

# MAX3263x Evaluation Kit

Evaluates: MAX32630, MAX32631

## General Description

The MAX3263x evaluation kit (EV kit) provides a convenient platform for evaluating the capabilities of the MAX3263x microcontroller. The EV kit also provides a complete, functional system ideal for developing and debugging applications.

## EV Kit Contents

- EV kit board with a MAX3263X microcontroller
- Olimex ARM-USB-TINY-H JTAG debugger with JTAG ribbon cable (for connecting from debugger to EV kit header J1) and USB standard A-to-B cable (for connecting from PC to debugger)
- Standard-A to Micro-B USB cable (for connecting from PC or standalone USB power supply to EV kit USB Micro-B connector CN2) allows connection from PC USB host to MAX3263X USB device controller peripheral
- Standard-A to Micro-B USB cable (for connecting PC to EV kit USB connector CN1) allows virtual COM port interface to MAX3263X UART 0 or UART 1 through a USB/UART bridge

Ordering Information appears at end of data sheet.

Bluetooth is a registered trademark of Bluetooth SIG, Inc

## Benefits and Features

- Easily Load and Debug Code Using the Supplied Olimex ARM-USB-TINY-H JTAG Debugger Connected Through a Standard 20-Pin ARM JTAG Header
- Selectable Power Sources for PMIC Include USB Power Through CN2, External Battery Through J2 Connector, or Bench Supply Through Test Points TP12 and TP13
- Selectable Power Source for On-Board Peripherals (Switches, LEDs, OLED Display, SPI Flash, Bluetooth® LE Transceiver)
- Headers for Accessing MAX3263X I/O Pins and Analog Front End (AFE) Input Signals
- USB Micro-B Connection to MAX3263x USB Device Controller
- USB Micro-B Connection to USB-UART Bridge Selectable Between MAX3263x Internal UART 0 and UART 1
- MAX3263X Internal Real-Time Clock (RTC)
- On-Board Bluetooth 4.0 BLE Transceiver with Chip Antenna
- General-Purpose Pushbutton Switches and Indicator LEDs (All Connected to GPIOs) for User I/O
- Prototyping Matrix (0.1in Grid) with Integrated Power Rails for Customer Circuitry



## Getting Started

- 1) While observing safe ESD practices, carefully remove the MAX3263x EV kit board out of its packaging. Quickly inspect the board to ensure that no damage occurred during shipment. Jumpers/shunts were preinstalled prior to testing and packaging. By default, they select the USB interface as the source of power for the EV kit board. See [Table 1](#) and [Figure 3](#) for the default settings and descriptions.
- 2) The MAX3263x is preprogrammed with a demo program. To power up the board and run the demo, simply connect the Micro-USB cable to the Micro-USB jack found at the top left of the EV kit PCB. The jack is labeled CN2. The other end of the Micro-USB cable can be connected either to a computer or to a USB wall charger to get +5V power. No data is sent over USB in this demo.
- 3) Once power is applied, the demo initiates. The demo displays text and graphics on the OLED display.
- 4) If the OLED display does not show a graphics screen, verify that the USB port is supplying +5V.
- 5) Do not connect any of the additional USB cables or Olimex JTAG adapter until after the tool chain/drivers are installed.

If the demo runs as expected, the next step is to download and run the installer. Refer to the Quick Start. The installer is a small application that allows the user to select which components to download and install including tools, drivers, and documentation. A description of each component and the hard drive size required for each can be seen by clicking on each component.

## Detailed Description

This section describes each major function or component on the MAX3263x EV kit. This EV kit is general purpose in nature and provides many user-selectable options that are described in the following sections. Each jumper setting is described and its default setting illustrated.

### Board Power

The EV kit's main power supply input is +5V, made available through Micro-USB type-B connector CN2. This is the default power source.

### Current Monitoring

Jumpers JP15, JP16, JP18, and JP19 provide convenient current monitoring points for VDD12 (JP15), VRTC (JP18), VDDDB (JP19), and VDDA+VDD18 (JP16). VDDIO (JP27) and VDDIOH (JP30) current can be monitored using these source selection jumpers.

## Pushbuttons

Pushbuttons (normally open) SW1, SW2, and SW3 can be used to generate a logic 0 signal on their corresponding GPIO port pins. Firmware defines the action taken on switch closure.

Pushbutton SW4 provides a global POR reset function for the MAX3263x by asserting the RSTN input.

Pushbutton SW5 controls the PFN1 input of the PMIC. The function of the PFN1 input is configurable.

## USB

The MAX3263x provides an integrated USB2.0 full-speed interface (12Mbps). This interface is accessed through the Micro-USB type-B connector, CN2. This interface is also the default power source for the EV kit.

## USB-UART Bridge

The EV kit board provides a USB-to-UART bridge chip, FTDI FT230X. This bridge eliminates the requirement for a physical RS-232 COM port. Instead, MAX3263x UART access is through the Micro-USB type-B connector, CN1. Virtual COM port drivers and guides for installing Windows® drivers are available at the FTDI Chip website. Default parameters are 115,200 baud, 8 bits, no parity, 1 stop bit, no flow control.

The USB-to-UART bridge can be connected to UART 0 or UART 1 of the MAX3263X with jumpers JP10 (RX), JP12 (TX), JP13 (CTS), and JP14 (RTS).

## LEDs

The EV kit board has four LEDs with series current-limiting resistors. LEDs DS1 (red), DS2 (green), DS3 (red) and DS4 (green) are connected to MAX3263x GPIO pins P3.0, P3.1, P3.2, and P3.3, respectively. LED GPIOs should be configured as open-drain due to 3.3V LED source voltages. A LED illuminates when the appropriate GPIO pin is driven low.

## Bluetooth Low-Energy (BLE) Controller

The EV kit board has a low-power Bluetooth controller, EM9301. Communication with the MAX3263x is through SPI 2B. This particular SPI port was selected due to the additional flow control signals that it features. The EM9301 controller is Bluetooth specification V4.0 compliant. Refer to the EM Microelectronic EM9301 data sheet for additional details.

*Windows is a registered trademark and service mark of Microsoft Corp.*





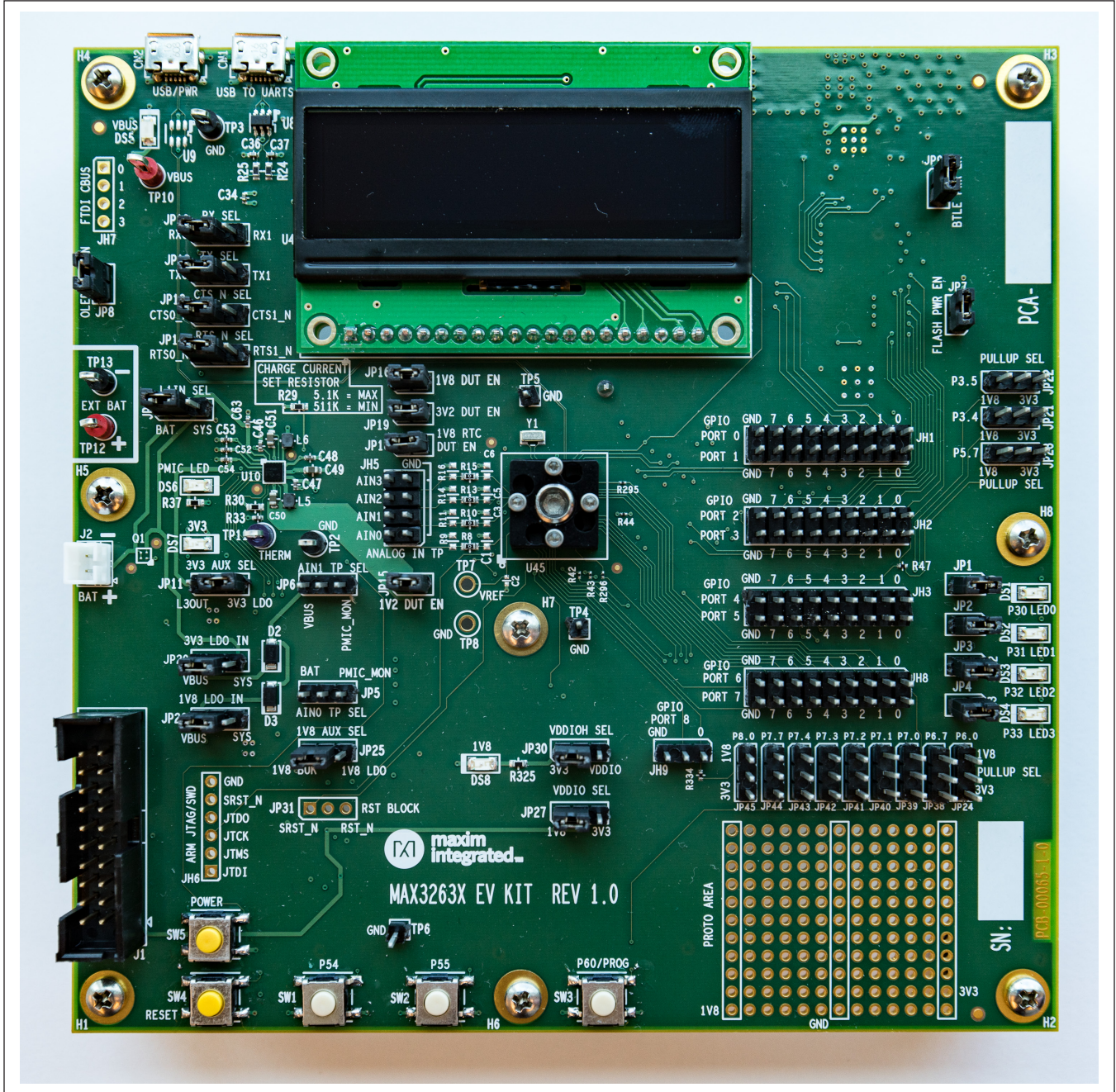


Figure 2. EV Kit Board

**Clocking**

The MAX3263x operates from an internal 96MHz relaxation oscillator. The internal oscillator is adequate to run the core digital logic and peripherals. The accuracy of the internal oscillator is not suitable for accurate RTC timekeeping or USB operation. The external 32.768kHz crystal, Y1, provides the RTC with an accurate time base and is also used to calibrate the internal oscillator for the accuracy required for USB operation.

**JTAG Connector**

The ARM standard 20-pin connector pinout is provided by shrouded header J1. JH6 is provided as an optional debugging access point, it is not populated by default. The Olimex ARM-USB-TINY-H debugger is supplied with the EV kit. Various debugger modules are available for this interface. See the schematic notes for instructions when using other than supplied debugger. JTAG logic levels are set by VDDIO and are 3.3V tolerant. Refer to the MAX3263x data sheet for more detail.

**JTAG Serial Wire Debug (SWD) Support**

SWD is supported by the MAX3263x and this EV kit. The port shares its clock (SWCLK) with JTAG TCK and a bidirectional data pin (SWDIO) is shared with JTAG TMS.

**Graphic OLED Display Module**

A 128 x 32 pixel graphic OLED display module, NHD-2.23-12832UCB3, is provided on the EV kit board. Communications with the NHD-2.23-12832UCB3 is through SPI 2A.

**Power Management IC (PMIC)**

The MAX14690 manages the EV kit power rails. It also manages the selection of EV kit power from either VBUS from CN2 or an (optional) external lithium-ion polymer battery. The MAX14690 can also function as a battery charger. Refer to the MAX14690 IC data sheet for additional information.

**GPIO Headers and Port configuration**

The MAX3263x provides support for both 1.8V and 3.3V peripherals through power rails VDDIO and VDDIOH. GPIO voltages can be programmed on a port-by-port basis, refer to MAX3263x operating guide for more detail. Multiple pullup options are supported when using special function port modes, with user selectable pullup voltage options to both rail voltages supported through jumper selection.

**Prototyping Area**

An area for adding customer-specific circuitry is provided. This matrix is on a 0.1in spacing and is usable for solder or wire-wrap construction. Power and ground rails run through the matrix.

**Jumper Descriptions**

[Table 1](#) details the functions of the configurable jumper headers on the EV kit board. The headers are standard 0.1in spacing, 0.025in posts. Settings in [Table 1](#) marked with an asterisk (“\*”) indicate default placements. [Figure 3](#) also shows the default placements highlighted in red.

**Table 1. Jumper Functions and Default Settings**

JUMPER	SETTINGS	DESCRIPTION
JP1 EN0	Open	Connection broken between MAX3263X GPIO3.0 and LED0.
	Closed*	Connection enabled between MAX3263X GPIO3.0 and LED0.
JP2 EN1	Open	Connection broken between MAX3263X GPIO3.1 and LED1.
	Closed*	Connection enabled between MAX3263X GPIO3.1 and LED1.
JP3 EN2	Open	Connection broken between MAX3263X GPIO3.2 and LED2.
	Closed*	Connection enabled between MAX3263X GPIO3.2 and LED2.
JP4 EN3	Open	Connection broken between MAX3263X GPIO3.3 and LED3.
	Closed*	Connection enabled between MAX3263X GPIO3.3 and LED3.
JP5 AIN0 TP SEL	1-2	Connect MAX3263X AIN0 and BAT.
	2-3	Connect MAX3263X AIN0 and PMIC_MON.
JP6 AIN1 TP SEL	1-2	Connect MAX3263X AIN1 to VBUS.
	2-3	Connect MAX3263X AIN1 to PMIC_MON.



**Table 1. Jumper Functions and Default Settings (continued)**

JUMPER	SETTINGS	DESCRIPTION
JP7 FLASH PWR EN	Open	Connection broken between 1.8V and FLASH VCC. The flash is disabled.
	Closed*	Connection enabled between 1.8V and FLASH VCC.
JP8 OLED PWR EN	Open	Connection broken between 3.3V and OLED display VDD.
	Closed*	Connection enabled between 3.3V and OLED display VDD.
JP9 BTLE PWR EN	Open	Connection broken between 3.3V and the EM9301 BLE controller. The controller is disabled.
	Closed*	Connection enabled between 3.3V and the EM9301 BLE controller.
JP10 RX SEL	1-2*	Connection enabled between MAX3263X UART 0 RX and FT230XS TXD.
	2-3	Connection enabled between MAX3263X UART 1 RX and FT230XS TXD.
JP11 3.3V PERIPH SEL	1-2	Connection enabled between PMIC L3OUT and 3.3V peripherals.
	2-3*	Connection enabled between LDO U11 and 3.3V peripherals.
JP12 TX SEL	1-2*	Connection enabled between MAX3263X UART 0 TX and FT230XS RXD.
	2-3	Connection enabled between MAX3263X UART 1 TX and FT230XS RXD.
JP13 CTS SEL	1-2*	Connection enabled between MAX3263X UART 0 CTS and FT230XS RTX.
	2-3	Connection enabled between MAX3263X UART 1 CTS and FT230XS RTS.
JP14 RTS SEL	1-2*	Connection enabled between MAX3263X UART 0 RTS and FT230XS CTS.
	2-3	Connection enabled between MAX3263X UART 1 RTS and FT230XS CTS.
JP15 1.2V DUT EN	Open	Connection broken between PMIC B1OUT (1.2V) and MAX3263X VDD12.
	Closed*	Connection enabled between PMIC B1OUT (1.2V) and MAX3263X VDD12.
JP16 1.8V DUT EN	Open	Connection broken between PMIC B2OUT (1.8V) and MAX3263X VDD18.
	Closed*	Connection enabled between PMIC B2OUT (1.8V) and MAX3263X VDD18.
JP17 L1IN SEL	1-2	Connection enabled between BAT and PMIC L1IN input and PMIC L1IN input.
	2-3*	Connection enabled between PMIC SYS and PMIC L1IN input.
JP18 1.8V RTC DUT EN	Open	Connection broken between PMIC L1OUT (1.8V) and MAX3263X VRTC input.
	Closed*	Connection enabled between PMIC L1OUT (1.8V) and MAX3263X VRTC input.
JP19 3.2V DUT EN	Open	Connection broken between PMIC L2OUT (3.2V) and MAX3263X VDDB input.
	Closed*	Connection enabled between PMIC L2OUT (3.2V) and MAX3263X VDDB input.
JP20 3.3V LDO IN	1-2*	Connection enabled between CN2-VBUS and 3.3V LDO input.
	2-3	Connection enabled between PMIC-SYS and 3.3V LDO input.
JP21 P34 PU SEL	1-2	Connection enabled between 1.8V and 10K pullup to GPIO3.4
	2-3	Connection enabled between 3.3V and 10K pullup to GPIO3.4
JP22 P35 PU SEL	1-2	Connection enabled between 1.8V and 10K pullup to GPIO3.5
	2-3	Connection enabled between 3.3V and 10K pullup to GPIO3.5
JP23 P57 PU SEL	1-2	Connection enabled between 1.8V and 10K pullup to GPIO5.7
	2-3	Connection enabled between 3.3V and 10K pullup to GPIO5.7

**Table 1. Jumper Functions and Default Settings (continued)**

JUMPER	SETTINGS	DESCRIPTION
JP24 P60 PU SEL	1-2	Connection enabled between 1.8V and 10K pullup to GPIO6.0
	2-3	Connection enabled between 3.3V and 10K pullup to GPIO6.0
JP25 1.8V AUX SEL	1-2*	Connection enabled between PMIC 1V8_BUK (1.8V) and 1.8V peripherals
	2-3	Connection enabled between 1.8V LDO (1.8V) and 1.8V peripherals
JP26 1.8V LDO IN	1-2*	Connection enabled between VBUS and input of the 1.8V onboard LDO
	2-3	Connection enabled between PMIC SYS and input of the 1.8V onboard LDO
JP27 VDDIO SEL	1-2*	Connection enabled between VDDIO and 1.8V AUX power
	2-3	Connection enabled between VDDIO and 3.3V AUX power
JP30 VDDIO SEL	1-2*	Connection enabled between VDDIOH and 3.3V AUX power
	2-3	Connection enabled between VDDIOH and VDDIO and VDDIO
JP38 P6.7 PU SEL	1-2	Connection enabled between 1.8V and 10K pullup at GPIO6.7
	2-3	Connection enabled between 3.3V and 10K pullup at GPIO6.7
JP39 P7.0 PU SEL	1-2	Connection enabled between 1.8V and 10K pullup at GPIO7.0
	2-3	Connection enabled between 3.3V and 10K pullup at GPIO7.0
JP40 P7.1 PU SEL	1-2	Connection enabled between 1.8V and 10K pullup at GPIO7.1
	2-3	Connection enabled between 3.3V and 10K pullup at GPIO7.1
JP41 P7.2 PU SEL	1-2	Connection enabled between 1.8V and 10K pullup at GPIO7.2
	2-3	Connection enabled between 3.3V and 10K pullup at GPIO7.2
JP42 P7.3 PU SEL	1-2	Connection enabled between 1.8V and 10K pullup at GPIO7.3
	2-3	Connection enabled between 3.3V and 10K pullup at GPIO7.3
JP43 P7.4 PU SEL	1-2	Connection enabled between 1.8V and 10K pullup at GPIO7.4
	2-3	Connection enabled between 3.3V and 10K pullup at GPIO7.4
JP44 P7.7 PU SEL	1-2	Connection enabled between 1.8V and 10K pullup at GPIO7.7
	2-3	Connection enabled between 3.3V and 10K pullup at GPIO7.7
JP45 P8.0 PU SEL	1-2	Connection enabled between 1.8V and 10K pullup at GPIO8.0
	2-3	Connection enabled between 3.3V and 10K pullup at GPIO8.0

\*Default position.

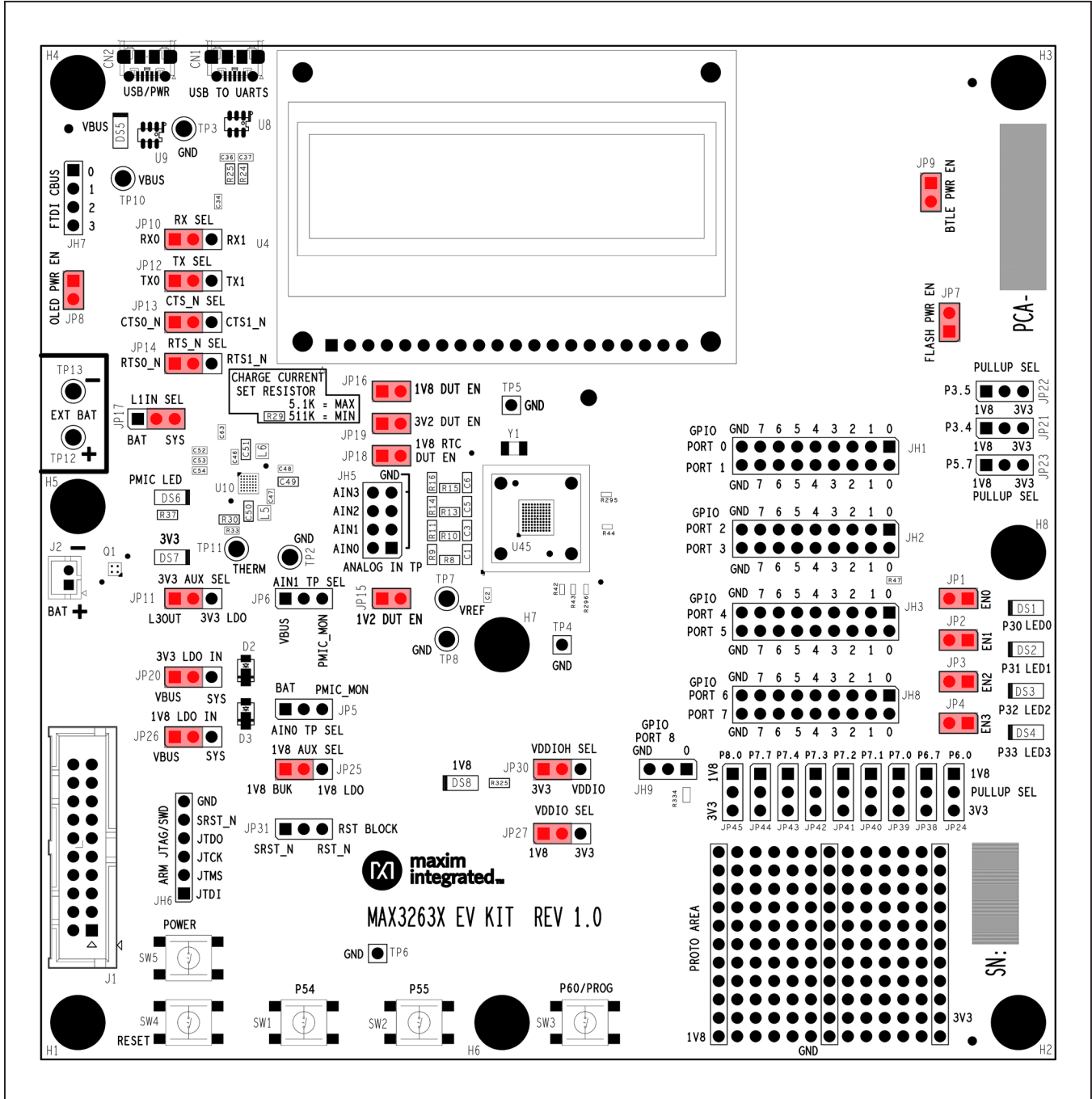


Figure 3. Default Jumper Placement



### Additional Resources

- MAX3263x EV kit Quick Start
- MAX3263x EV kit data sheet (this document)
- MAX3263x EV kit schematic\* (attached to this PDF)
- MAX3263x data sheet\*
- MAX3263x User's Guide\*
- ARM® Cortex® Toolchain User's Guide—README\*
- MAX3263X CMSIS Libraries—Firmware User's Guide\*
- Example projects and app notes describing them\*

\*Additional information resides in the **MAX3263x Resources** component of the installer. Once this component is installed, the information can then be found in the Windows **Start** Menu under **Maxim Integrated**, or it can be found by exploring the installation directory. Documentation is fetched at the time of installation to assist offline development. However, it is recommended to visit [www.maximintegrated.com](http://www.maximintegrated.com) to check whether updates have been made to any of the documents.

### Component List and Schematic

See the following links for component information and schematics:

- [MAX3263x EV BOM](#)
- [MAX3263x EV Schematic](#)

### Technical Support

For technical support, go to:

<http://support.maximintegrated.com/micro>.

### Ordering Information

PART	TYPE
MAX32630-EVKIT#	EV Kit

#Denotes RoHS compliant.

ARM is a registered trademark and registered service mark and Cortex is a registered trademark of ARM Limited.

## Revision History

































REVISION NUMBER	REVISION DATE	DESCRIPTION	PAGES CHANGED
0	1/16	Initial release	—

For pricing, delivery, and ordering information, please contact Maxim Direct at 1-888-629-4642, or visit Maxim Integrated's website at [www.maximintegrated.com](http://www.maximintegrated.com).


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Quantity	Part Reference	Value	BOM_Description	Manufacturer_PN	Manufacturer
1	ANT1	2450AT42B100E	ANTENNA CHIP 2.4GHZ	2450AT42B100E	Johanson Technology Inc
8	BMP1,BMP2,BMP3,BMP4,BMP5,BMP6,BMP7,BMP8	RB Bump	BUMPER RECESSED #4 SCREW BLACK DNI	720	Keystone Electronics Inc
DNI*,1	C1,C3,C5,C6,R9,R11,R14,R16	DNI	CAP CER 0.1UF 10V 10% X5R 0402	GRM155861A104K0A01	Murata
DNI*,1	C2	100nF	CAP CER 1UF 6.3V 20% X5R 0402	C1005X5R0J00K050B	TDK Corporation
17	C7,C8,C9,C10,C11,C14,C16,C17,C18,C19,C20,C21,C22,C23,C24,C25,C54,C56,C62,C63,C144,C146,C163	1uF	CAP CER 4700PF 25V 10% X7R 0402	GRM155871E472KA01D	Murata
2	C23	4.7nF	CAP CER 0.1UF 10V 10% X5R 0402	GRM155861A104K0A01D	Murata
10	C13,C14,C17,C24,C34,C39,C58,C60,C61,C62	100nF	CAP CER 4700PF 25V 10% X7R 0402	GRM155871E472KA01D	Murata
DNI*,1	C15	4.7nF	CAP CER 1uF 16V 10% X7R 0603	GCM188R71E103KA01D	Murata
2	C16,C31	1uF	CAP CER 15PF 50V 5% NPO 0402	GRM1555C1H150A01D	Murata
2	C22,C23	15pF	CAP CER 47uF 6.3V 20% X5R 1206	C3216X5R0J476M	TDK Corporation
1	C25	47uF	CAP CER 100PF 50V 5% NPO 0402	C1005C0G1H101J050BA	TDK Corporation
2	C30,C32	100pF	CAP CER 10nF 25V 10% X7R 0603	GRM188R71E103KA01D	Murata
2	C35,C44	100nF	CAP CER 47PF 50V 1% NPO 0402	C1005C0G1H470F050BA	TDK Corporation
2	C36,C37	4.7pF	CAP CER 4.7uF 10V 10% X5R 0603	C0603C475K8PACTU	Kemet
1	C38	4.7uF	CAP CER 0.1UF 25V 10% X8R 0603	C1608X8R1E104K0800A	TDK Corporation
3	C40,C42,C45	100nF	CAP CER 0.1uF 16V 10% X7R 0603	C0603C104K4RACTU	Kemet
1	C41	100nF	CAP CER 1UF 35V 10% X5R 0603	GKM107B1J05KA-T	Taiyo Yuden
1	C43	1uF	CAP CER 22UF 4V 20% X5R 0603	AMK107B226MA-T	Taiyo Yuden
3	C49,C50,C51	22uF	CAP CER 22uF 6.3V 20% X5R 1206	C3216X5R0J226M/0.85	TDK Corporation
2	C55,C161	22uF	CAP CER 10UF 6.3V 20% X5R 0603	CLD10616MQ8NNNC	Samsung Electro-Mechanics America, Inc
2	C57,C160	10uF	DNI		
DNI*,1	C64	DNI	CAP CER 30pF 50V 5% NPO 0603	C0603C300J5GACTU	Kemet
DNI*,1	C159	30pF	CONN RCPT MICRO USB R/A SMD	105017-0001	Molex
2	CN1,CN2	MICRO USB R/A	DIODE SCHOTTKY 30V 2A POWERDI123	DFL5230L-7	Diodes Inc
2	D2,D3	DFL5230L-7	LED 660NM RED WTR CLR 1206 SMD	SML-LX1206SRC-TR	Lumex Opto
3	DS1,DS3,DS6	RED	LED 565NM WTR CLR GREEN 1206 SMD	SML-LX1206GC-TR	Lumex Opto
4	DS2,DS4,DS7,DS8	GRN	LED 469NM BLUE DIF 1206 SMD	HSMR-C150	Avago Technologies US Inc.
1	DS5	BLU	DNI		
1	H1	DNI	DNI MTG 125DRL 300PAD		
1	H2	DNI	DNI MTG 125DRL 300PAD		
1	H3	DNI	DNI MTG 125DRL 300PAD		
1	H4	DNI	DNI MTG 125DRL 300PAD		
1	H5	DNI	DNI MTG 125DRL 300PAD		
1	H6	DNI	DNI MTG 125DRL 300PAD		
1	H7	DNI	DNI MTG 125DRL 300PAD		
1	H8	DNI	DNI MTG 125DRL 300PAD		
1	HDR1	20P 1x20	CONN HEADER .100 SINGL STR 20POS	PEC20SAAN	Sullins
1	J1	20P 1x20	CONN HEADER LQFP60 STR 20POS GOLD	51033008-5	TE Connectivity
1	J2	2POS 2MM	CONN HEADER PH TOP 2POS 2MM	B2B-PH-K-(5L/F)(5N)	JST Sales America Inc
4	JH1,JH2,JH3,JH8	18P 2x9	CONN HEADER .100 DUAL STR 18POS	PEC09DAAN	Sullins
1	JH5	8P 2x4	CONN HEADER .100 DUAL STR 8POS	PEC04DAAN	Sullins
DNI*,1	JH6	6P 1x6	CONN HEADER .100 SINGL STR 6POS	PEC06SAAN	Sullins
DNI*,1	JH7	4P 1x4	CONN HEADER .100 SINGL STR 4POS	PEC04SAAN	Sullins
26	JH9,JP5,JP6,JP10,JP11,JP12,JP13,JP14,JP17,JP20,JP21,JP22,JP23,JP24,JP25,JP26,JP27,3	3P 3x1	CONN HEADER .100 SINGL STR 3POS	PEC03SAAN	Sullins
11	JP1,JP2,JP3,JP4,JP7,JP8,JP9,JP15,JP16,JP18,JP19	JUMPER	CONN HEADER .100 SINGL STR 2POS (2x1)	PEC02SAAN	Sullins
DNI*,1	JP31	3P 3x1	CONN HEADER .100 SINGL STR 3POS	PEC03SAAN	Sullins
1	L1	3.3nH	INDUCTOR MULTILAYER 3.3NH 0402	MLK100553N35T000	TDK Corporation
1	L2	1.5nH	INDUCTOR MULTILAYER 1.5NH 0402	MLK100551N5T000	TDK Corporation
2	L3,L4	HZ1206C202R-10	FERRITE CHIP SIGNAL 2000 OHM SMD	HZ1206C202R-10	Laird-Signal Integrity Products
2	L5,L6	2.2uH	INDUCTOR POWER 2.2UH 1.05A SMD	VLS201610ET-2R2M	TDK Corporation
8	MS1,MS2,MS3,MS4,MS5,MS6,MS7,MS8	Screw Steel	MACHINE SCREW PAN PHILLIPS SMD	PMSS5 440 0025 PH	B&F Fastener Supply
8	MST1,MST2,MST3,MST4,MST5,MST6,MST7,MST8	STANDOFF	HEX STANDOFF 4-40 ALUMINUM 5/8"	1808	Keystone Electronics
1	PCB1	PCB			
1	PROT01	DNI	Proto Type Area 11x13 (0.1" L5)		
DNI*,1	Q1	S1849DB-T1-E1	MOSFET P-CH 8V MICROFOOT	S1849DB-T1-E1	Vishay Silicon
1	Q2	NM8B7222ALT1G	TRANS GP 5S NPN 40V SOT23	NM8B7222ALT1G	ON Semi
3	R1,R2,R3	100	RES 100 OHM 1/10W 1% 0603 SMD	ERJ-3EK100V0	Panasonic
3	R4,R6,R37	470	RES 470 OHM 1/10W 1% 0603 SMD	ERJ-3EK470V0	Panasonic
4	R5,R7,R38,R325	32	RES 332 OHM 1/10W 1% 0603 SMD	ERJ-3EK332V0	Panasonic
4	R8,R10,R13,R15	0	RES 0.0 OHM 1/10W JUMP 0603 SMD	ERJ-3GEY0R0V0	Panasonic
4	R17,R19,R21,R50	215K	RES 215K OHM 1/10W 1% 0603 SMD	ERJ-3EK2153V	Panasonic
1	R20	27K	RES 27K OHM 1/10W 1% 0402 SMD	ERJ-2RFK2702X	Panasonic
4	R23,R26,R27,R28	10K	RES 10K OHM 1/10W 1% 0603 SMD	ERJ-3EK1002V	Panasonic
2	R24,R25	27	RES 27 OHM 1/10W 1% 0603 SMD	ERJ-3EK27R0V	Panasonic
1	R29	511K	RES 511K OHM 1/10W 1% 0603 SMD	ERJ-3EK5113V	Panasonic
1	R30	100K	RES 100K OHM 1/10W 1% 0603 SMD	ERJ-3EK1003V	Panasonic
2	R31,R326	2.7K	RES 2.7K OHM 1/10W 1% 0603 SMD	ERJ-3EK2701V	Panasonic
17	R32,R34,R35,R39,R41,R47,R48,R49,R322,R327,R328,R329,R330,R331,R332,R333,R33	10K	RES 10K OHM 1/10W 1% 0402 SMD	ERJ-2RFK1002X	Panasonic
1	R36	100K	THERMISTOR 100K OHM NTC 0402 SMD	NCP155W1F0403RC	Murata Electronics North America
DNI*,1	R37	3.33K	RES 4.7K OHM 1/10W 1% 0402 SMD	ERJ-2RFK4701X	Panasonic
1	R39	0	RES 0.0 OHM 1/20W JUMP 0201 SMD	ERJ-1GN9R0X0	Panasonic
DNI*,1	R310	62	RES 62 OHM 1/10W 1% 0402 SMD	ERJ-2RFK62R0X	Panasonic
DNI*,1	R323	0	RES 0.0 OHM 1/20W JUMP 0201 SMD	ERJ-1GN9R0X0	Panasonic
3	SW1,SW2,SW3	835-1000	SWTCH TACTILE SPST-NO 0.05A 24V	835-1000	Omnron Electronics
2	SW4,SW5	835-1002 BY OMZ	SWTCH TACTILE SPST-NO 0.05A 24V	835-1002 BY OMZ	Omnron Electronics
4	SW6,SW7,SW8,SW9	DIP SW 6POS SMT	SWTCH DIP 6POS HALF PITCH SMD	TDAD08G5B1R	C&K Components
1	T1	2450BL15B200	BALUN 2.4GHZ W/IF/BLUETOOTH	2450BL15B200E	Johanson Technology Inc
4	TP1,TP2,TP3,TP13	BLK	TEST POINT PC MULTI PURPOSE BLK	5011	Keystone Electronics
4	TP4,TP5,TP6	1P	CONN HEADER .100 SINGL STR 1POS	PEC01SAAN	Sullins
DNI*,1	TP7	RED	TEST POINT PC MULTI PURPOSE RED	5010	Keystone Electronics
DNI*,1	TP8	BLK	TEST POINT PC MULTI PURPOSE BLK	5011	Keystone Electronics
2	TP10,TP12	RED	TEST POINT PC MULTI PURPOSE RED	5010	Keystone Electronics
1	TP11	PRPL	TEST POINT PC MULTI PURPOSE PRPL	5129	Keystone Electronics
1	U2	MX25U12835FZ21-10G	IC FLASH 128MBIT 104MHZ 8WSN	MX25U12835FZ21-10G	Macronix International
1	U4	NHD-2.23-12832UCB3	LCD OLED GRAPHIC 128 X 32 BLUE	NHD-2.23-12832UCB3	Newhaven Display Intl
1	U6	EM9301V02LF24D+	BLE Controller without DCCD	EM9301V02LF24D+	EM Microelectronic
1	U7	FT232RL	IC USB SERIAL BASIC UART 16550	FT232RL-R	FTDI
1	U8	MAX3207EAUT-T	ESD PROT DIFF SOT23 6	MAX3207EAUT-T	Maxim Integrated
DNI*,1	U9	MAX3207EAUT-T	ESD PROT DIFF SOT23 6	MAX3207EAUT-T	Maxim Integrated
1	U10	MAX14690	MAX14690 36P WLP	MAX14690	Maxim Integrated
1	U11	MAX1806EUA33+	IC REG LDO 3.3V/ADJ 0.5VA UMUX	MAX1806EUA33+	Maxim Integrated
1	U15	74LVC2T45DC	TXRX TRANSLATING 3ST 8VSSOP	74LVC2T45DC,125	NXP Semiconductors
1	U45	MAX3263XIWG	MAX3263XIWG	C14733	Ironwood Electronics, INC.
1	U46	MAX1806EUA18+	Low Dropout Linear Regulator	MAX1806EUA18+	Maxim Integrated
1	Y1	32.768KHz	CRYSTAL 32.768KHZ 6.0PF SMD	AB507-32.768KHZ-6-T	Abracon Corp
1	Y2	26MHz	CRYSTAL 26MHZ 10-1 U-T	ABM8-26.000MHZ10-1-U-T	Abracon Corporation

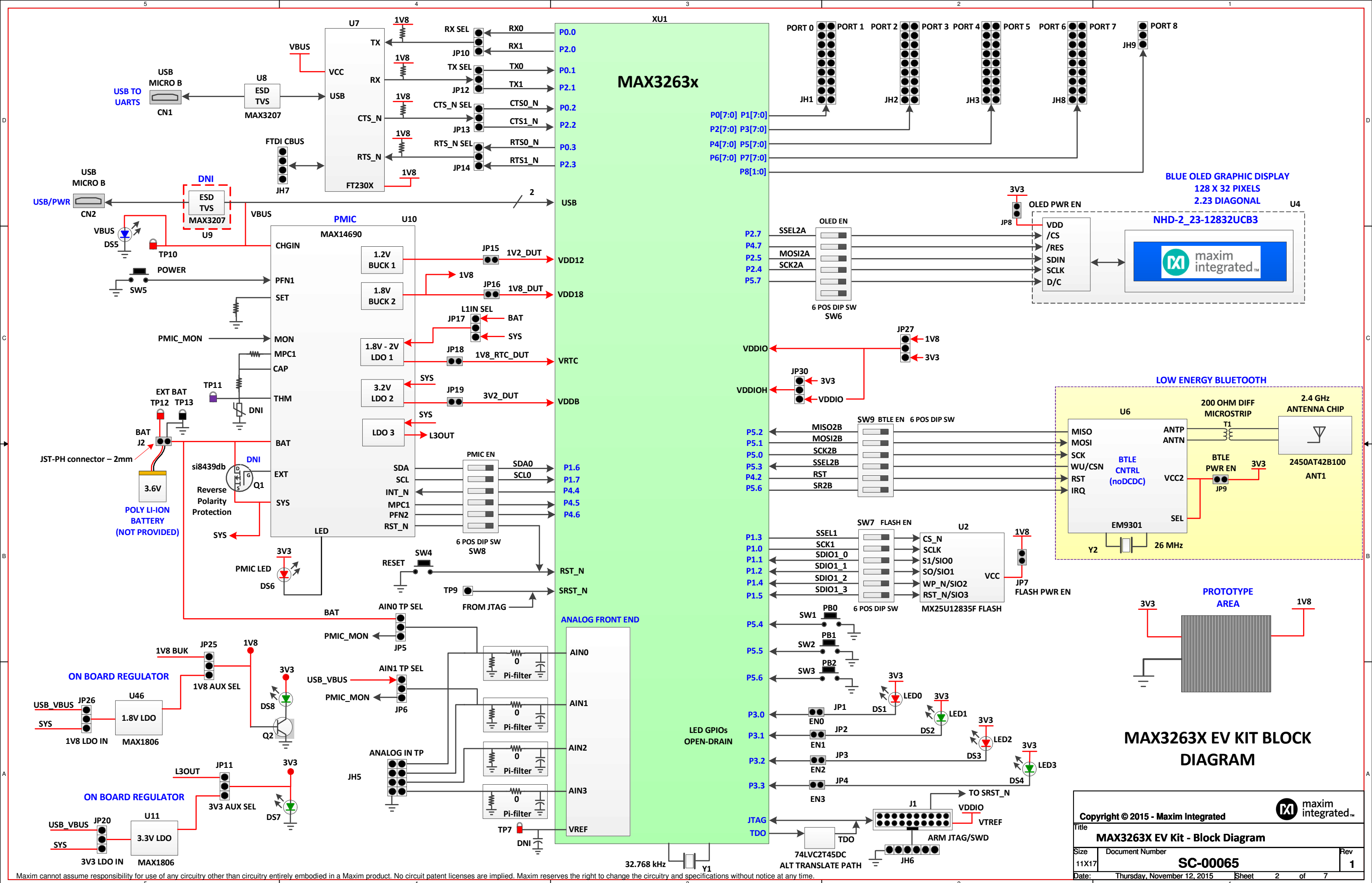
**NOTES:**

 MS1 Screw Steel	 MS2 Screw Steel	 BMP1 RB Bump	 BMP2 RB Bump
 MS3 Screw Steel	 MS4 Screw Steel	 BMP3 RB Bump	 BMP4 RB Bump
 MS5 Screw Steel	 MS6 Screw Steel	 BMP5 RB Bump	 BMP6 RB Bump
 MS7 Screw Steel	 MS8 Screw Steel	 BMP7 RB Bump	 BMP8 RB Bump
 MST1 STANDOFF	 MST2 STANDOFF	 H1 DNI 1	 H2 DNI 1
 MST3 STANDOFF	 MST4 STANDOFF	 H3 DNI 1	 H4 DNI 1
 MST5 STANDOFF	 MST6 STANDOFF	 H5 DNI 1	 H6 DNI 1
 MST7 STANDOFF	 MST8 STANDOFF	 H7 DNI 1	 H8 DNI 1

PCB1  
PCB-00065-1-0

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Title <b>MAX3263X EV Kit - Rev History &amp; Notes</b>		
Size 11X17	Document Number <b>SC-00065</b>	Rev <b>1</b>
Date: Thursday, November 12, 2015 Sheet 1 of 7		



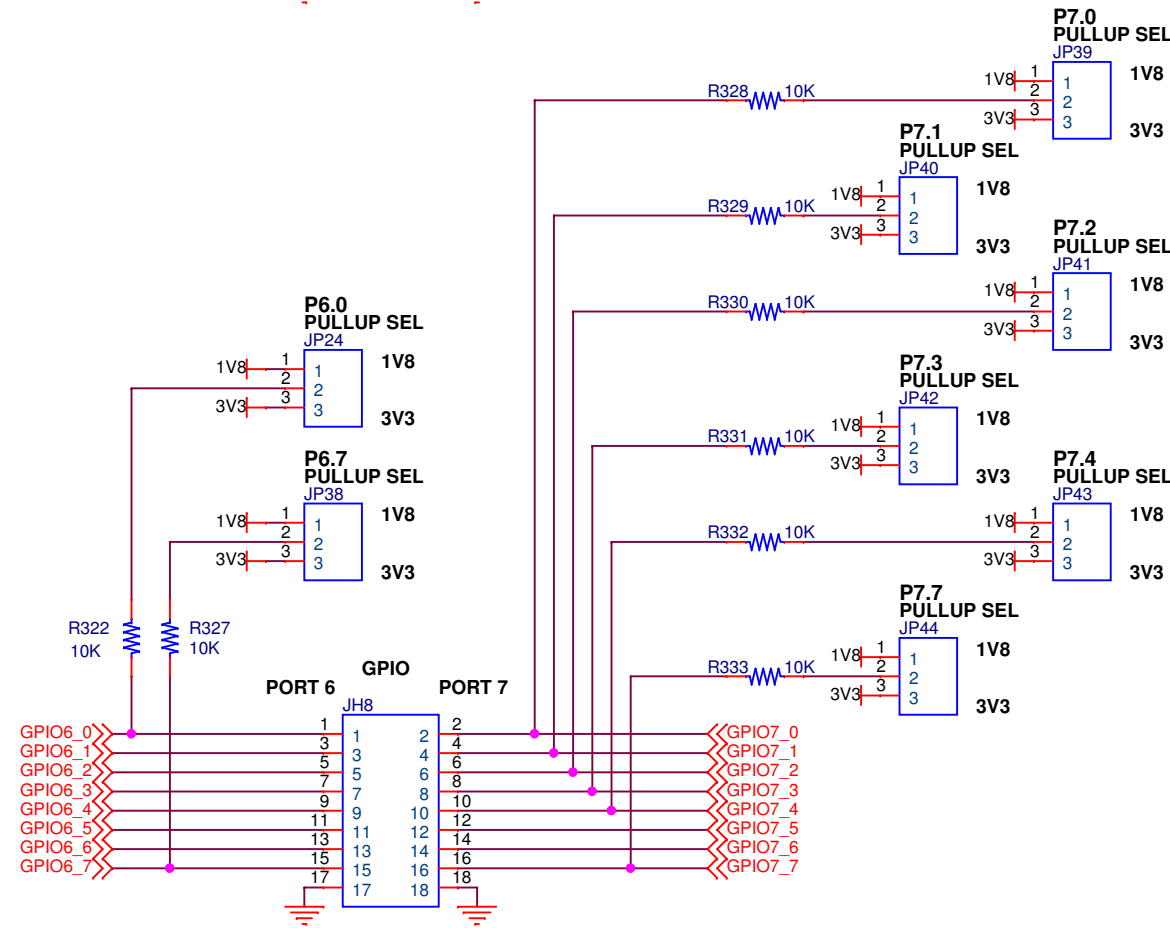
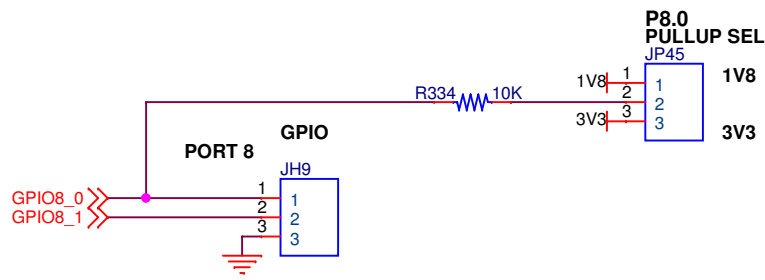
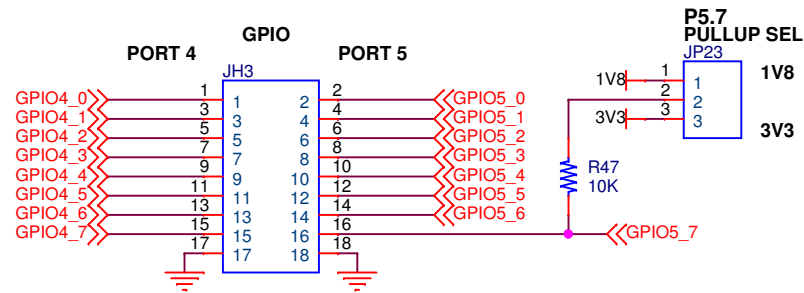
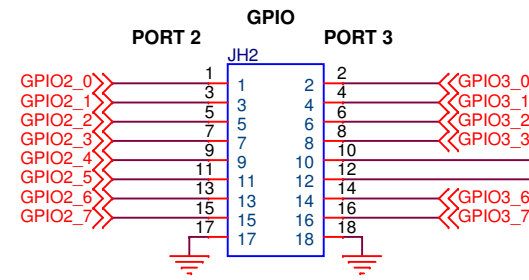
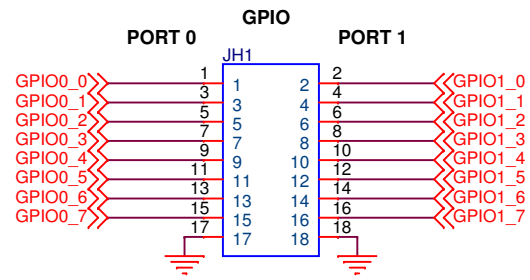


**MAX3263X EV KIT BLOCK DIAGRAM**

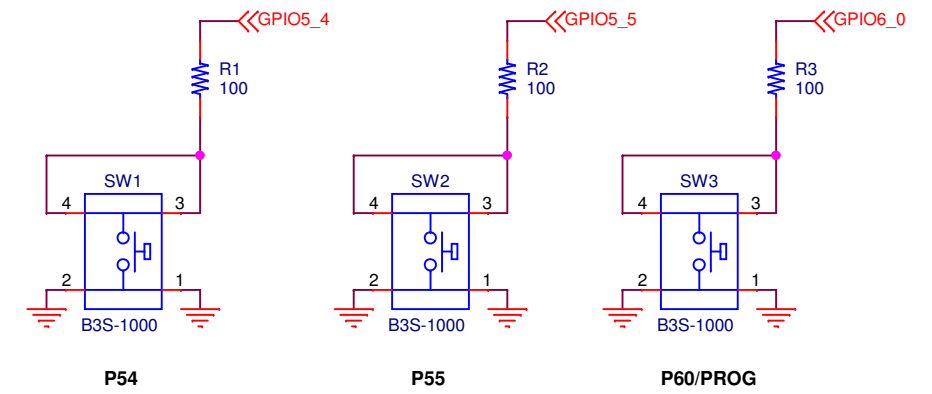
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Title			
MAX3263X EV Kit - Block Diagram			
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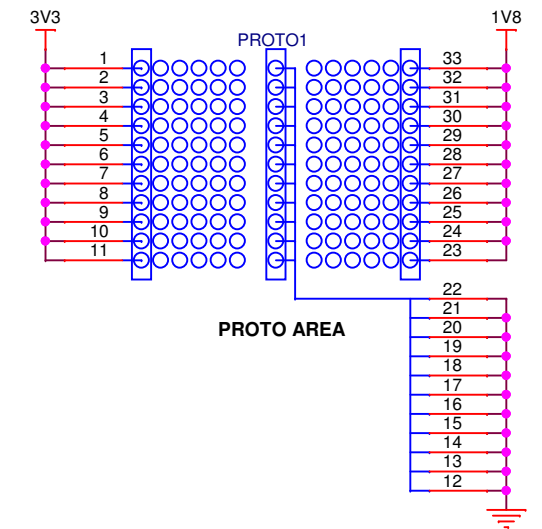
# GPIO HEADERS



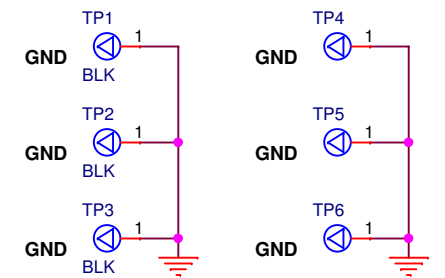
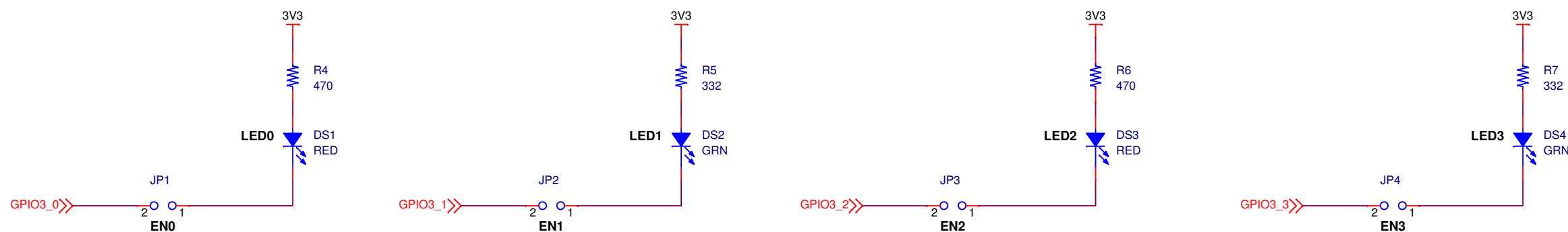
# GENERAL PURPOSE PB SWITCHES



# PROTOTYPE AREA



# GENERAL PURPOSE LEDs (NOTE: Configure GPIOs as open-drain due to LED 3.3V supply voltage)



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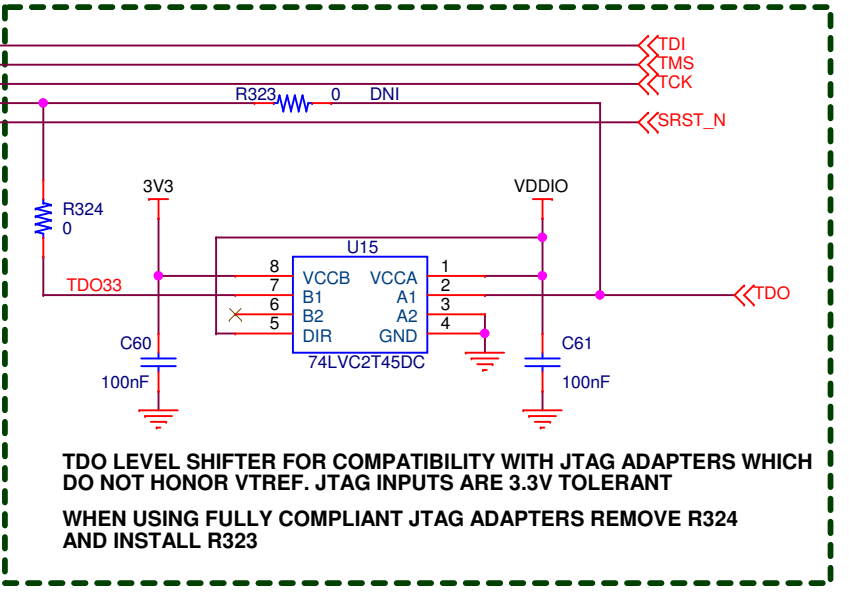
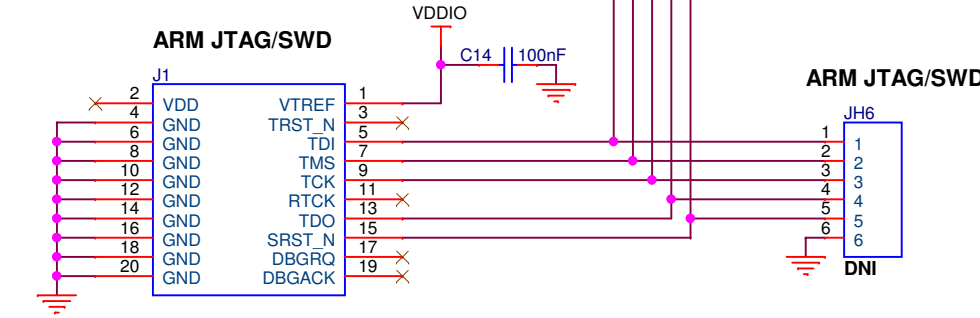
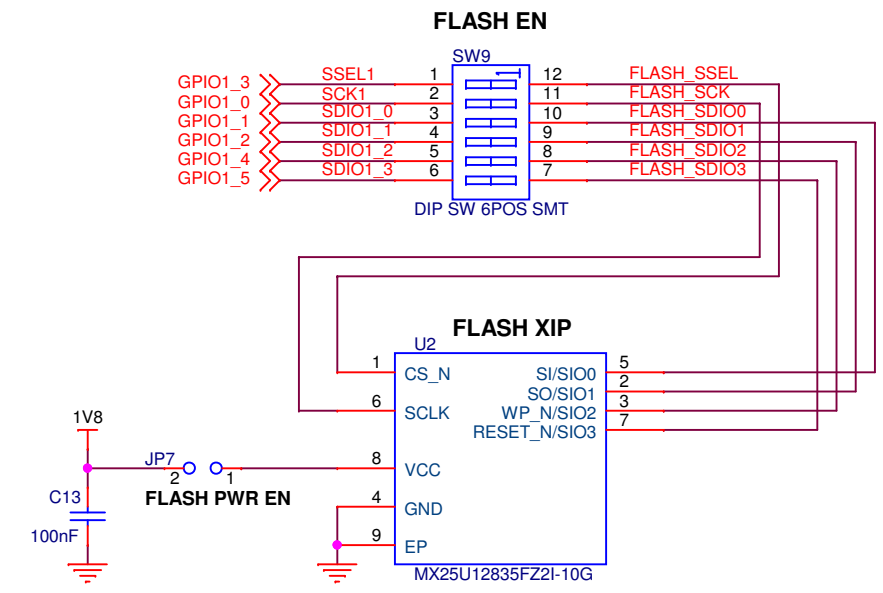
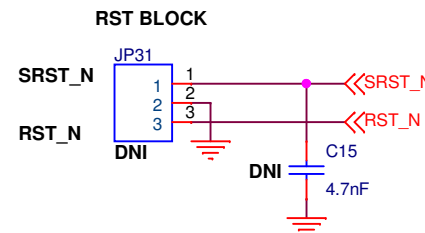
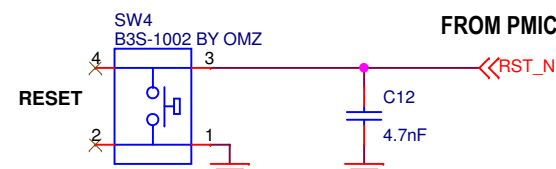
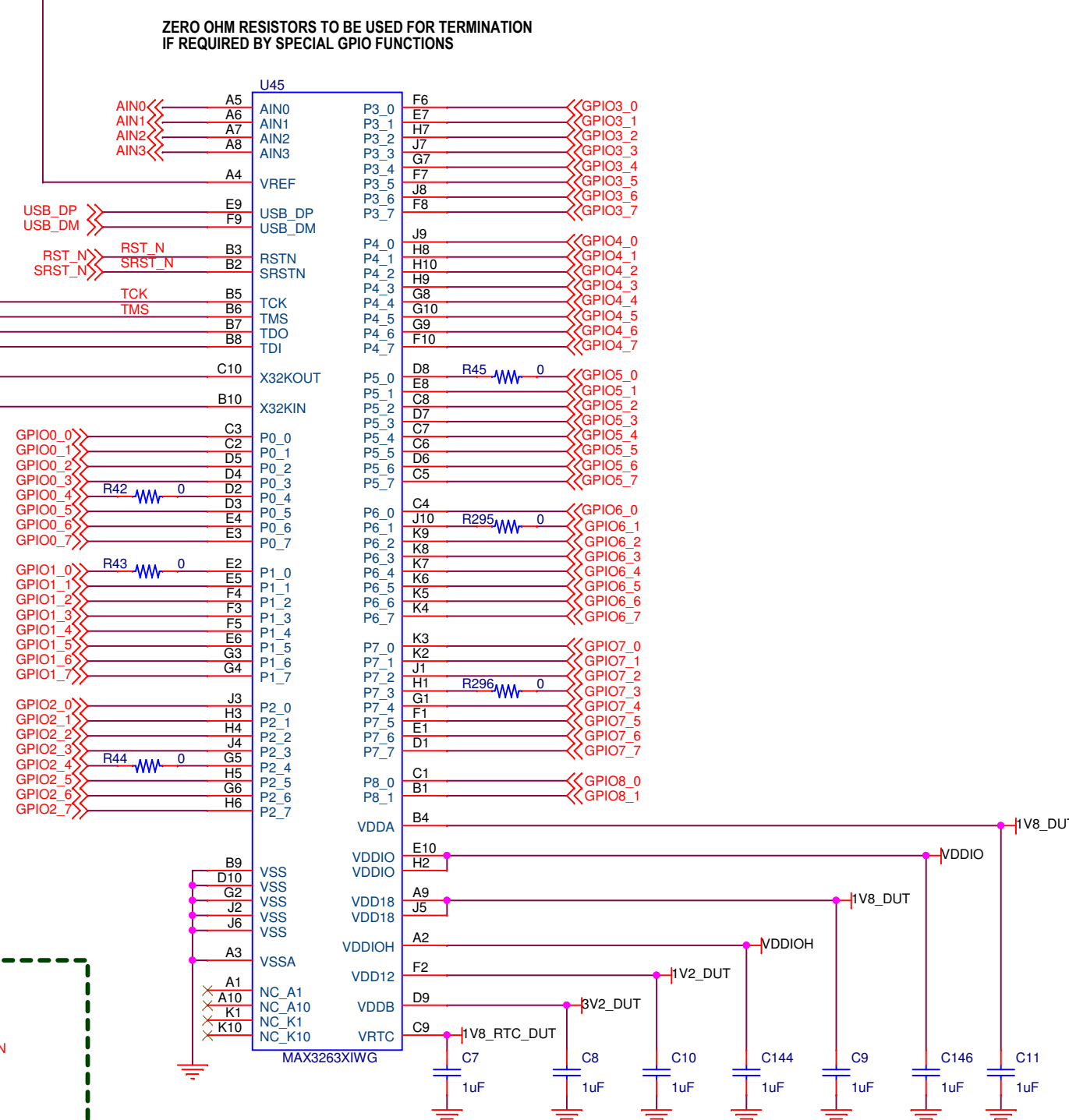
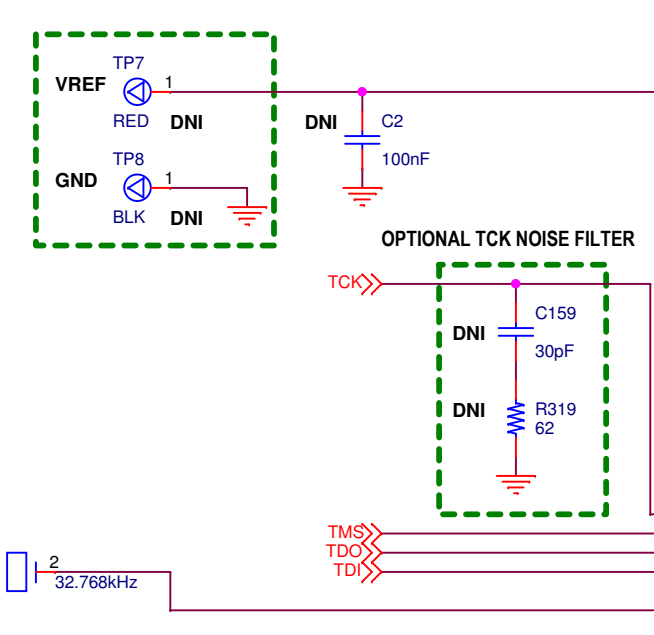
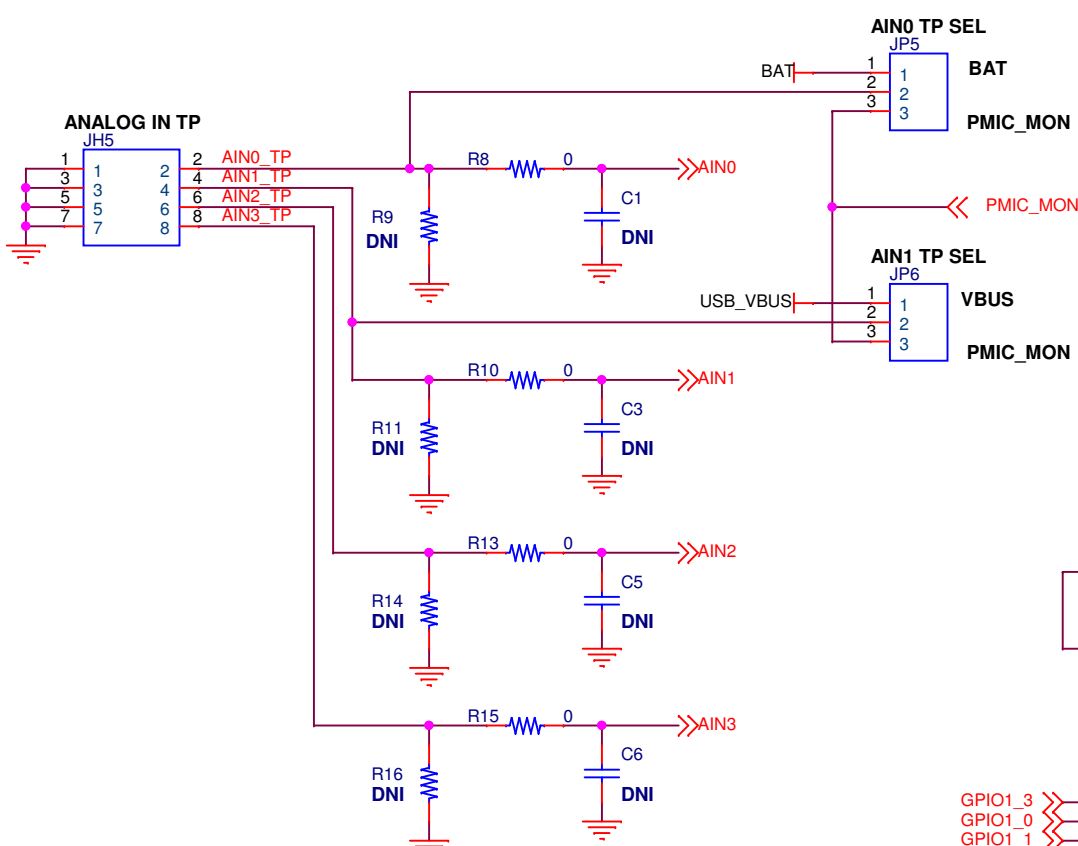
MAX3263X EV Kit - Headers, LEDs & Switches

Document Number: SC-00065

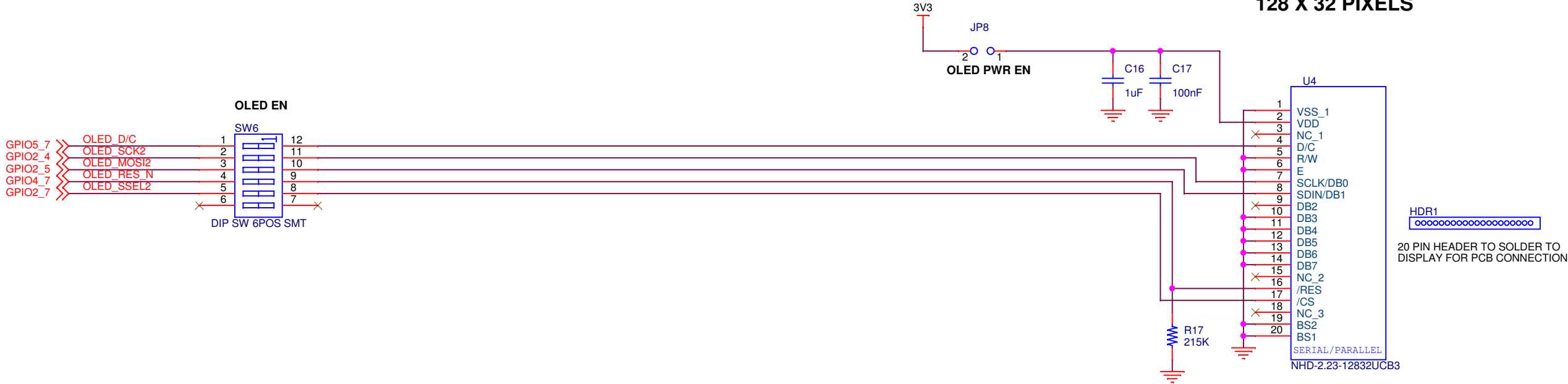
Date: Thursday, November 12, 2015

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Rev 1



# BLUE GRAPHIC OLED DISPLAY 128 X 32 PIXELS



# BLUETOOTH LOW ENERGY

