

MAX32650 Evaluation Kit

Evaluates: MAX32650–MAX32652

General Description

The MAX32650 EV kit provides a platform for evaluating the capabilities of the MAX32650 ultra-low power memory-scalable microcontroller designed specifically for high performance battery powered applications.

EV Kit Contents

- MAX32650 EV kit containing a MAX32650 with a preprogrammed demo
- JTAG debugger with ribbon cable
- Two standard A to Micro B USB cables

Ordering Information

| PART | TYPE |
|-----------------|--------|
| MAX32650-EVKIT# | EV Kit |

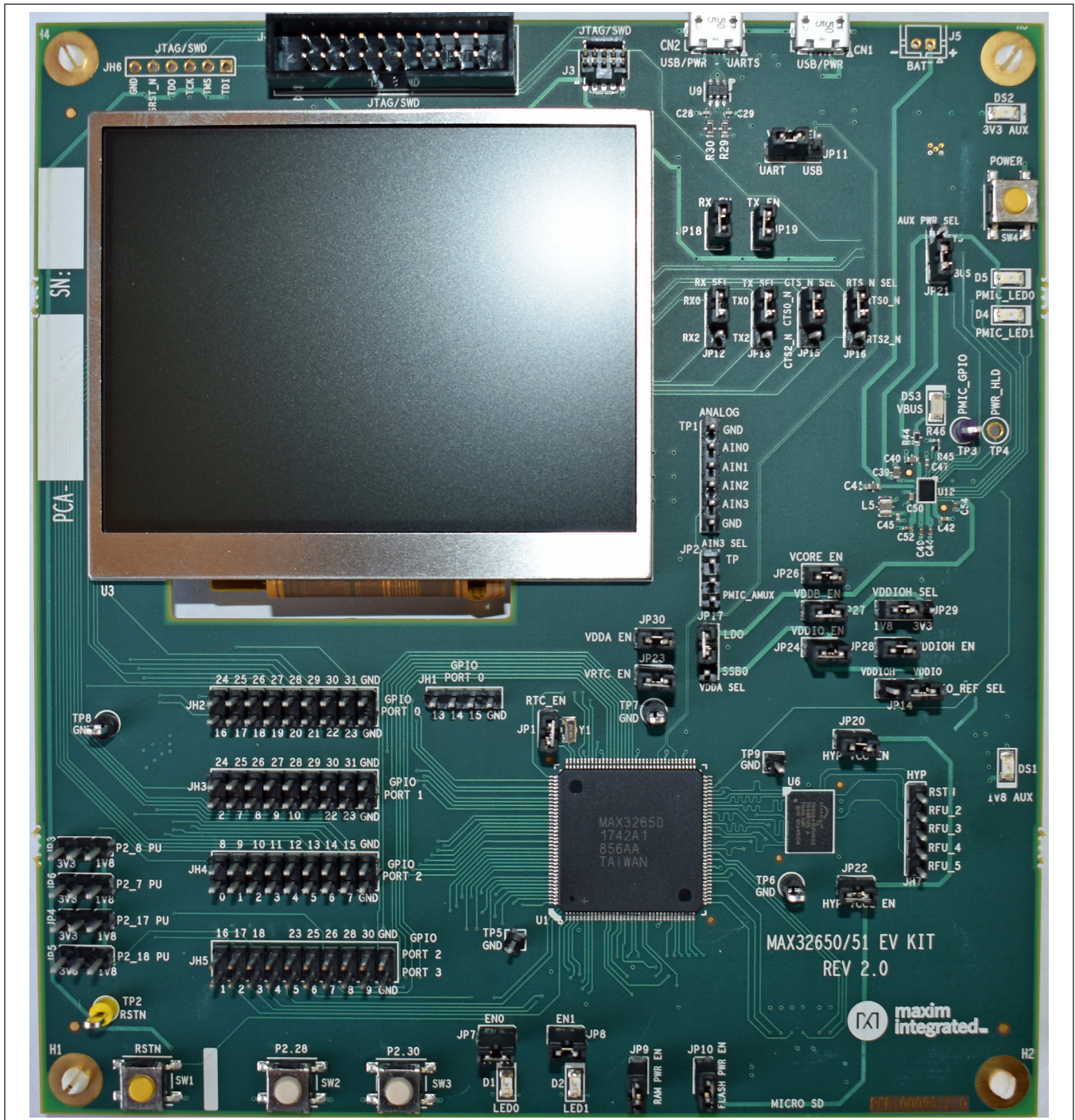
#Denotes RoHS compliant.

Benefits and Features

- 3.5in 320 x 240 Color TFT Display
- 64MB HyperRAM
- 64MB XIP Flash
- 1MB XIP RAM
- USB 2.0 Micro B Interface
- USB 2.0 Micro B to Serial UARTs
 - Selection with Jumpers Between UART0 and UART2
- Micro SD Card Interface
- Select GPIOs Accessed through 0.1in Header
- Access to the Four Analog Input Through 0.1in Header
- Arm® or SWD JTAG 20-Pin Header
- On-Board PMIC to Source Power for the MAX32650
- Board Power Provided by Either USB Port
- Individual Power Measurement on All IC Rails Through Jumpers
- On-Board 1.8V and 3.3V Regulators for Peripherals
- Two General-Purpose LEDs and Two General-Purpose Pushbutton Switches

Arm is a registered trademark of Arm Limited (or its subsidiaries) in the US and/or elsewhere.

MAX32650 EV Kit Board



Quick Start

Procedure

Follow the steps below to verify board operation:

- 1) While observing safe ESD practices, carefully remove the MAX32650 EV kit board out of its packaging. Quickly inspect the board to ensure that no damage occurred during shipment. Jumpers/shunts are pre-installed prior to testing and packaging.
- 2) The MAX32650 is preprogrammed with a demo program. To power up the board and run the demo. Verify that the board is powered up by observing that the blue LED (DS3) and the green LEDs (DS1 and DS2) are illuminated.
- 3) Once power is applied, the demo initiates and displays the Maxim logo upon successful completion.

Detailed Description of Hardware

Power Supply

The EV kit is powered by +5V and is made available through VBUS on the Micro-USB type-B connectors CN1 or CN2. This sources the MAX77650 PMIC that provides power to the MAX32650 rails. The board is default jumpered for power provided by CN1. A blue LED (DS3) illuminates when the board is powered. Green LEDs DS1 and DS2 illuminate when the 1V8 and 3V3 LDOs are powered, respectively. These are dedicated for sourcing power to the board peripherals.

Current Monitoring

Jumpers provide convenient current monitoring points for VRTC (J6), VDDIO (J7), VDDIOH (J8 or J11), VCORE (J9), VDDB (J10) and VDDA (J12).

Clocking

The IC nominally operates from an internal oscillator of 120MHz. Three other lower frequency oscillators can be selected depending on power needs. There is an internal 32.768 oscillator that requires an external 32.768kHz crystal (Y1), for accurate RTC timekeeping and USB operation.

Color TFT Display

The display provided is a 3.5in 320 x 240 color TFT. It has three-wire serial control, a 24-bit parallel RGB interface with a white LED backlight.

Universal Serial Bus

A USB Micro B connector (CN1) is provided for prototyping USB slave applications. The USB 2.0 full-speed interface (480Mbps) transceiver is embedded in the MAX32650.

UART Interfaces

The EV kit provides a USB-to-UART bridge chip, FTDI FT230X. This bridge eliminates the requirement for a physical RS-232 COM port. Instead, the IC's UART access is through the Micro-USB type-B connector, CN2. The USB-to-UART bridge can be connected to UART 0 or UART 2 of the IC with jumpers JP12 (RX), JP13 (TX), JP15 (CTS), and JP16 (RTS). Virtual COM port drivers and guides for installing Windows® drivers are available at the FTDI chip website.

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

Arm JTAG Connectors

The Arm standard 20-pin connector pinout is provided by shrouded header J4. JH6 is provided as an optional debugging access point, it is not populated by default. The JTAG debugger is supplied with the EV kit. JTAG logic levels are fixed to VDDIO (1.8V).

JTAG Serial Wire Debug (SWD) Support

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

Reset Pushbutton

Pushbutton SW3 manually resets the MAX32650.

Indicator LEDs

The indicator LEDs D1 (red) and D2 (green) are connected to GPIO P2.25 and P2.26, respectively. The GPIOs need to be configured for 3.3V or open drain since they are sourced at 3.3V.

GPIO Pushbuttons

The two pushbuttons (SW2 and SW3) are connected to GPIO P2.28 and P2.30, respectively. If the pushbutton is pressed, the attached port pin is pulled low.

GPIO Headers

Select GPIOs are accessible through a 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 pin-by-pin basis. Refer to the IC's operating guide for more detail.

VIO_REF Setting

The VIO_REF voltage is set by jumper JP14 and was originally selectable between VDDIO and VDDIOH. This, however, can place 3.3V on the pullup (R1) on RSTN and cause an extra $\sim 2\mu\text{A}$ of current to be driven in RSTN. To prevent this, JP14 position 3 has been clipped and VIO_REF jumpered to VDDIO.

Table 1. Jumper Settings

| JUMPER | SIGNAL | SETTINGS | DESCRIPTION |
|--------|--------|----------|--|
| JP1 | 32KIN | 1-2* | Connects 32KIN to the 32.768kHz crystal |
| | | Open | Disconnects 32KIN to the 32.768kHz crystal |
| JP2 | AIN3 | 1-2 | Connects analog header TP1 to AIN3 |
| | | 2-3 | Connects PMIC_AMUX TP1 to AIN3 |
| JP3 | P2_8 | 1-2* | Connects 1.8V pullup to P2_8 |
| | | 2-3* | Connects 3.3V pullup to P2_8 |
| JP4 | P2.17 | 1-2 | Connects 1.8V pullup to P2.17 |
| | | 2-3 | Connects 3.3V pullup to P2.17 |
| JP5 | P2.18 | 1-2 | Connects 1.8V pullup to P2.18 |
| | | 2-3 | Connects 3.3V pullup to P2.18 |
| JP6 | P2.7 | 1-2 | Connects 1.8V pullup to P2.7 |
| | | 2-3 | Connects 3.3V pullup to P2.7 |

*Denotes default setting.

Table 1. Jumper Settings (continued)

| JUMPER | SIGNAL | SETTINGS | DESCRIPTION |
|--------|----------------------|----------|--|
| JP7 | P2.25 | 1-2* | Connects LED D1 to P2.25 |
| | | Open | Disconnects LED D1 to P2.25 |
| JP8 | P2.26 | 1-2* | Connects LED D2 to P2.26 |
| | | Open | Connects LED D2 to P2.26 |
| JP9 | RAM XIP VCC | 1-2* | Connects 1V8_AUX to RAM XIP VCC |
| | | Open | Disconnects 1V8_AUX to RAM XIP VCC |
| JP10 | FLASH XIP VCC | 1-2* | Connects 1V8_AUX to FLASH XIP VCC |
| | | Open | Disconnects 1V8_AUX to FLASH XIP VCC |
| JP11 | VBUS | 1-2 | Connects USB port to VBUS |
| | | 2-3* | Connects USB-UART port to VBUS |
| JP12 | TXD of USB-Serial IC | 1-2* | Connects TXD of USB-Serial IC to P2.11 (UART0_RX) |
| | | 2-3 | Connects TXD of USB-Serial IC to P2.1 (UART2_RX) |
| JP13 | RXD of USB-Serial IC | 1-2* | Connects RXD of USB-Serial IC to P2.12 (UART0_TX) |
| | | 2-3 | Connects RXD of USB-Serial IC to P1.10 (UART2_TX) |
| JP14 | VIO_REF | 1-2* | Connects VDDIO to VIO_REF |
| | | 2-3 | Connects VDDIOH to VIO_REF |
| JP15 | RTS of USB-Serial IC | 1-2* | Connects RTS of USB-Serial IC to P2.9 (UART0_CTS0) |
| | | 2-3 | Connects RTS of USB-Serial IC to P1.7 (UART2_CTS2) |
| JP16 | CTS of USB-Serial IC | 1-2* | Connects CTS of USB-Serial IC to P2.10 (UART0_RTS0) |
| | | 2-3 | Connects CTS of USB-Serial IC to P1.8 (UART2_RTS2) |
| JP17 | VDDA | 1-2 | Connects VDDA to LDO of the PMIC |
| | | 2-3* | Connects VDDA to SSB0 of the PMIC |
| JP18 | TXD of USB-Serial IC | 1-2* | Connects TXD of USB-Serial IC to JP12 RX SEL jumper |
| | | Open | Disconnects TXD of USB-Serial IC to JP12 RX SEL Jumper |
| JP19 | RXD of USB-Serial IC | 1-2* | Connects RXD of USB-Serial IC to JP13 TX SEL Jumper |
| | | Open | Disconnects RXD of USB-Serial IC to JP13 TX SEL Jumper |
| JP20 | HyperRAM VCC | 1-2* | Connects 1V8_AUX to VCC Hyper RAM VCC |
| | | Open | Disconnects 1V8_AUX to VCC Hyper RAM VCC |
| JP21 | 3V3 LDO VCC | 1-2* | Connects PMIC SYS to 3V3 LDO |
| | | Open | Connects VBUS to 3V3 LDO |
| JP22 | HyperRAM VCCQ | 1-2* | Connects 1V8_AUX to VCC Hyper RAM VCCQ |
| | | Open | Disconnects 1V8_AUX to VCC Hyper RAM VCCQ |
| JP23 | VRTC | 1-2* | Connects PMIC SBB0 to VRTC |
| | | Open | Disconnects PMIC SBB0 to VRTC |
| JP24 | VDDIO | 1-2* | Connects PMIC SBB0 to VDDIO |
| | | Open | Disconnects PMIC SBB0 to VDDIO |

*Denotes default setting.

Table 1. Jumper Settings (continued)

| JUMPER | SIGNAL | SETTINGS | DESCRIPTION |
|--------|--------|----------|--|
| JP25 | N/A | N/A | Jumper not present |
| | | N/A | Jumper not present |
| JP26 | VCORE | 1-2* | Connects PMIC SBB1 to VCORE |
| | | Open | Disconnects PMIC SBB1 to VCORE |
| JP27 | VDDB | 1-2* | Connects PMIC SBB2 to VDDB |
| | | Open | Disconnects PMIC SBB2 to VDDB |
| JP28 | VDDIOH | 1-2* | Connects PMIC power to VDDIOH |
| | | Open | Disconnects PMIC power to VDDIOH |
| JP29 | VDDIOH | 1-2* | Connects PMIC SBB0 (1.8V) to VDDIOH |
| | | 2-3 | Disconnects PMIC SBB2 (3.3V) to VDDIOH |
| JP30 | VDDA | 1-2* | Connects PMIC power (LDO or SSB0) to VDDA |
| | | Open | Disconnects PMIC power (LDO or SSB0) to VDDA |

*Denotes default setting.

MAX32650 EV Kit Bill of Materials

| Qty | Part Reference | Value | BOM Description | Manufacturer PN | Manufacturer |
|-----|--|------------------|-------------------------------------|----------------------|---------------------------------|
| 8 | C1,C3,C4,C6,C7,C8,C46,C47 | 1uF | CAP CER 1UF 6.3V X5R 0402 | GRM155R60J105KE19D | Murata |
| 4 | C2,C5,C9,C10 | 150pF | CAP CER 150PF 50V 5% COG 0603 | C1608COG1H151J080AA | TDK Corporation |
| 5 | C11,C30,C37,C40,C41 | 4.7uF | CAP CER 4.7uF 10V 10% X5R 0603 | C0603C475K8PACTU | Kemet |
| 6 | C12,C14,C20,C21,C36,C38 | 1uF | CAP CER 1uF 16V 10% X7R 0603 | GCM188R71C105KA64D | Murata |
| 1 | C13 | 10pF | CAP CER 10pF 50V 5% NPO 0603 | 06035A100JAT2A | AUX |
| 14 | C15,C16,C17,C18,C19,C22,C23,C26,C31,C34,C44,C49,C52,C54 | 100nF | CAP CER 0.1UF 10V 10% X5R 0402 | GRM155R61A104KA01D | Murata |
| 2 | C24,C32 | 100nF | CAP CER 0.1UF 25V 10% X8R 0603 | C1608X8R1E104K080AA | TDK Corporation |
| 1 | C25 | 1uF | CAP CER 1UF 35V 10% X5R 0603 | GMK107BJ105KA-T | Taiyo Yuden |
| 1 | C27 | 10nF | CAP CER 10nF 25V 10% X7R 0603 | GRM188R71E103KA01D | Murata |
| 2 | C28,C29 | 47pF | CAP CER 47PF 50V 1% NPO 0402 | C1005COG1H470F050BA | TDK Corporation |
| 1 | C33 | 100nF | CAP CER 0.1uF 16V 10% X7R 0603 | C0603C104K4RACTU | Kemet |
| 1 | C35 | 10uF | CAP CER 10uF 10V 10% X7R 0805 | GRM21BR71A106KE51L | Murata |
| 1 | C39 | 22uF | CAP CER 22UF 4V 20% X5R 0603 | AMK107BJ226MA-T | Taiyo Yuden |
| 4 | C42,C43,C50,C51 | 10uF | CAP CER 10UF 6.3V 20% X5R 0402 | GRJ155R60J106ME11D | Murata Electronics |
| 1 | C45 | 3.3nF | CAP CER 3300PF 16V 10% X7R 0402 | GRM15XR71C332KA86D | Murata Electronics |
| 2 | C48,C53 | 4.7uF | CAP CER 4.7UF 4V 20% X5R 0402 | AMK105BJ475MV-F | Taiyo Yuden |
| 1 | CN1, CN2 | MICRO USB B R/A | CONN RCPT 5POS MICRO USB B R/A | 47346-0001 | Molex |
| 2 | D1,D5 | RED | LED 660NM RED WTR CLR 1206 SMD | SML-LX1206SRC-TR | Lumex Opto |
| 4 | D2,D4,DS1,DS2 | GRN | LED 565NM WTR CLR GREEN 1206 SMD | SML-LX1206GC-TR | Lumex Opto |
| 1 | D3 | CMOSH-3 | Schottky Diode 30V 100mA | CMOSH-3 | Central Semiconductor |
| 1 | DS3 | BLUE | LED 469NM BLUE DIFF 1206 SMD | HSMR-C150 | Avago Technologies US Inc. |
| 4 | H1,H2,H3,H4 | DNI | DNI MTG 125DRL 300PAD | | |
| 1 | J1 | 047571-0001 | CONN MICRO SD CARD PUSH-PULL R/A | 047571-0001 | Molex |
| 1 | J2 | 54P 0.5mm | CONN FFC/FPC 54POS ZIF .5MM SMD | 512965494 | Molex Inc |
| 1 | J3 | 10P CORTEX DEBUG | CONN HEADER 10POS DUAL .05" SMD | FTSH-105-01-F-DV-K | Samtec |
| 1 | J4 | 20P 10x2 | CONN HEADER 2.54MM 20POS GOLD | SBH11-PBPC-D10-ST-BK | Sullins |
| 1 | J5 | 2POS 2MM | CONN HEADER PH TOP 2POS 2MM | B2B-PH-K-S(LF)(SN) | JST Sales America Inc |
| 15 | JP1,JP7,JP8,JP9,JP10,JP18,JP19,JP20,JP22,JP23,JP24,JP26,JP27,JP28,JP30 | JUMPER | CONN HEADER .100 SINGL STR 2POS | PEC02SAAN | Sullins |
| 1 | JH1 | 4P 1x4 | CONN HEADER .100 SINGL STR 4POS | PEC04SAAN | Sullins |
| 3 | JH2,JH3,JH4 | 18P 2x9 | CONN HEADER .100 DUAL STR 18POS | PEC09DAAN | Sullins |
| 1 | JH5 | 20P 2x10 | CONN HEADER .100 DUAL STR 20POS | PEC10DAAN | Sullins |
| 1 | JH6 | 6P 1x6 | CONN HEADER .100 SINGL STR 6POS | PEC06SAAN | Sullins |
| 1 | JH7 | 5P 1x5 | CONN HEADER .100 SINGL STR 5POS | PEC05SAAN | Sullins |
| 14 | JP2,JP3,JP4,JP5,JP6,JP11,JP12,JP13,JP14,JP15,JP16,JP17,JP21,JP29 | 3P 3x1 | CONN HEADER .100 SINGL STR 3POS | PEC03SAAN | Sullins |
| 1 | L1 | 22uH | INDUCTOR POWER 22UH 20% SMD | CLF6045T-220M | TDK Corporation |
| 2 | L2,L4 | HZ1206C202R-10 | FERRITE CHIP SIGNAL 2000 OHM SMD | HZ1206C202R-10 | Laird-Signal Integrity Products |
| 1 | L3 | BLM21PG221SN1D | FERRITE CHIP 220 OHM 0805 | BLM21PG221SN1D | Murata Electronics |
| 1 | L5 | 1.5uH | Fixed Inductors 0806 1.5uH 20% 1.5A | DFE201610E-1R5M=P2 | Murata Electronics |
| 1 | PCB1 | PCB | | | |

MAX32650 EV Kit Bill of Materials (continued)


| Qty | Part Reference | Value | BOM Description | Manufacturer PN | Manufacturer |
|-----|--|--------------------------|----------------------------------|--------------------------|-----------------------|
| 1 | Q1 | BSS806N | MOSFET N-CH 20V 2.3A SOT23 | BSS806N H6327 | Infineon Technologies |
| 13 | R1,R12,R13,R14,R15,R16,R17, R25,R28,R31,R32,R39,R47 | 10K | RES 10K OHM 1/10W 1% 0603 SMD | ERJ-3EKF1002V | Panasonic |
| 4 | R2,R4,R6,R8 | 33.2 | RES 33.2 OHM 1/10W 1% 0603 SMD | ERJ-3EKF33R2V | Panasonic |
| 4 | R3,R5,R7,R9 | 49.9 | RES 49.9 OHM 1/10W 1% 0603 SMD | ERJ-3EKF49R9V | Panasonic |
| 5 | R10,R11,R18,R19,R45 | 10K | RES 10K OHM 1/10W 1% 0402 SMD | ERJ-2RKF1002X | Panasonic |
| 2 | R20,R21 | 100 | RES 100 OHM 1/10W 1% 0603 SMD | ERJ-3EKF1000V | Panasonic |
| 1 | R22 | 470 | RES 470 OHM 1/10W 1% 0603 SMD | ERJ-3EKF4700V | Panasonic |
| 3 | R23,R41,R42 | 332 | RES 332 OHM 1/10W 1% 0603 SMD | ERJ-3EKF3320V | Panasonic |
| 1 | R24 | 137K | RES SMD 137K OHM 1% 1/10W 0603 | ERJ-3EKF1373V | Panasonic |
| 1 | R26 | 10K | RES 10K OHM 1/10W 1% 0603 SMD | ERJ-3EKF1002V | Panasonic |
| 1 | R27 | 1M | RES SMD 1M OHM 5% 1/8W 0805 | ERJ-6GEYJ105V | Panasonic |
| 2 | R29,R30 | 27 | RES 27 OHM 1/10W 1% 0603 SMD | ERJ-3EKF27R0V | Panasonic |
| 5 | R35,R36,R37,R38,R40 | DNI | DNI 0402 | | |
| 1 | R43 | 150K | RES 150K OHM 1/10W 1% 0603 SMD | ERJ-3EKF1503V | Panasonic |
| 1 | R44 | 2.7K | RES 2.7K OHM 1/10W 1% 0603 SMD | ERJ-3EKF2701V | Panasonic |
| 1 | R46 | 10K | NTC THERMISTOR 10K OHM 1% 0402 | NCP15XH103F03RC | Murata Electronics |
| 2 | SW1,SW4 | B3S-1002 BY OMZ | SWITCH TACTILE SPST-NO 0.05A 24V | B3S-1002 BY OMZ | Omron Electronics |
| 2 | SW2,SW3 | B3S-1000 | SWITCH TACTILE SPST-NO 0.05A 24V | B3S-1000 | Omron Electronics |
| 1 | TP1 | 6P 1x6 | CONN HEADER .100 SINGL STR 6POS | PEC06SAAN | Sullins |
| 1 | TP2 | YLV | TEST POINT PC MULTI PURPOSE YEL | 5014 | Keystone Electronics |
| 1 | TP3 | PRPL | TEST POINT PC MULTI PURPOSE PRPL | 5129 | Keystone Electronics |
| 1 | TP4 | YLV | TEST POINT PC MULTI PURPOSE YEL | 5014 | Keystone Electronics |
| 2 | TP5,TP9 | 1P | CONN HEADER .100 SINGL STR 1POS | PEC01SAAN | Sullins |
| 3 | TP6,TP7,TP8 | BLK | TEST POINT PC COMPACT .063"D BLK | 5006 | Keystone Electronics |
| 1 | U1 | MAX32650ICE+ | MAX32650ICE+ 144P TQFP | MAX32650ICE+ | Maxim Integrated |
| 1 | U2 | MAX8574EUT+T | IC CONV LCD BOOST SOT23-6 | MAX8574EUT+T | Maxim Integrated |
| 1 | U3 | NHD-3.5-320240MF-ATXL#-1 | LCD DISP TFT 3.5" 320X240 B/L | NHD-3.5-320240MF-ATXL#-1 | Newhaven Display Intl |
| 1 | U4 | MX25U6435FM2I-10G | IC FLASH 64MBIT 104MHZ 8SOP | MX25U6435FM2I-10G | Macronix |
| 1 | U5 | N01S818HAT22I | IC SRAM 1MBIT 20MHZ 8TSSOP | N01S818HAT22I | ON Semiconductor |
| 1 | U6 | S27KS0641DPBHV020 | IC HYPERRAM 64Mb 24BGA 166MHz | | Cypress Semiconductor |
| 2 | U7,U9 | MAX3207EAUT+T | ESD PROT DIFF SOT23-6 | MAX3207EAUT+T | Maxim Integrated |
| 1 | U8 | FT230XS-R | IC USB SERIAL BASIC UART 16SSOP | FT230XS-R | FTDI |
| 1 | U10 | MAX1806EUA33+ | IC REG LDO 3.3V/ADJ 0.5A 8UMAX | MAX1806EUA33+ | Maxim Integrated |
| 1 | U11 | MAX1818EUT18+ | IC REG LDO 1.8V/ADJ 0.5A SOT23-6 | MAX1818EUT18+ | Maxim Integrated |
| 1 | U12 | MAX77650 | max77650 PMIC | MAX77650 | Maxim Integrated |
| 1 | Y1 | 32.768kHz | CRYSTAL 32.768KHZ 6.0PF SMD | ABS07-32.768KHZ-6-T | Abracon Corp |

MAX32650 EV Kit Schematics

NOTES:

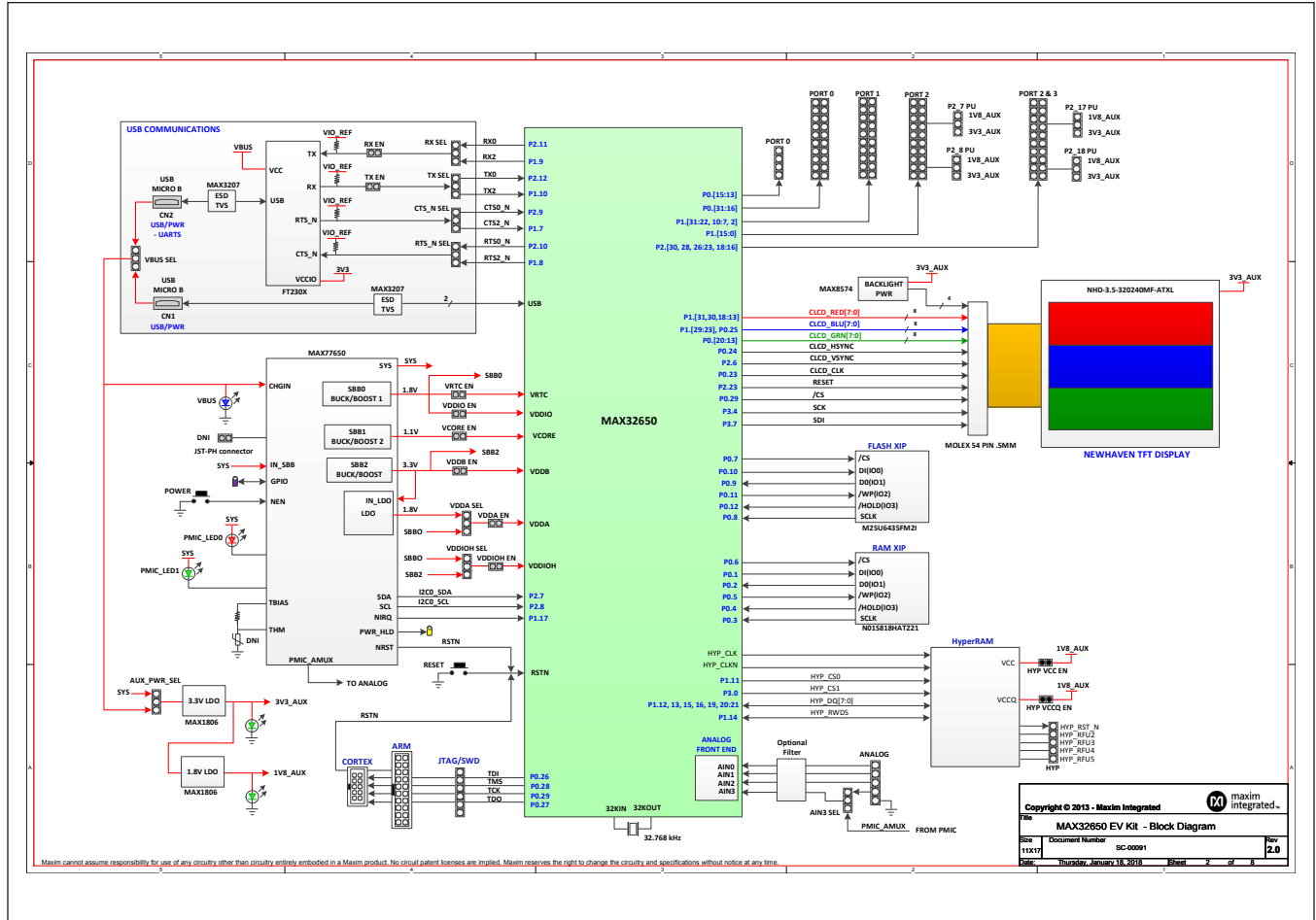
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DAUGHTERBOARD STANDOFF HOLES

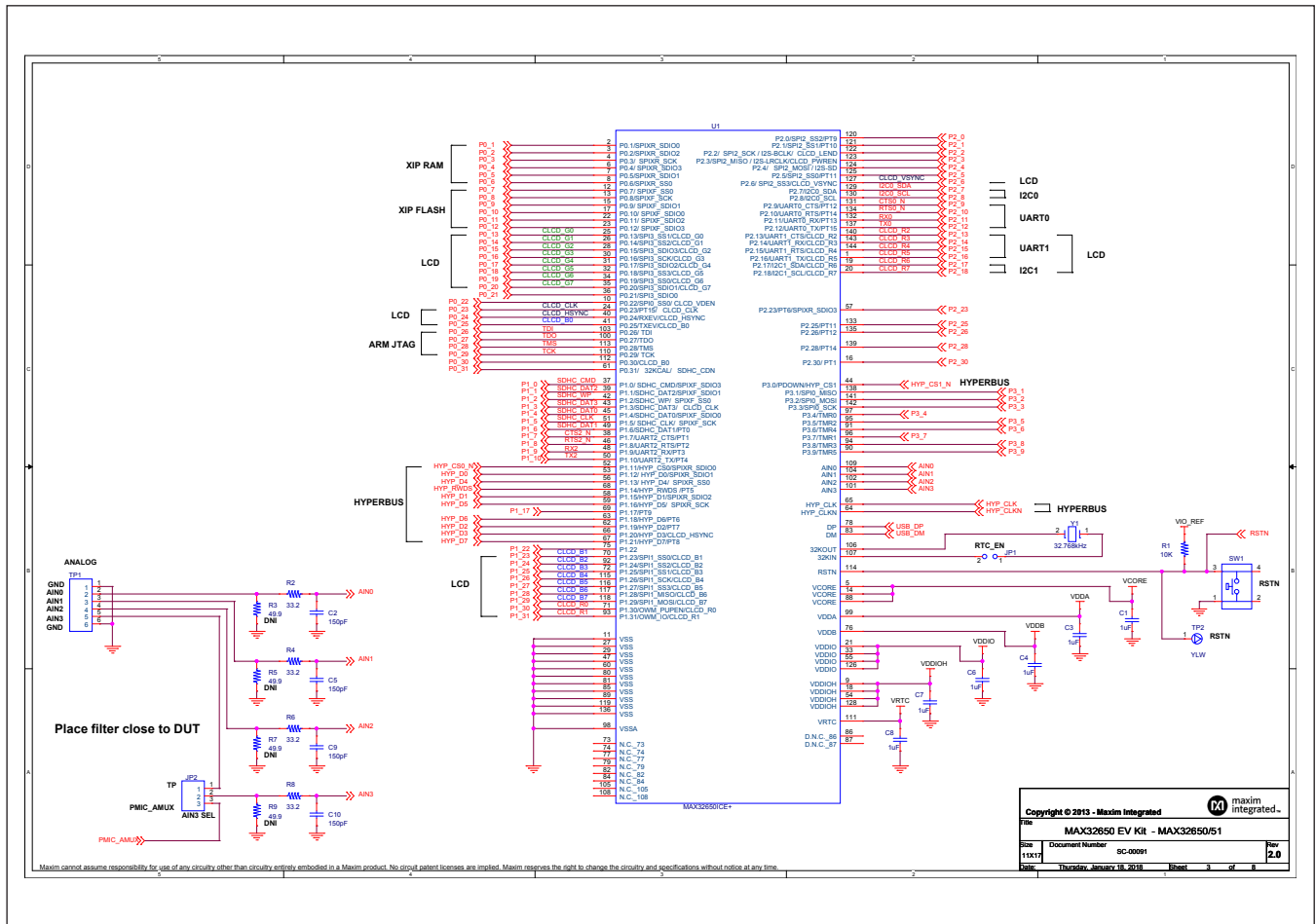
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| Title: MAX32650 EV Kit - Rev History & Notes | | | |
| Size: 11x17 | Document Number: SC-00099 | Rev: 2.0 | |
| Date: Thursday, January 18, 2018 | | Sheet: 1 | of 8 |

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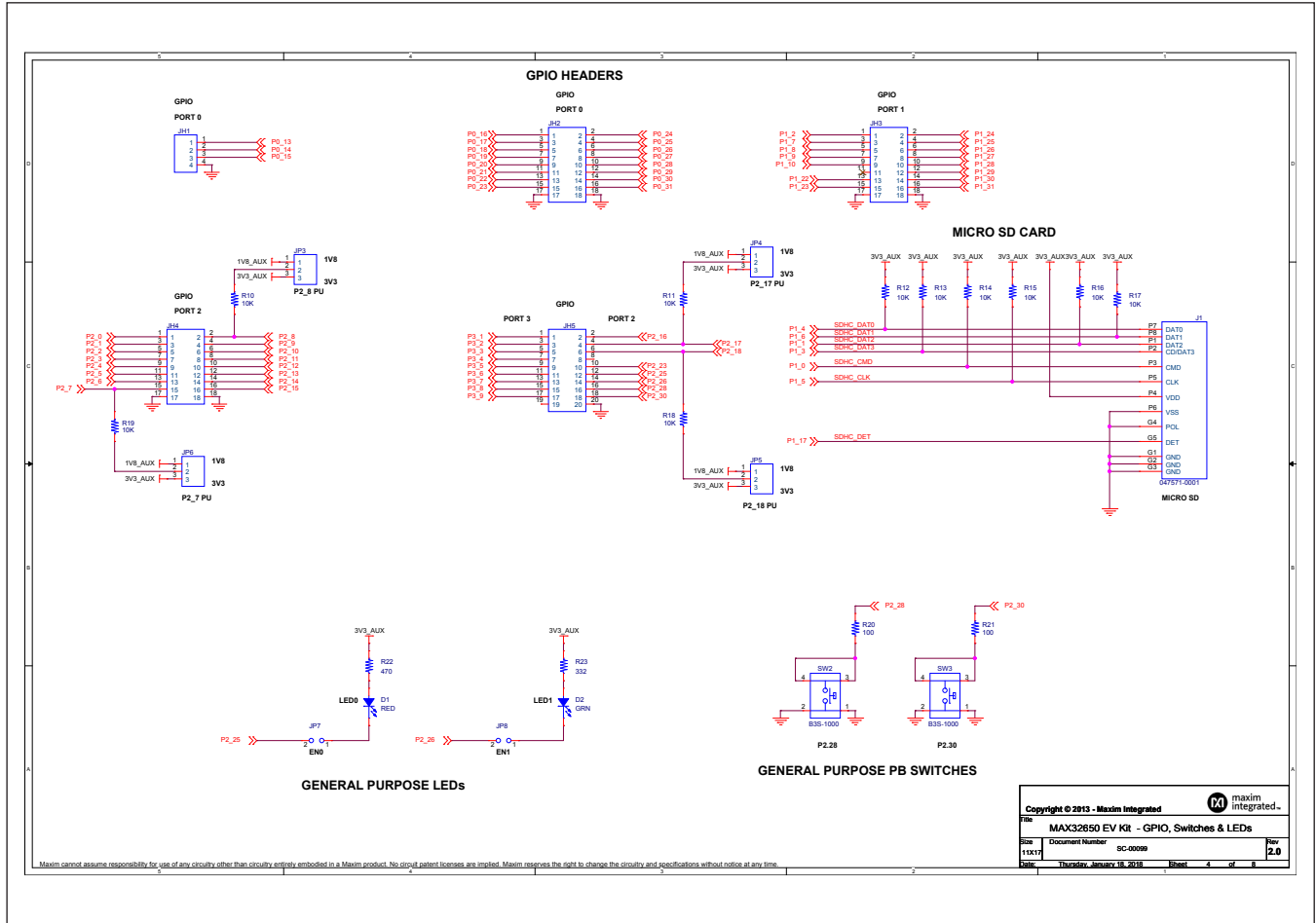
MAX32650 EV Kit Schematics (continued)



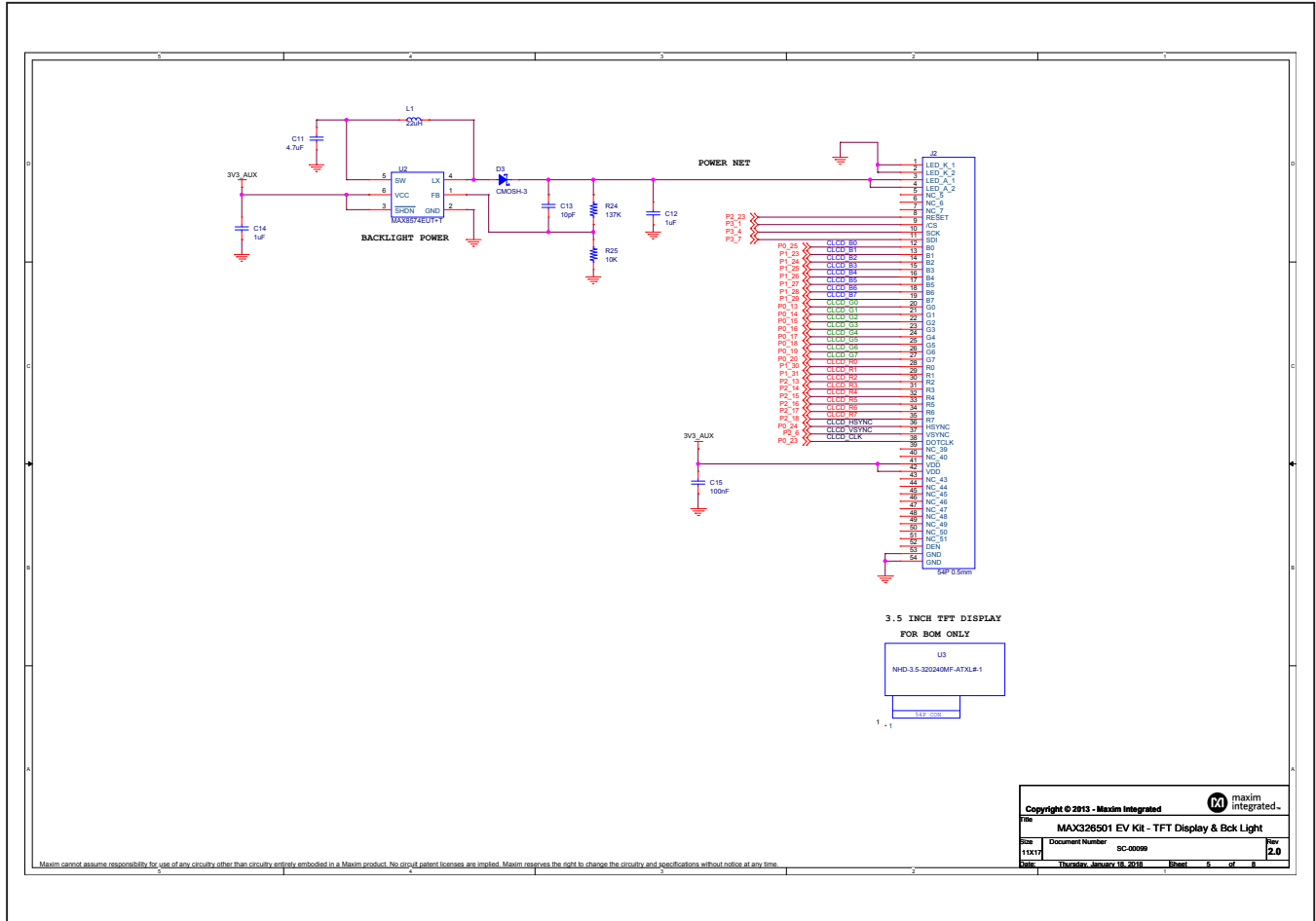
MAX32650 EV Kit Schematics (continued)



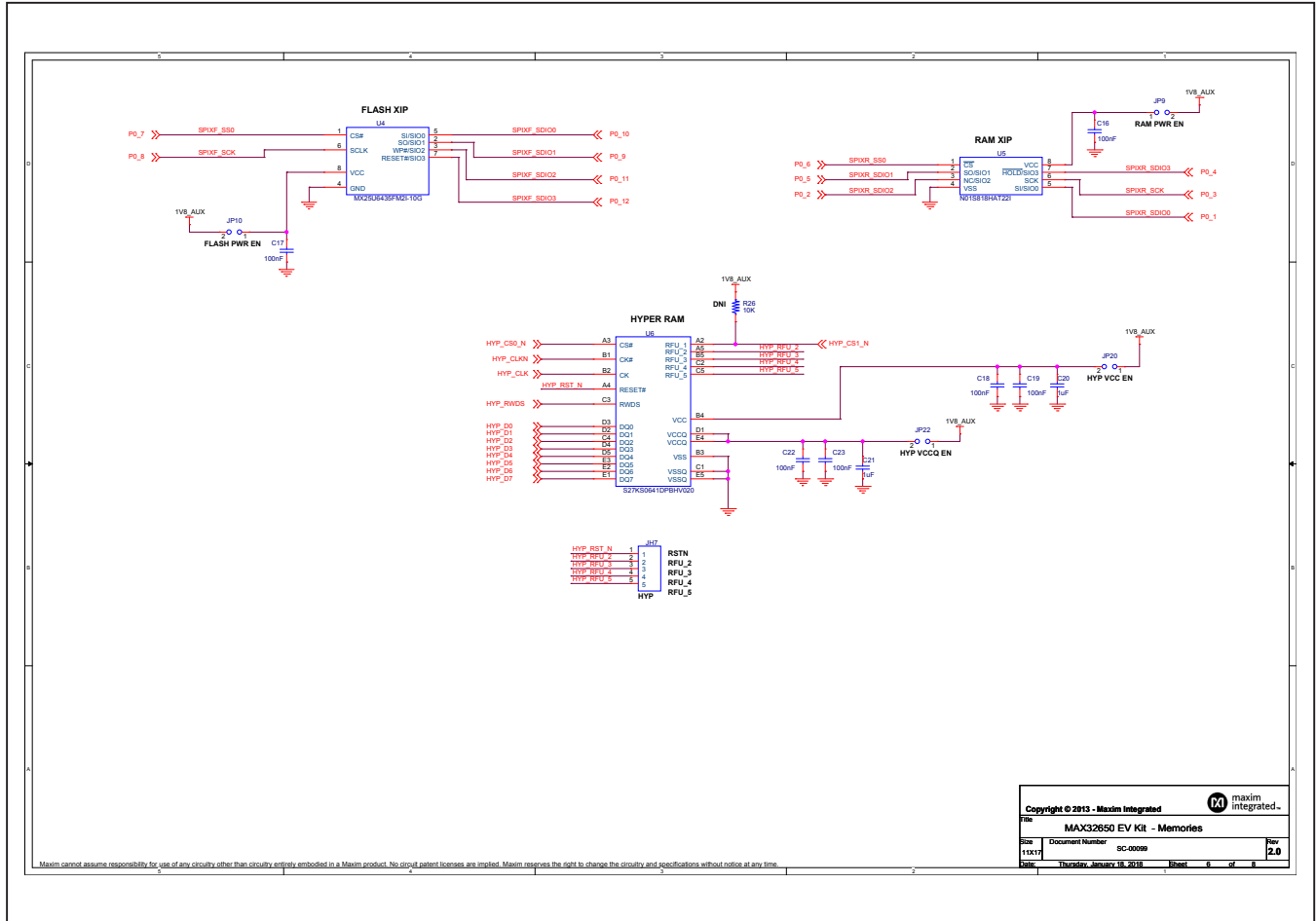
MAX32650 EV Kit Schematics (continued)



MAX32650 EV Kit Schematics (continued)

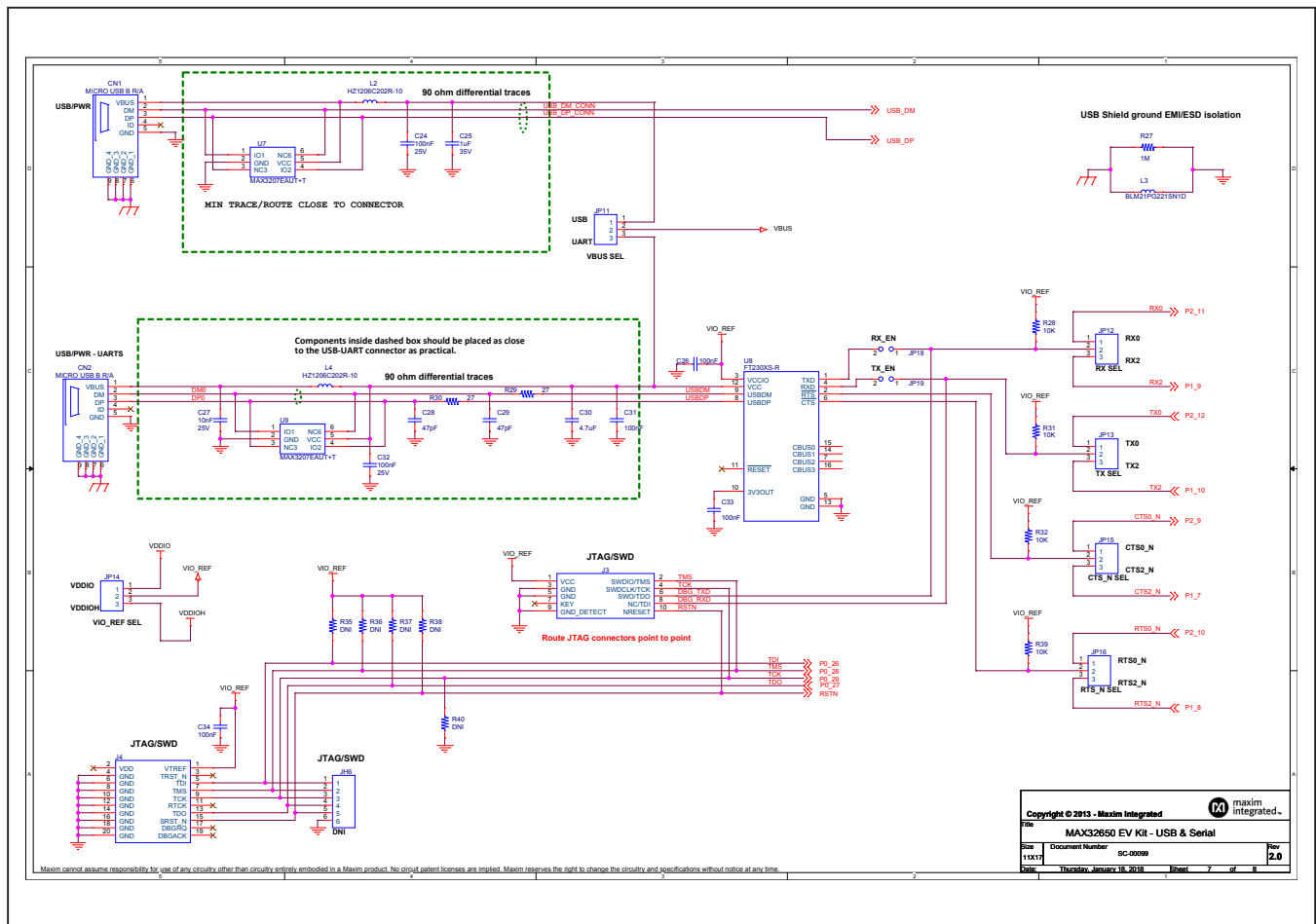


MAX32650 EV Kit Schematics (continued)

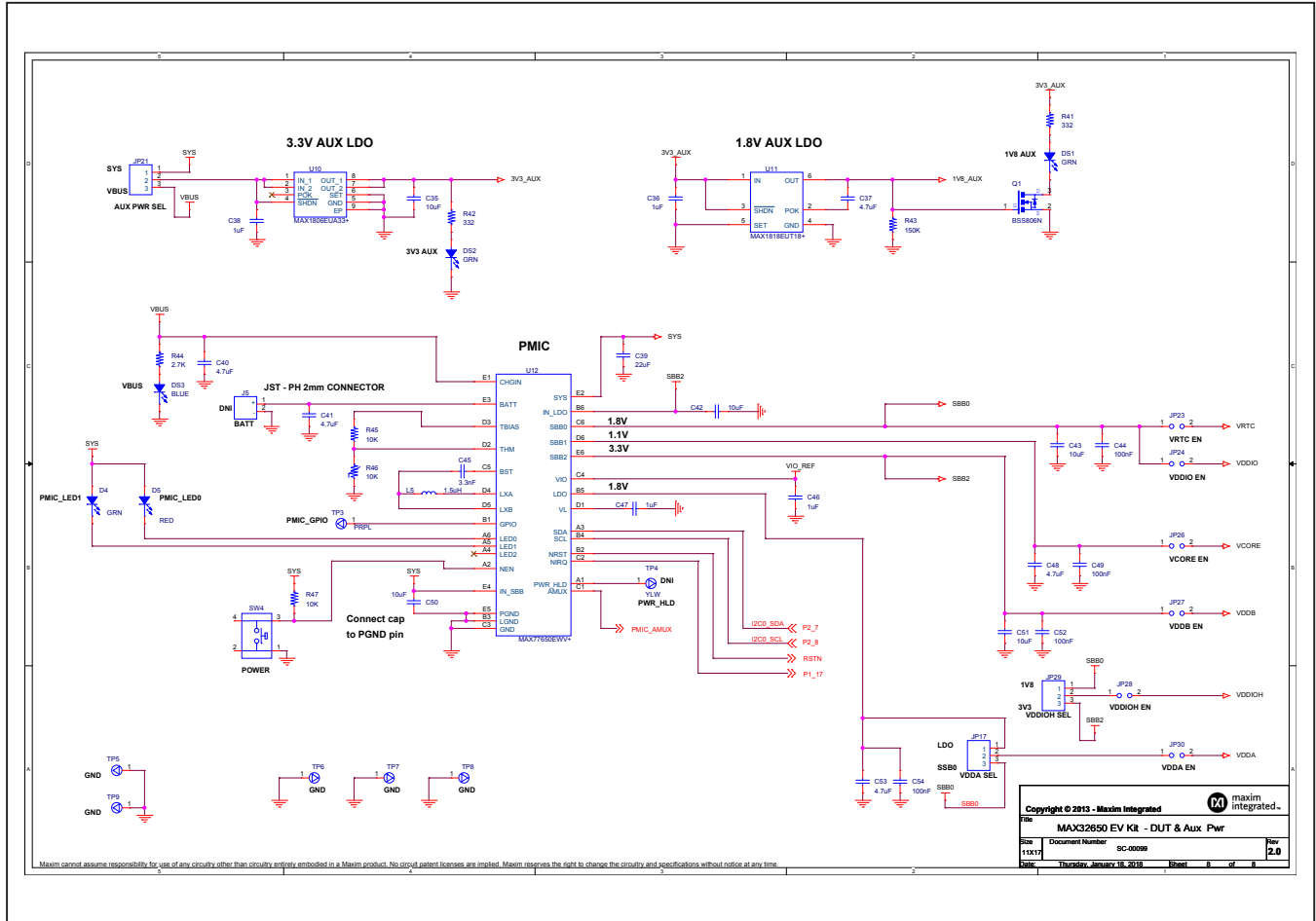


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| MAX32650 EV Kit - Memories | | |
| Doc ID | Document Number | SC-00099 |
| Rev | 11/17 | Rev 2.0 |
| Date | Thursday, January 18, 2018 | Sheet 6 of 8 |

MAX32650 EV Kit Schematics (continued)



MAX32650 EV Kit Schematics (continued)



Revision History

| REVISION NUMBER | REVISION DATE | DESCRIPTION | PAGES CHANGED |
|-----------------|---------------|--|---------------|
| 0 | 10/17 | Initial release | — |
| 1 | 1/18 | Updated <i>MAX32650 EV Kit Board Photo, Procedure, Arm JTAG Connectors, Table 1, and MAX32650 EV Kit Bill of Materials</i> , and added <i>VIO_REF Settings</i> | 2–7 |
| 2 | 2/18 | Added MAX32651 and MAX32652 to data sheet, updated schematics | 1–17 |
| 3 | 3/18 | Updated orderable part number | 1 |

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