDDIOH (3.3V) for proper operation. Buffer U2 prevents loading the ports, since these ports also may serve as HW flow control for UART 0.

**GPIO Pushbuttons**

Pushbuttons PB1 and PB2 connect to P2.6 and P2.7, respectively. Pressing a button pulls the associated port low.

**GPIO Headers**

Select GPIOs are accessible through 0.1in spaced header pins. The IC provides support for both 1.8V and 3.3V peripherals through power rails VDDIO and VDDIOH. GPIO voltages can be programmed on a pin-by-pin basis.

**Wakeup Input**

The MAX78000 offers multiple low-power and micropower operating modes. Wakeup pushbutton SW4 provides a debounced signal to bring the IC back into normal operating mode.

**Parallel Camera Module**

The MAX78000 supports parallel camera interface (PCIF) devices. The included camera module plugs into the EV kit board and uses an OVM7692 integrated camera/lens device.

**Table 1. MAX78000 EV Kit Jumper Settings**

JUMPER	SIGNAL	SETTINGS	DESCRIPTION
JP1	LED1 EN	1-2*	Enables auxiliary LED1
		Open	Disables auxiliary LED1
JP2	LED2 EN	1-2*	Enables auxiliary LED2
		Open	Disables auxiliary LED2
JP3	TRIG1	1-2*	Enables power monitor event trigger 1
		Open	Disables power monitor event trigger 1
JP4	TRIG2	1-2*	Enables power monitor event trigger 2
		Open	Disables power monitor event trigger 2
JP5	VREGI	1-2*	Enables 3V3 VREGI power
		Open	Disables 3V3 VREGI power
JP6	VREGIA	1-2*	Enables 3V3 VREGIA power
		Open	Disables 3V3 VREGIA power
JP7	CNN BOOST	1-2*	Enables 1V1 boost LDO power
		Open	Disables 1V1 boost LDO power

*Arm and Cortex are registered trademarks of Arm Limited.*

**Table 1. MAX78000 EV Kit Jumper Settings (continued)**

JUMPER	SIGNAL	SETTINGS	DESCRIPTION
JP8	VDDA	1-2*	Internal SIMO powers VDDA
		2-3	External LDO powers VDDA
JP9	VDDIO	1-2*	Internal SIMO powers VDDIO
		2-3	External LDO powers VDDIO
JP10	VDDIOH	1-2*	DUT LDO powers VDDIOH
		2-3	AUX LDO powers VDDIOH
JP11	VCOREB	1-2*	Internal SIMO powers VCOREB
		2-3	External LDO powers VCOREB
JP12	VCOREA	1-2*	Internal SIMO powers VCOREA
		2-3	External LDO powers VCOREA
JP13	VREGI PM BYPASS	1-2	Bypasses power monitor shunt
		Open*	Enables power monitoring using power accumulator
JP14	CNN 1V1	1-2*	Connects 1V1 boost LDO to VCOREA
		Open	Disables 1V1 boost LDO
JP15	VCOREA PM BYPASS	1-2	Bypasses power monitor shunt
		Open*	Enables power monitoring using power accumulator
JP16	VCOREB PM BYPASS	1-2	Bypasses power monitor shunt
		Open*	Enables power monitoring using power accumulator
JP17	VREG_A PM BYPASS	1-2	Bypasses power monitor shunt
		Open*	Enables power monitoring using power accumulator
JP18	RESET EN	1-2	Enables RV JTAG adapter to perform full system reset
		Open*	Disables system reset by RV JTAG adapter
JP19	TFT BL	1-2*	Enables main TFT screen backlight
		Open	Disables main TFT screen backlight
JP20	I2S CLK SEL	1-2*	Onboard 12.288MHz oscillator drives I <sup>2</sup> S clock
		2-3	External 1V8 CMOS LEVEL source drives I <sup>2</sup> S clock
JP21	DUT I	1-2*	DUT 3V3 total current monitor point
		Open	Open to insert current meter
JP22	USB-SPI/CAM	1-2	Enables USB-SPI bridge
		2-3*	Enables camera
JH1	UART 0 EN	1-2*, 3-4*	Enables USB-UART0 bridge, software flow control
		All open	Disables USB-UART0 bridge, allows reuse of port pins
JH2	UART 1 EN	All installed	Enables USB-UART1 bridge
		All open*	Disables USB-UART1 bridge, allows reuse of port pins

\*Indicates default jumper setting

### Ordering Information

PART	TYPE
MAX78000EVKIT#	EV Kit

#Denotes RoHS compliant.

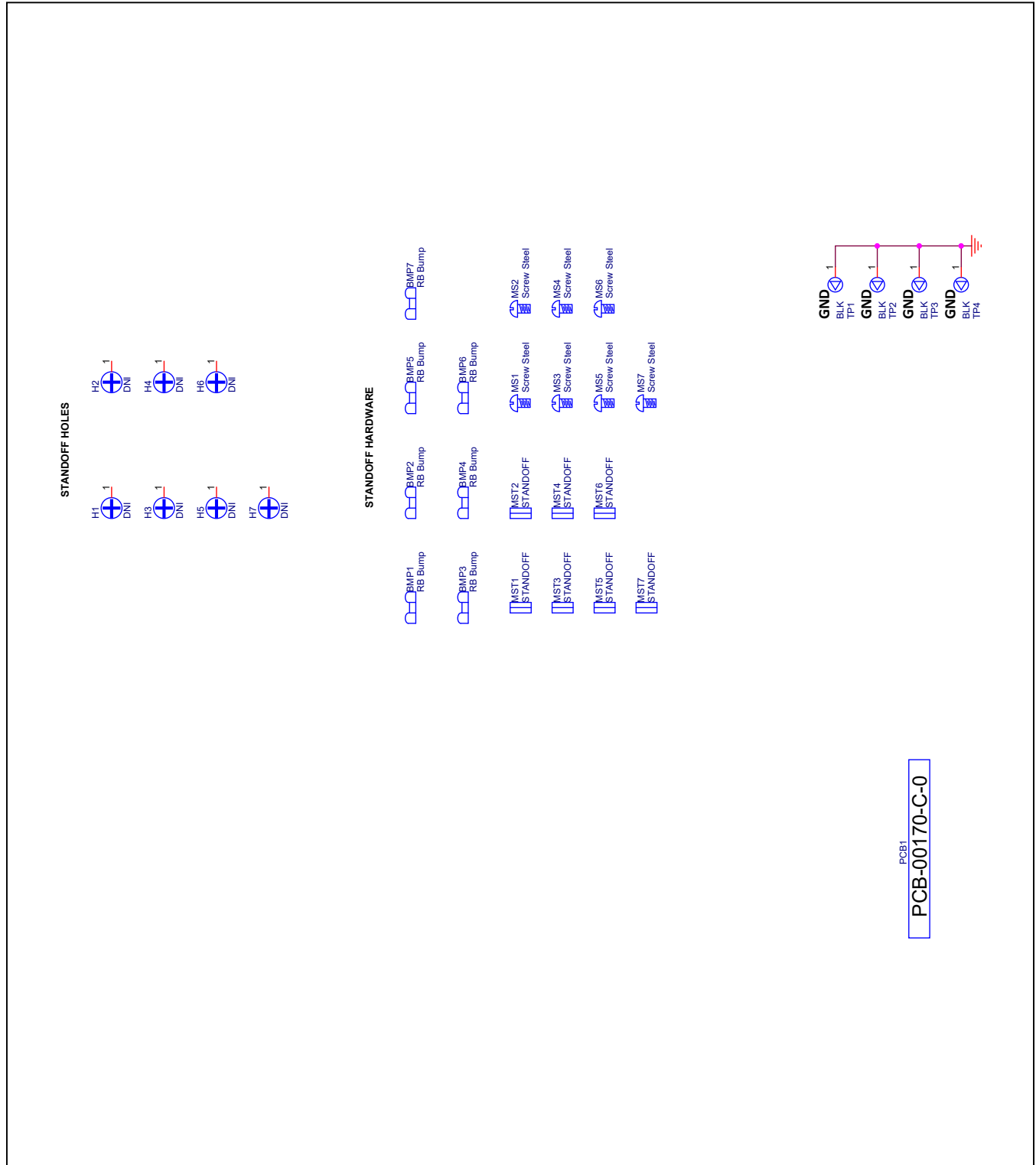
MAX78000 EV Kit Bill of Materials

QUANTITY	PART REFERENCE	VALUE	BOM_DESCRIPTION	MANUFACTURER_PN	MANUFACTURER
7	BMP1,BMP2,BMP3,BMP4, BMP5,BMP6,BMP7	RB Bump	BUMPER RECESSED #4 SCREW BLACK	720	Keystone Electronics
4	C1,C75,C111,C112	1uF	CAP CER 1UF 35V 10% X5R 0603	GMK107BJ105KA-T	Taiyo Yuden
26	C2,C6,C8,C9,C44,C49,C69, C70,C71,C72,C86,C88,C89, C90,C91,C92,C93,C94,C95, C100,C101,C102,C105,C106, C108,C116	100nF	CAP CER 0.1UF 16V 10% X7R 0402	GRM155R71C104KA88D	Murata Electronics
3	C3,C103,C113	100nF	CAP CER 0.1UF 50V 10% X7R 0603	C0603C104K5RACTU	Kemet
2	C4,C5	47pF	CAP CER 47PF 50V 1% NP0 0402	C1005C0G1H470F050BA	TDK Corporation
10	C7,C15,C17,C28,C41,C46, C56,C74,C104,C107	4.7uF	CAP CER 4.7UF 10V 10% X5R 0603	C0603C475K8PACTU	Kemet
26	C10,C11,C12,C13,C14,C16, C22,C23,C24,C38,C39,C45, C48,C55,C61,C73,C76,C77, C78,C79,C80,C81,C82,C83, C84,C85	1uF	CAP CER 1UF 16V 10% X5R 0402	GRT155R61C105KE01D	Murata Electronics North America
2	C18,C20	10nF	CAP CER 10000PF 16V 10% X7R 0402	GRM155R71C103KA01D	Murata Electronics North America
3	C19,C21,C87	10uF	CAP CER 10UF 25V 10% X7S 0805	GRM21BC71E106KE11L	Murata Electronics
2	C25,C26	47uF	CAP CER 47UF 6.3V 20% X5R 0805	C2012X5R0J476M125AC	TDK Corporation
1	C27	3.3nF	CAP CER 3300PF 16V 10% X7R 0402	GRM15XR71C332KA86D	Murata Electronics North America
7	C29,C30,C31,C32,C35,C40, C50	22uF	CAP CER 22UF 6.3V 20% X5R 0603	C1608X5R0J226M080AC	TDK Corporation
1	C34	100uF	CAP ALUM POLY 100UF 20% 25V SMD	25SVPF100M	Panasonic Electronic Components
8	C36,C37,C43,C47,C53,C54, C59,C60	100nF	CAP CER 0.1UF 6.3V 10% X5R 0201	GRM033R60J104KE19D	Murata
10	C52,C57,C62,C64,C65,C66, C96,C97,C98,C99	DNI	DNI		
1	C68	220pF	CAP CER 220pF 50V 5% NP0 0402	C1005C0G1H221J	TDK Corporation
1	C109	100pF	CAP CER 100PF 50V +/-1% NP0 0402	04025A101FAT2A	AVX Corporation
2	C110,C114	27pF	CAP CER 27PF 50V 5% NP0 0402	GRM1555C1H270JA01D	Murata Electronics
1	C115	470nF	CAP CER 0.47UF 10V 10% X5R 0402	GRM155R61A474KE15J	Murata Electronics North America
3	CN1,CN2,J1	MICRO USB B R/A	CONN RCPT SPOS MICRO USB B R/A	47346-0001	Molex
1	D1	GRN	LED 565NM WTR CLR GREEN 1206 SMD	SML-LX1206GC-TR	Lumex Opto
1	D2	RED	LED 660NM RED WTR CLR 1206 SMD	SML-LX1206SRC-TR	Lumex Opto
1	D3	BLUE	LED 469NM BLUE DIFF 1206 SMD	HSMR-C150	Avago Technologies US Inc.
1	D4	SML-LX0404SIUPGUSB	LED RGB CLEAR 0404 SMD	SML-LX0404SIUPGUSB	Lumex Opto/Components Inc.
1	DSP1	CFAF320240F-035T-TS-CB	320x240 Color TFT with Carrier Board	CFAF320240F-035T-TS-CB	Crystalfontz
1	DSP2	42P (2x21)	CONN RCPT 42P 0.100" SMD	HLE-121-02-f-dv	Samtec Inc.
7	H1,H2,H3,H4,H5,H6,H7	DNI	DNI MTG 125DRL 300PAD		
1	J2	MAXDAP	MAXDAP_POGO_PIN CBL PLUG-OF-NAILS 10-PIN	TC2050-IDC-NL	Tag-Connect LLC
1	J3	503480-1000	CONN FFC FPC 10POS 0.50MM R/A	503480-1000	Molex, LLC
1	J4	24P 2x12__OVM7692-RYAA	CONN HDR 24POS 0.1 TIN PCB	PPPC122LFBN-RC	Sullins
1	J5	SMA	CONN SMA JACK STR 50 OHM PCB	5-1814832-1	TE Connectivity
2	JH1,JH3	8P 2x4	CONN HEADER .100 DUAL STR 8POS	PEC04DAAN	Sullins
1	JH2	4P 2x2	CONN HEADER .100 DUAL STR 4POS	PEC02DAAN	Sullins
2	JH4,JH5	10P CORTEX DEBUG	IDC BOX HEADER 0.050 10 POS SMD	3220-10-0300-00	CNC Tech
1	JH6	5P 1x5	CONN HEADER .100 SINGL STR 5POS	PEC05SAAN	Sullins
15	JP1,JP2,JP3,JP4,JP5,JP6, JP7,JP13,JP14,JP15,JP16, JP17,JP18,JP19,JP21	JUMPER	CONN HEADER .100 SINGL STR 2POS (2x1)	PEC02SAAN	Sullins
7	JP8,JP9,JP10,JP11,JP12, JP20,JP22	3P JUMPER	CONN HEADER .100 SINGL STR 3POS	PEC03SAAN	Sullins
1	L1	BLM41PG102SN1L	FERRITE CHIP 1K OHM 1500MA 1806	BLM41PG102SN1L	Murata Electronics
1	L2	2.2uH	FIXED IND 2.2UH 1A 150 MOHM SMD 0805	MLP2012H2R2MT0S1	TDK Corporation
2	L3,L4	BLM21AG121SN1D	FERRITE BEAD 120 OHM 0805 1LN	BLM21AG121SN1D	Murata Electronics North America
1	L5	2.2uH	FIXED IND 2.2UH 3.25A 61 MOHM	74437324022	Würth Elektronik
7	MS1,MS2,MS3,MS4,MS5,MS6, MS7	Screw Steel	MACHINE SCREW PAN PHILLIPS 4-40	PMSSS 440 0025 PH	B&F Fastener Supply
7	MST1,MST2,MST3,MST4, MST5,MST6,MST7	STANDOFF	HEX STANDOFF 4-40 ALUMINUM 5/8"	1808	Keystone Electronics

MAX78000 EV Kit Bill of Materials (continued)

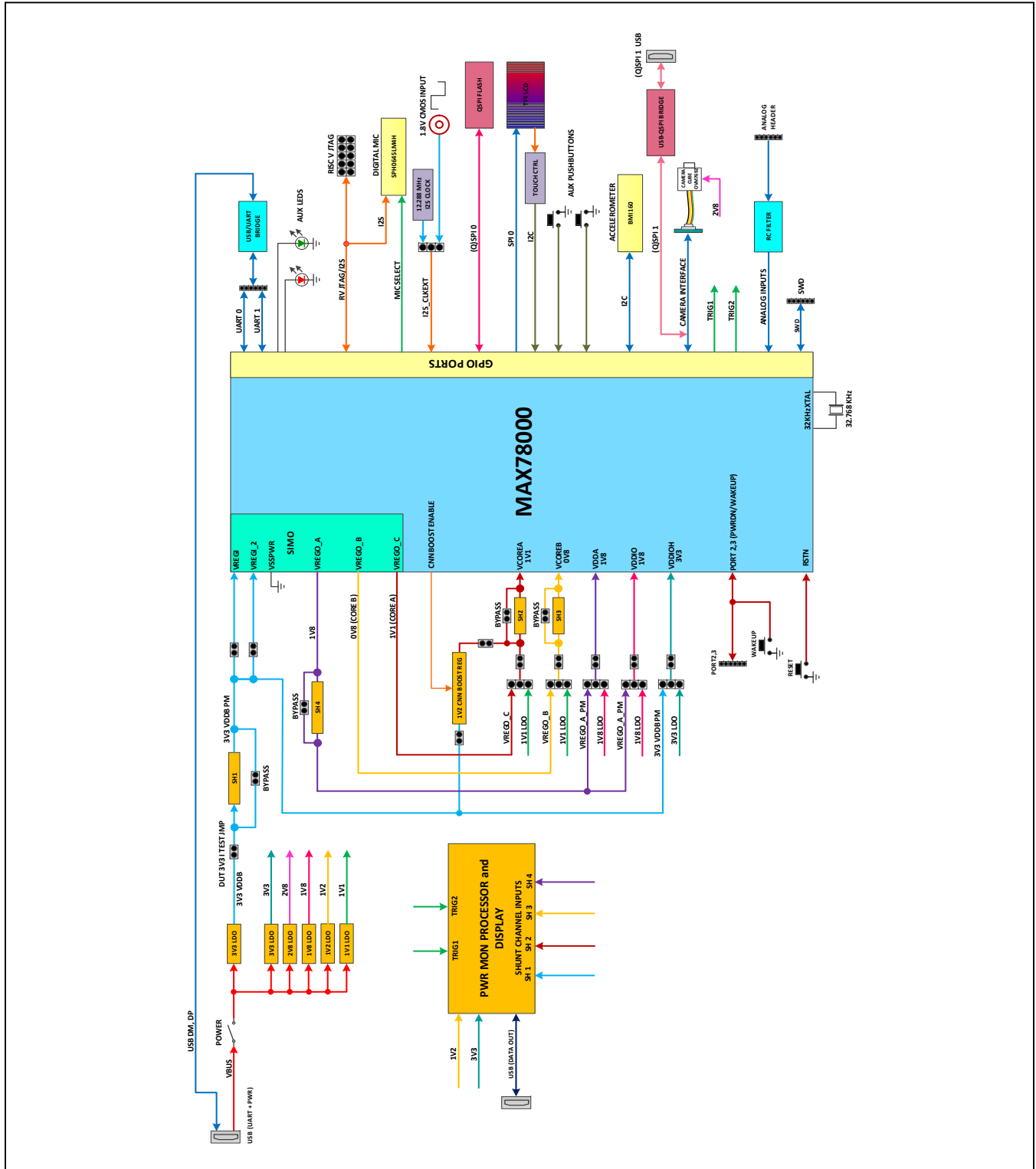
QUANTITY	PART REFERENCE	VALUE	BOM_DESCRIPTION	MANUFACTURER_PN	MANUFACTURER
1	PCB1	PCB			
1	R1	332	RES 332 OHM 1/10W 1% 0603 SMD	ERJ-3EKF3320V	Panasonic
3	R2,R3,R35	100K	RES SMD 100K OHM 1% 1/10W 0402	ERJ-2RKF1003X	Panasonic
1	R4	470	RES 470 OHM 1/10W 1% 0603 SMD	ERJ-3EKF4700V	Panasonic
2	R5,R6	27	RES SMD 27 OHM 1% 1/10W 0402	ERJ-2RKF27R0X	Panasonic
1	R7	2.7K	RES 2.7K OHM 1/10W 1% 0603 SMD	ERJ-3EKF2701V	Panasonic
1	R9	30K	RES SMD 30K OHM 1% 1/10W 0402	ERJ-2RKF3002X	Panasonic
1	R10	3.32K	RES SMD 3.32K OHM 1% 1/10W 0402	ERJ-2RKF3321X	Panasonic
1	R11	8.2K	RES SMD 8.2K OHM 1% 1/16W 0402	RC0402FR-078K2L	Yageo
16	R12,R36,R40,R41,R46,R47, R48,R53,R55,R56,R58,R59, R62,R64,R65,R66	10K	RES SMD 10K OHM 1% 1/16W 0402	RC0402FR-0710KL	Yageo
0	R13,R16,R21,R24	33.2	RES 33.2 OHM 1/10W 1% 0603 SMD	ERJ-3EKF33R2V	Panasonic
4	R14,R18,R22,R25	100 mOhms	RES 0.1 OHM 1% 3/4W 1206	KRL1632E-M-R100-F-T5	Susumu
1	R17	383K	RES SMD 383K OHM 1% 1/10W 0402	ERJ-2RKF3833X	Panasonic Electronic Components
2	R28,R29	49.9K	RES SMD 49.9K OHM 1% 1/10W 0402	ERJ-2RKF4992X	Panasonic Electronic Components
4	R30,R31,R33,R34	0	RES 0.0 OHM 1/10W JUMP 0402 SMD	ERJ-2GE0R00X	Panasonic
6	R37,R38,R39,R42,R50,R51	2.21K	RES SMD 2.21K OHM 1% 1/10W 0402	ERJ-2RKF2211X	Panasonic
1	R43	2.7K	RES SMD 2.7K OHM 1% 1/10W 0402	ERJ-2RKF2701X	Panasonic
1	R44	1.4K	RES SMD 1.4K OHM 1% 1/10W 0402	ERJ-2RKF1401X	Panasonic Electronic Components
1	R45	1K	RES 1K OHM 1/10W 1% 0402 SMD	ERJ-2RKF1001X	Panasonic
2	R52,R54	0	RES SMD 0 OHM JUMPER 1/10W 0603	RC0603JR-070RL	Yageo
1	R57	33.2	RES SMD 33.2 OHM 1% 1/10W 0402	ERJ-2RKF33R2X	Panasonic
1	R60	12.1K	RES SMD 12.1K OHM 1% 1/10W 0402	ERJ-2RKF1212X	Panasonic Electronic Components
1	R61	1M	RES SMD 1M OHM 1% 1/10W 0402	ERJ-2RKF1004X	Panasonic
1	R63	47K	RES SMD 47K OHM 1% 1/10W 0402	ERJ-2RKF4702X	Panasonic Electronic Components
1	SW1	SPDT 3A	SWITCH TOGGLE SPDT 3A 120V	ET01MD1AGE	C&K Components
5	SW2,SW3,SW5,SW6,SW7	B3S-1000P	SWITCH TACTILE SPST-NO 0.05A 24V	B3S-1000P	Omron Electronics
1	SW4	B3S-1002 BY OMZ	SWITCH TACTILE SPST-NO 0.05A 24V	B3S-1002 BY OMZ	Omron Electronics
4	TP1,TP2,TP3,TP4	BLK	TEST POINT PC MULTI PURPOSE BLK	5011	Keystone Electronics
1	TP5	BLUE	TEST POINT PC MULTI PURPOSE BLUE	5127	Keystone Electronics
1	TP6	RED	TEST POINT PC MULTI PURPOSE RED	5010	Keystone Electronics
1	TP7	WHT	TEST POINT PC MULTI PURPOSE WHT	5012	Keystone Electronics
1	U1	MAX78000EXG+	MAX78000EXG+ 81P BGA	MAX78000EXG+	Maxim Integrated
4	U2,U5,U16,U18	NL27WZ07DFT2G	IC BUFFER NON-INVERT 5.5V SC88	NL27WZ07DFT2G	ON Semiconductor
1	U3	FT230XS-R	IC USB SERIAL BASIC UART 16SSOP	FT230XS-R	FTDI
4	U4,U21,U26,U29	MAX13202EALT+T	ESD PROTECT 2CH 6-UDFN	MAX13202EALT+	Maxim Integrated
3	U6,U8,U11	MAX8869EUE33	REG LDO 3.3V/ADJ 16TSSOP-EP	MAX8869EUE33+	Maxim Integrated
1	U7	MAX8869EUE18+	IC REG LDO 1.8V/ADJ 1A 16TSSOP-EP	MAX8869EUE18+	Maxim Integrated
1	U9	MAX38902AATA+	IC REG LDO LINEAR ADJ .5A 8TDFN	MAX38902AATA+	Maxim Integrated
1	U10	MAX8902BATA+T	IC REG LDO ADJ 0.5A 8TDFN	MAX8902BATA+T	Maxim Integrated
1	U13	MAX34417ENE+	IC 4CH SMBUS MONITOR 16TWLP	MAX34417ENE+	Maxim Integrated
1	U15	SPH0645LM4H-B	CRAWFORD MIC DGT I2S BOTTOM PORT	SPH0645LM4H-B	Knowles
1	U17	MAX6816EUS+T	IC INTFACE SPECIALIZED SOT143-4	MAX6816EUS+TCT-ND	Maxim Integrated
1	U19	MAX1818EUT33+T	IC REG LIN POS ADJ 500MA SOT23-6	MAX1818EUT33+T	Maxim Integrated
1	U20	MAX32625ITK+	MAX32625ITK+ 68P TQFN	MAX32625ITK+	Maxim Integrated
1	U22	LS013B7DH03	LCD TFT 1.28" 128X128 FPC	LS013B7DH03	Sharp Microelectronics
1	U23	BMI160	IMU ACCEL/GYRO I2C/SPI 14LGA	BMI160	Bosch Sensortec
1	U24	TSC2046IPWR	IC TOUCH SCREEN CTRLRL LV 16TSSOP	TSC2046IPWR	TI
1	U25	IS25LP128-JBLE	IC FLASH	IS25LP128-JBLE	ISSI, Integrated Silicon Solution Inc
1	U28	FT4222HQ-D-R	IC BRIDGE USB TO I2C/SPI 32VQFN	FT4222HQ-D-R	FTDI
1	U30	MAX38642AENT+	IC REG BUCK ADJ .7A 6WLP	MAX38642AENT+	Maxim Integrated
1	U31	MAX4948ETG+	IC SWITCH HEX SPDT 24TQFN	MAX4948ETG+	Maxim Integrated
1	XU1	MAX78000EXG+ 81P BGA	MAX78000EXG+ 81P BGA SOCKET	81BHC80A01	Plastronics
1	Y1	32.768kHz	CRYSTAL 32.768KHZ 6.0PF SMD	ABS07-32.768KHZ-6-T	Abrakon Corp
1	Y2	32.768KHz	CRYSTAL 32.7680KHZ 6PF SMD	ECS-.327-6-12-TR	ECS Inc.
1	Y3	SG-210STF 12.2880ML3	XTAL OSC XO 12.2880MHZ CMOS SMD	SG-210STF 12.2880ML3	EPSON
1	Y4	12MHz	CRYSTAL 12MHZ 18PF SMD	ABM3-12.000MHZ-D2Y-T	Abrakon Corp

MAX78000 EV Kit Schematic



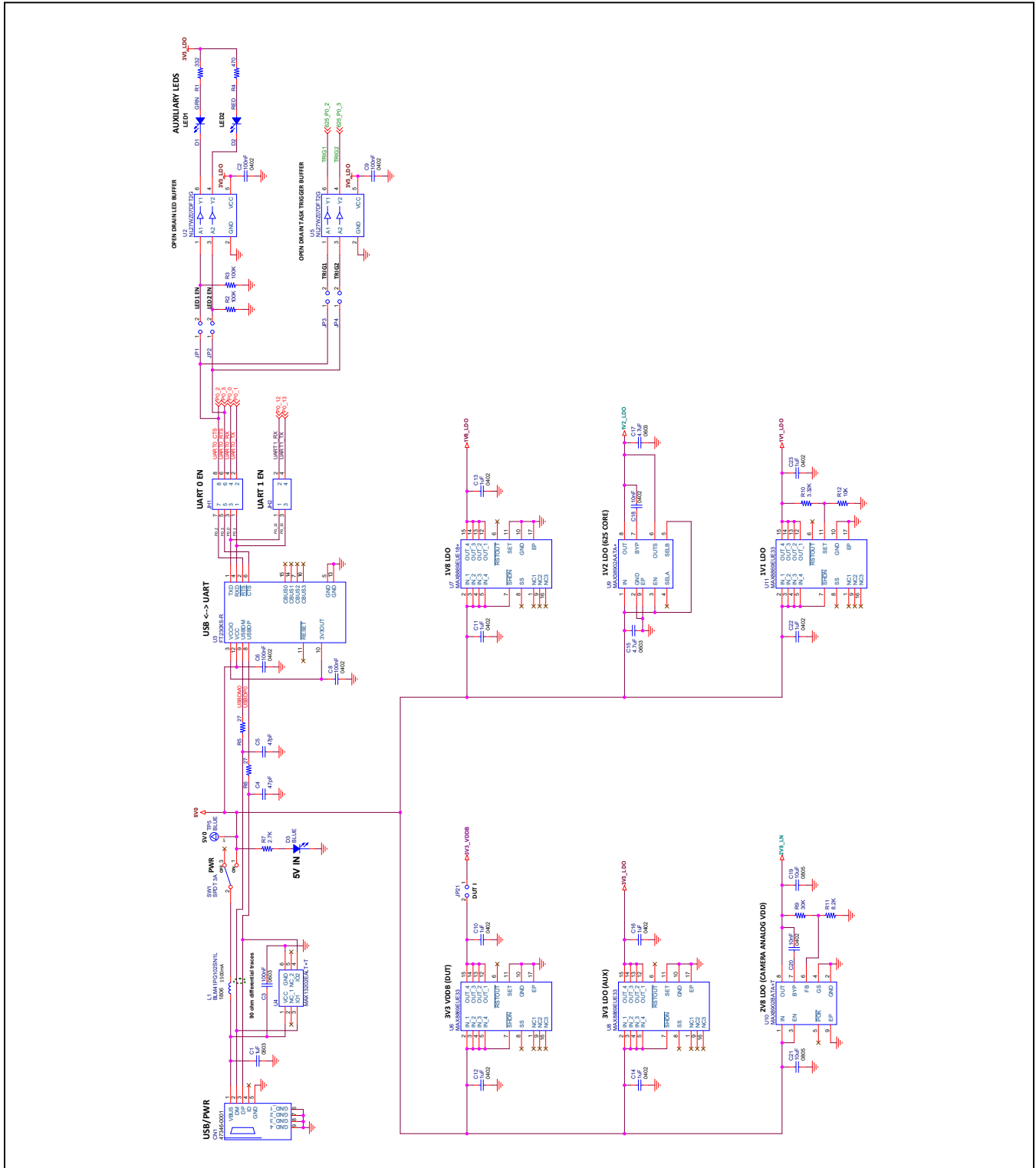
PCB1  
PCB-00170-C-0

MAX78000 EV Kit Schematic (continued)

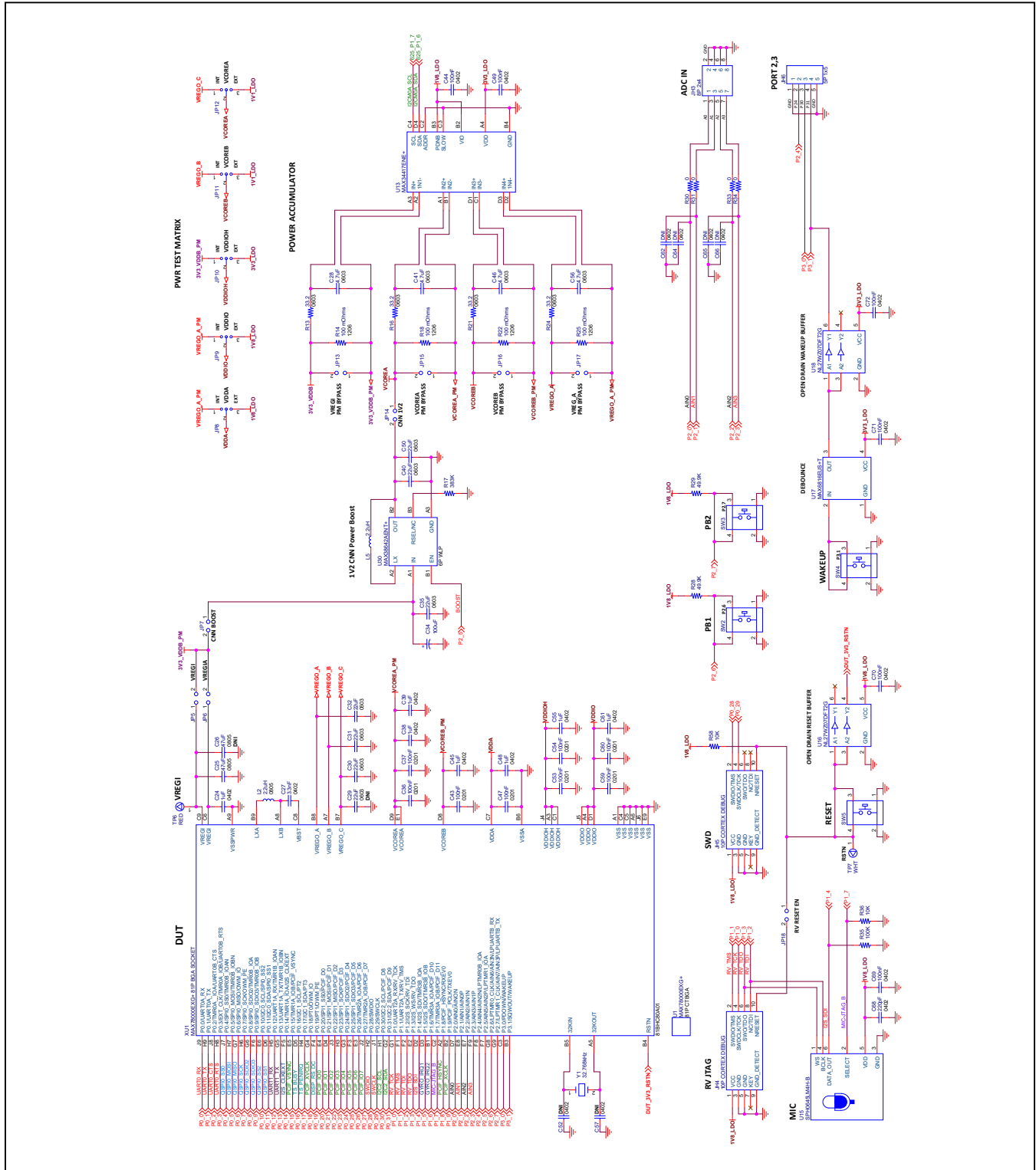




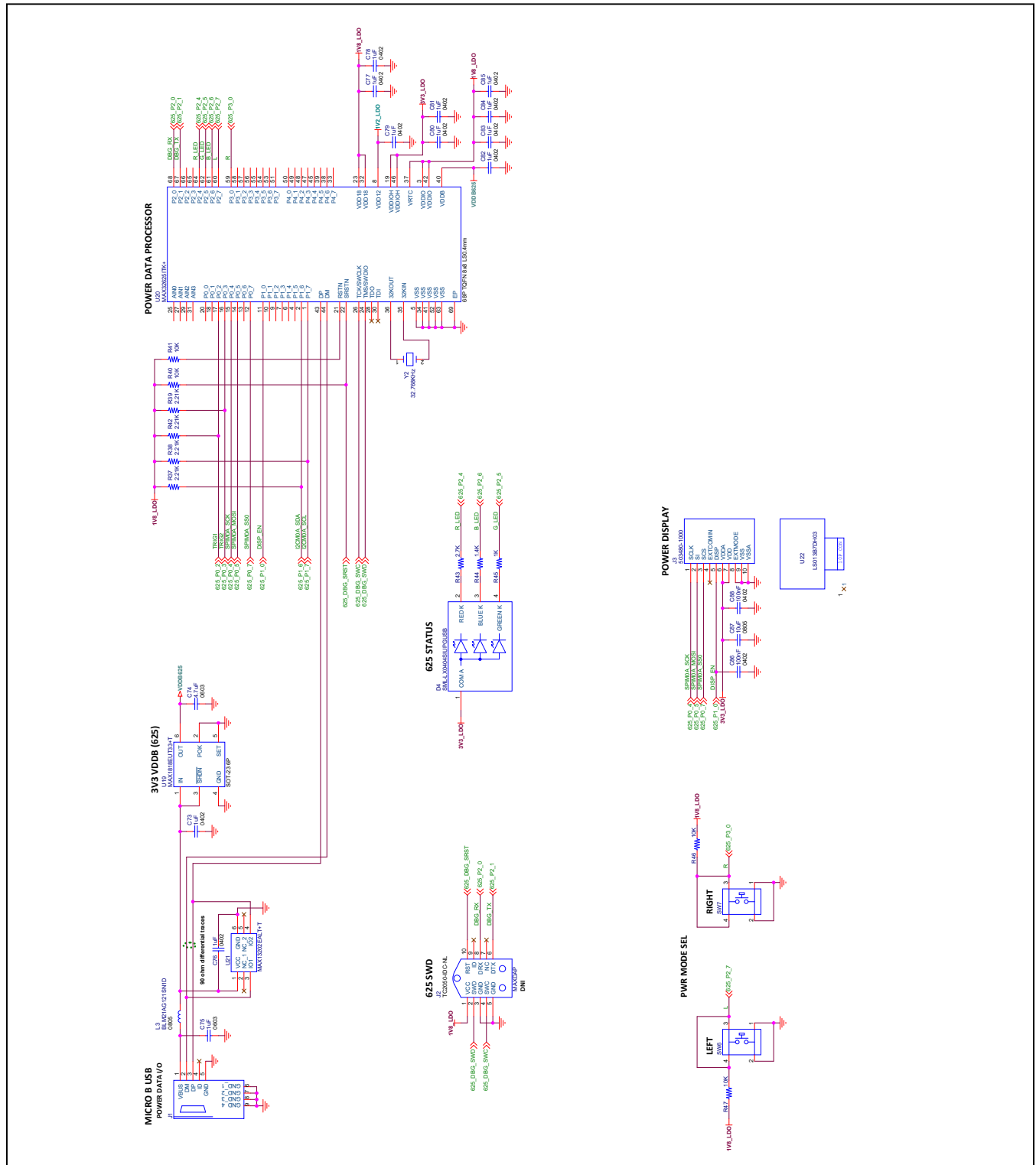
MAX78000 EV Kit Schematic (continued)



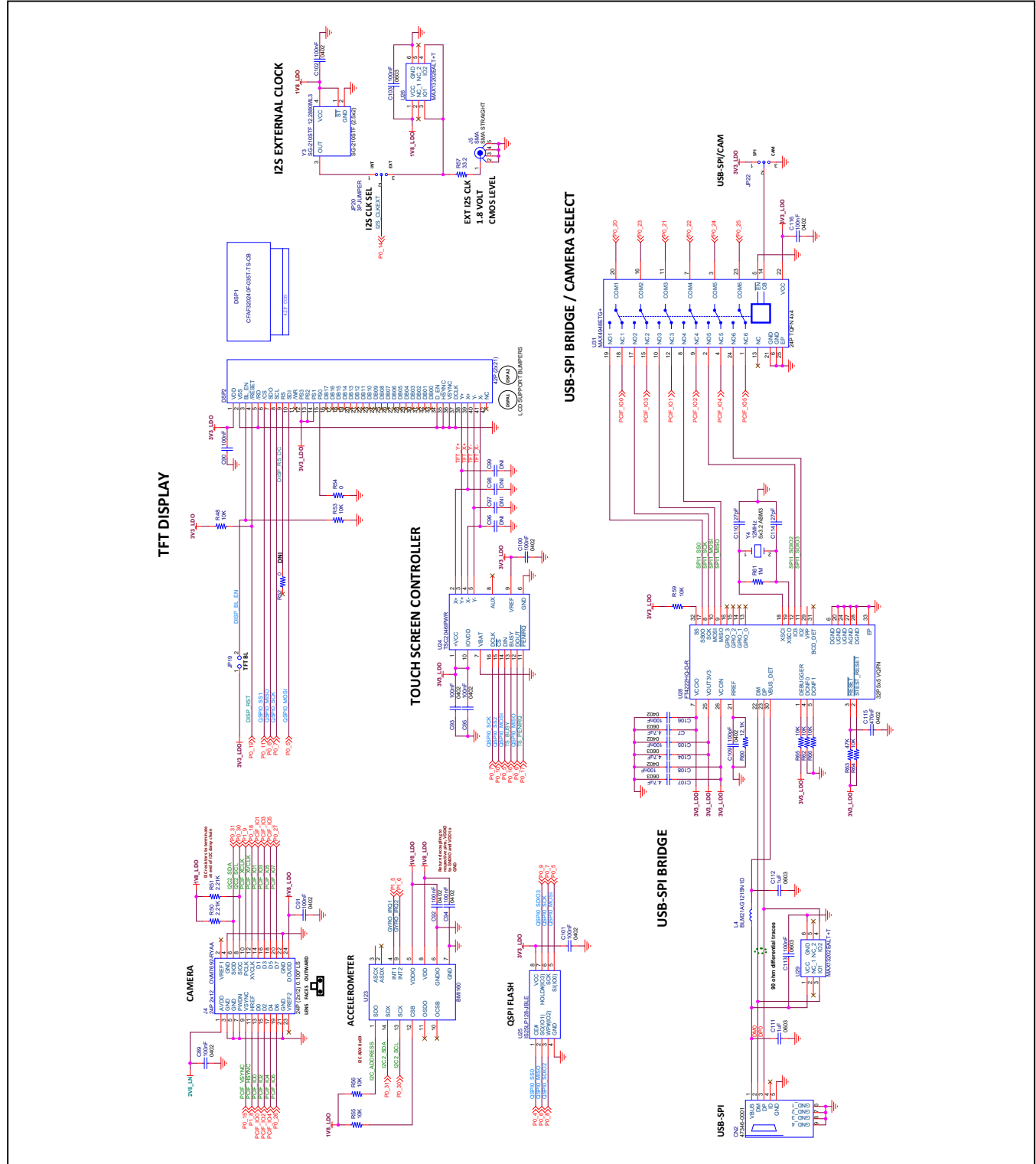
MAX78000 EV Kit Schematic (continued)



MAX78000 EV Kit Schematic (continued)



MAX78000 EV Kit Schematic (continued)



Revision History

REVISION NUMBER	REVISION DATE	DESCRIPTION	PAGES CHANGED
0	8/20	Initial release	—
1	9/20	Updated <i>General Description, EV Kit Contents, EV Kit Board, Quick Start, Detailed Description of Hardware (or Software)</i> , BOM, and Schematic	All
2	5/22	Replaced board photo	2



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