

## General Description

The MAX11300 evaluation kit (EV kit) provides a proven design to evaluate the MAX11300 20-port programmable mixed-signal I/O with 12-bit ADC, 12-bit DAC, analog switches, and GPIO. The EV kit also includes Windows XP®, Windows Vista®, Windows® 7-, and Windows 8.0-/8.1-compatible software that provides a simple graphical user interface (GUI) for exercising the features of the IC.

The EV kit comes with a MAX11300GTL+ installed.

## Features and Benefits

- 20 PIXITM Ports for Analog or Digital Control or Sensing
- Two External Temperature Sensors (2N3904)
- 50-Pin Signal Header (20 Ports, Two Temperatures, and Power Supplies)
- SPI Interface Terminals
- Optional 2.5V On-Board Reference (MAX6071)
- Windows XP-, Windows Vista-, Windows 7-, and Windows 8.0-/8.1-Compatible Software
- USB-PC Connection (Cable Included)
- RoHS Compliant
- Proven Four-Layer PCB Layout
- Fully Assembled and Tested

Ordering Information appears at end of data sheet.

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PIXI is a trademark of Maxim Integrated Products, Inc.

**Note:** Active-low pin names such as  $\overline{INT}$  are shown in the software and PCB layout with a B suffix (e.g., INTB).

## Quick Start

### Required Equipment

- EV kit (USB mini-B cable included)
- Windows XP, Windows Vista, Windows 7, Windows 8.0, or Windows 8.1 PC, running .NET v4, with a spare USB port
- $\pm 12.5V$  DC at 500mA dual-output DC power supply
- Digital voltmeter (DVM)

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

### Procedure

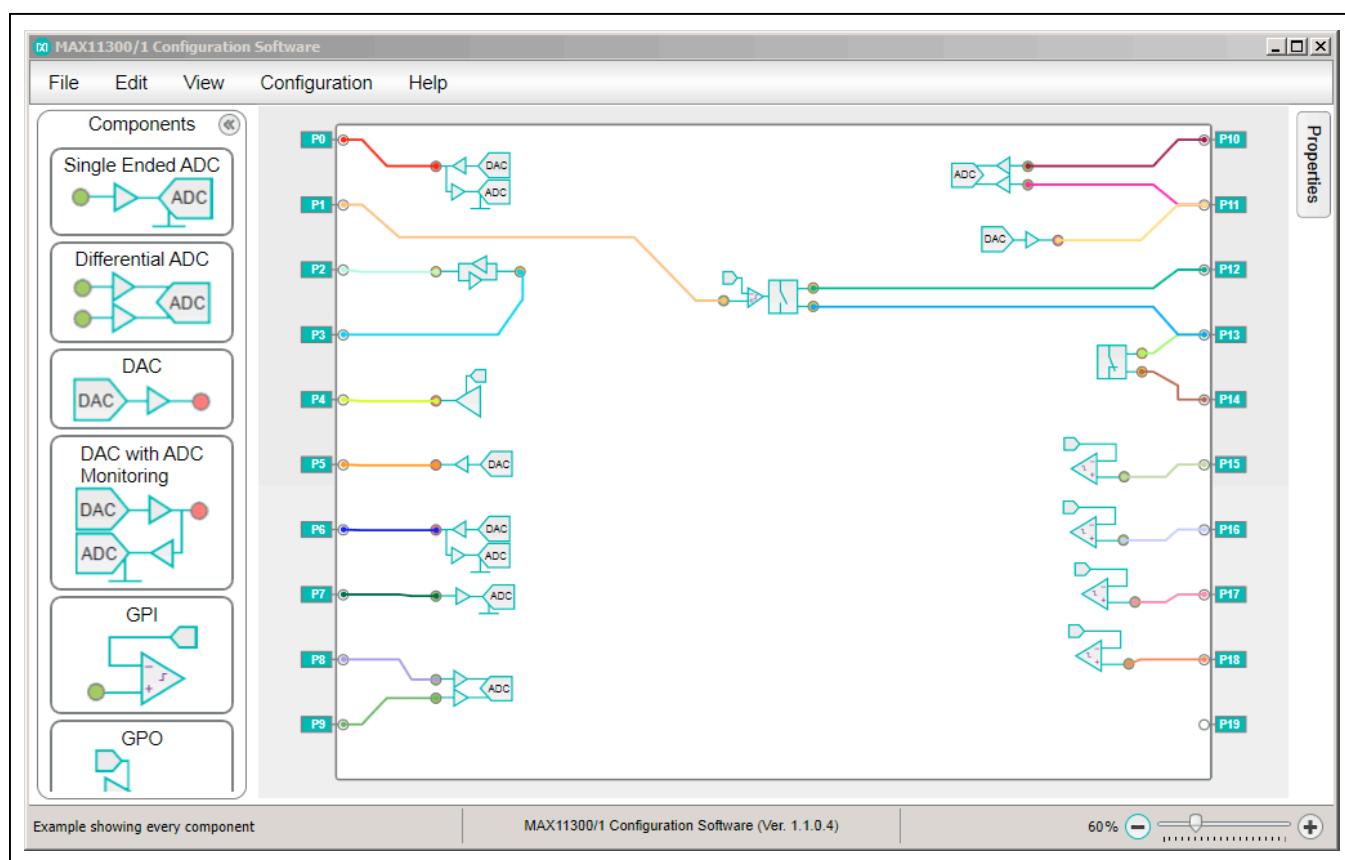
The EV kit is fully assembled and tested. Follow the steps below to verify board operation:

- 1) Visit [www.maximintegrated.com/evkitsoftware](http://www.maximintegrated.com/evkitsoftware) to download the latest version of the EV kit software, MAX11300EVKitSetupV1.1.zip. Save the EV kit software to a temporary folder and uncompress the ZIP file.
- 2) Install the EV kit software and USB driver on your computer by running the MAX11300EVKitSetupV1.0.exe program inside the temporary folder. The program files are copied to your PC and icons are created in the Windows Start | Programs menu. During software installation, some versions of Windows may show a warning message indicating that this software is from an unknown publisher. This is not an error condition and it is safe to proceed with installation. Administrator privileges are required to install the USB device driver on Windows. **Note:** The software requires .NET Framework v4. If this framework is not detected during installation, the installer launches dotNetFx40\_Full\_setup.exe to install it. Internet access may be required to install the .NET Framework v4 if it is not already installed.
- 3) Verify that all jumpers are in their default positions, as shown in [Table 1](#), [Table 2](#), [Table 3](#), and [Table 4](#).
- 4) Configure the power supply for  $\pm 12.5V$  DC output (typical load current is 50mA) (be sure to keep AVD-DIO-AVSSIO within rated supply range).

- 5) Connect the +12.5V DC power supply between AVDDIO (+) and GND (-). Connect the -12.5V DC power supply between AVSSIO (-) and GND (+).
- 6) Connect the DVM- to GND (-)
- 7) Enable the power-supply output.
- 8) Connect the USB cable from the PC to the EV kit board. A Windows message appears when connecting the EV kit board to the PC for the first time. Each version of Windows has a slightly different message. If you see a Windows message stating **Ready to Use**, proceed to the next step. Otherwise, open the **USB\_Driver\_Help\_200.PDF** document in the Windows **Start | Programs** menu to verify that the USB driver was installed successfully.
- 9) Use the DVM+ to verify the test point voltages shown in [Table 2](#).
- 10) Start the MAX11300 Configuration Software by opening its icon in the Windows **Start | Programs** menu.

The MAX11300 configuration software main window appears, as shown in [Figure 1](#). Drag and drop components into the device, wire them up, and then use the **File** menu | **Generate Registers** to export the configuration to Max11300Register.csv.

- 11) Start the EV kit software by opening its icon in the Windows **Start | Programs** menu. The EV kit software main window appears, as shown in [Figure 2](#).
- 12) Select **File** menu | **Load Configuration...** | **MAX11300Register.csv** to load the configuration into the MAX11300. Alternatively, use one of the prebuilt demo configurations, such as MAX11300Register\_20131115\_1505.csv, which configures all 20 PIXI ports with different configurations.
- 13) Select the **Chart** tab, then check **Options** menu | **Polling** to show the analog inputs on a graph. Select the **Data** tab to see the low-level input code values in hexadecimal.



*Figure 1. MAX11300 EV Kit Configuration Software*

## Detailed Description of EV Kit Software

The **Device Configuration** tab (Figure 2) accesses the global device control registers, interrupt sources,

temperature limits, DAC presets, and ADC conversion rate. Changing the controls on the GUI writes the corresponding registers immediately.

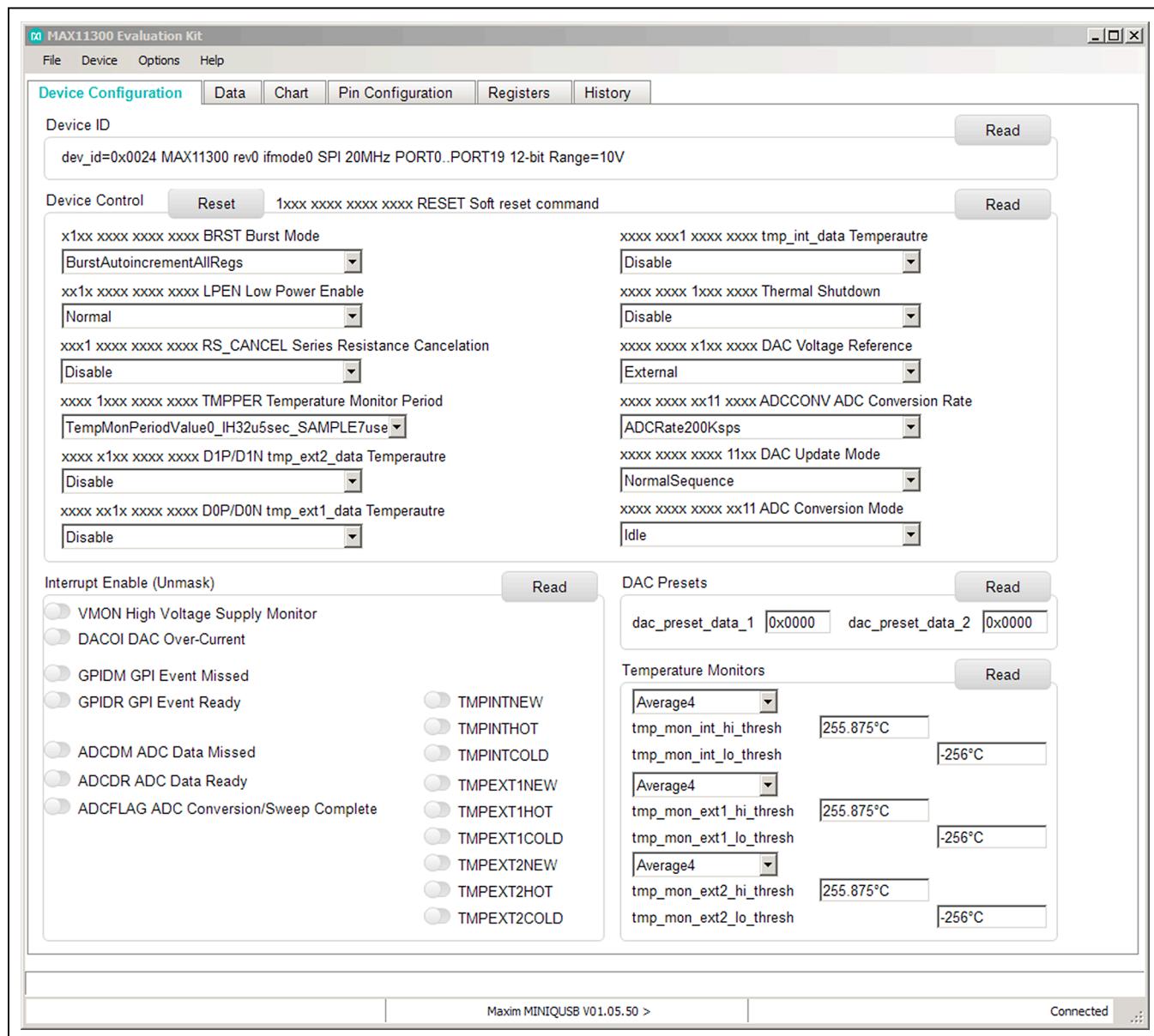


Figure 2. Device Configuration Tab

**MAX11300 Evaluation Kit**

File Device Options Help

Device Configuration Data Chart Pin Configuration Registers History

|        |   | Read Configuration |         |                             | Write Selected |            |                   | Read All |
|--------|---|--------------------|---------|-----------------------------|----------------|------------|-------------------|----------|
| Port   | Configured As                             | DAC Out            | GPO Out | Write                       | Input          | Interrupt  | Description       |          |
| PORT0  | 0x6100 DACoutWithADCmonitor               | 0x0000             |         | <input type="radio"/> Write | 0x0000         |            | [ADC New]         |          |
| PORT1  | 0x1000 GPIOinPgmThreshold                 | 0x0666             |         | <input type="radio"/> Write | 0              | 0 masked   | [gpi_status=0]    |          |
| PORT2  | 0x2000 GPIOinOutBidirLevelTrans           |                    |         | <input type="radio"/> Write |                |            |                   |          |
| PORT3  | 0x0000 HighImpedance                      |                    |         | <input type="radio"/> Write |                |            |                   |          |
| PORT4  | 0x3000 GPIOoutRegDrivenOutputDAClevel     | 0x0666             | 0       | <input type="radio"/> Write |                |            |                   |          |
| PORT5  | 0x5100 DACout                             | 0x0000             |         | <input type="radio"/> Write |                |            |                   |          |
| PORT6  | 0x6100 DACoutWithADCmonitor               | 0x0000             |         | <input type="radio"/> Write | 0x0000         |            | [ADC New]         |          |
| PORT7  | 0x7400 ADCinPosSingleEnded                |                    |         | <input type="radio"/> Write | 0x0096         |            | [ADC New]         |          |
| PORT8  | 0x8409 ADCinPosDifferential               |                    |         | <input type="radio"/> Write | 0x0006         |            | [ADC New][PORT9]  |          |
| PORT9  | 0x9400 ADCinNegDifferential               |                    |         | <input type="radio"/> Write |                |            |                   |          |
| PORT10 | 0x810b ADCinPosDifferential               |                    |         | <input type="radio"/> Write | 0x006d         |            | [ADC New][PORT11] |          |
| PORT11 | 0xa100 DACoutADCinNegDifferential         | 0x0000             |         | <input type="radio"/> Write |                |            |                   |          |
| PORT12 | 0xb001 GPIOBidirAnalogSwitchExtControlled |                    |         | <input type="radio"/> Write |                |            | [PORT1]           |          |
| PORT13 | 0xc000 GPIOBidirAnalogSwitch              |                    |         | <input type="radio"/> Write |                |            |                   |          |
| PORT14 | 0x0000 HighImpedance                      |                    |         | <input type="radio"/> Write |                |            |                   |          |
| PORT15 | 0x1000 GPIOinPgmThreshold                 | 0x0666             |         | <input type="radio"/> Write | 1              | 0 masked   | [gpi_status=0]    |          |
| PORT16 | 0x1000 GPIOinPgmThreshold                 | 0x0666             |         | <input type="radio"/> Write | 0              | 1 pos edge | [gpi_status=0]    |          |
| PORT17 | 0x1000 GPIOinPgmThreshold                 | 0x0666             |         | <input type="radio"/> Write | 0              | 2 neg edge | [gpi_status=0]    |          |
| PORT18 | 0x1000 GPIOinPgmThreshold                 | 0x0666             |         | <input type="radio"/> Write | 0              | 3 any edge | [gpi_status=0]    |          |
| PORT19 | 0x0000 HighImpedance                      |                    |         | <input type="radio"/> Write |                |            |                   |          |
| INT    | Internal Temperature                      |                    |         |                             | 0x00df         |            | 27.875°C          |          |
| EXT1   | External Temperature D0P/D0N              |                    |         |                             | 0x00e9         |            | 29.125°C          |          |
| EXT2   | External Temperature D1P/D1N              |                    |         |                             | 0x00ea         |            | 29.25°C           |          |
|        |   |                    |         |                             |                |            |                   |          |

Figure 3. Data Tab

The **Data** tab (Figure 3) presents a tabular display of all PIXI ports and temperature channels. Double-click in the **Configured As** cells to jump directly to the **Pin Configuration** tab (Figure 5) for the corresponding pin. Each row represents one of the PIXI ports or one of the temperature sensors. Some configurations enable **DAC**

**Out** or **GPO Out** controls, or provide ADC or GPI input values. Pins configured for GPI input can be used as interrupt sources by double-clicking in the **Interrupt** cell. Select the **Chart** tab (Figure 4), then check **Options** menu | **Polling** to show the analog inputs on a graph.

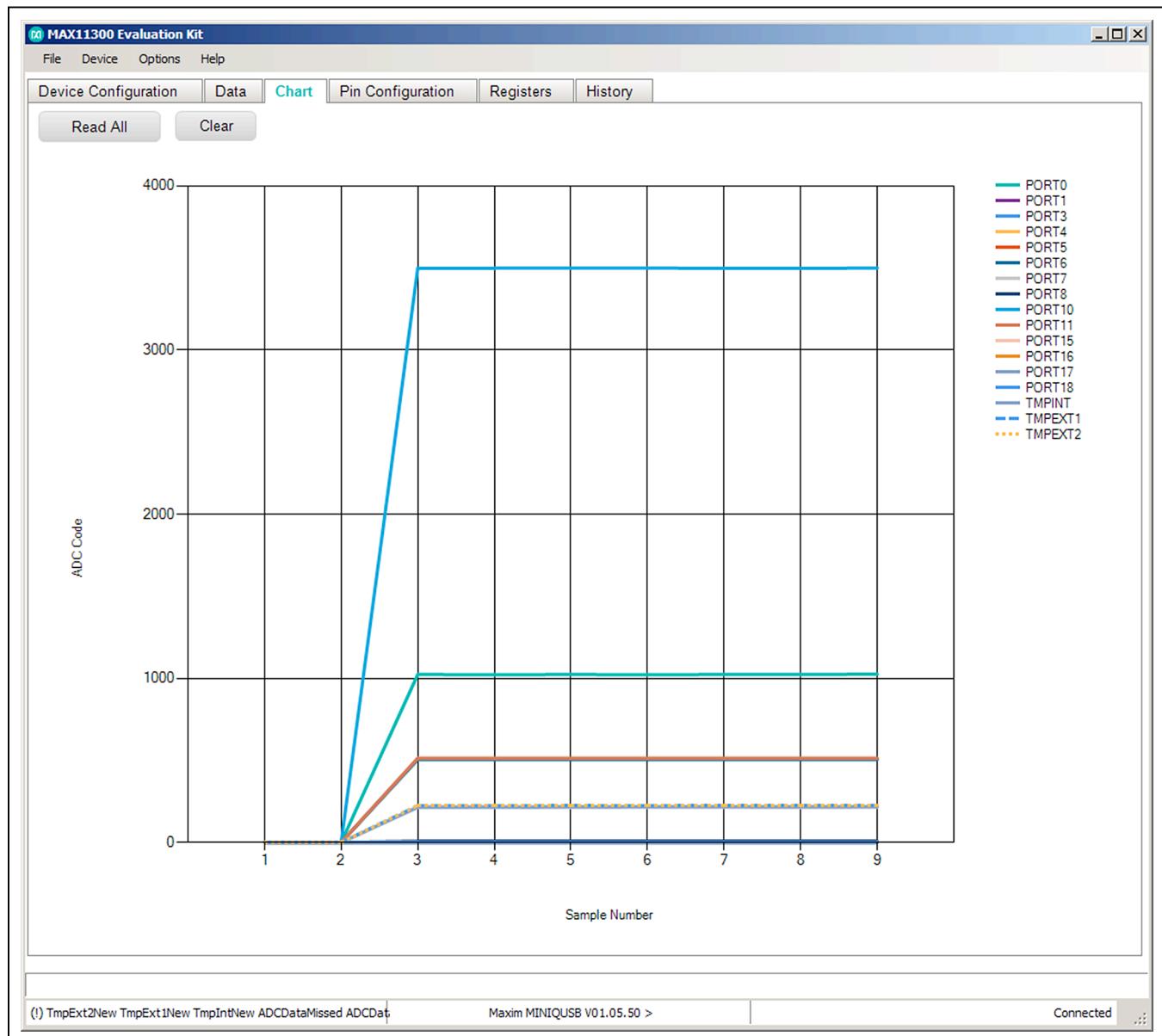


Figure 4. Chart Tab

The PIXI ports can be viewed and manually adjusted from the **Pin Configuration** tab. Selecting the pin function affects the choices in the other four fields. The software does not attempt to validate the configuration.

The normal development flow is to start in the MAX11300 Configuration software, use its **Generate Registers** menu item to export the registers to a \*.csv file, then use the EV kit software to connect to the hardware and load that \*.csv file.

The GPIO1–GPIO3 pins are spare outputs from the MAXQ2000 microcontroller that can be optionally used to support external diagnostic testing. They are not part of the MAX11300.

The supply voltages are used to help validate the available operating ranges, but the software has no way to independently verify that the nominal values are actually present.

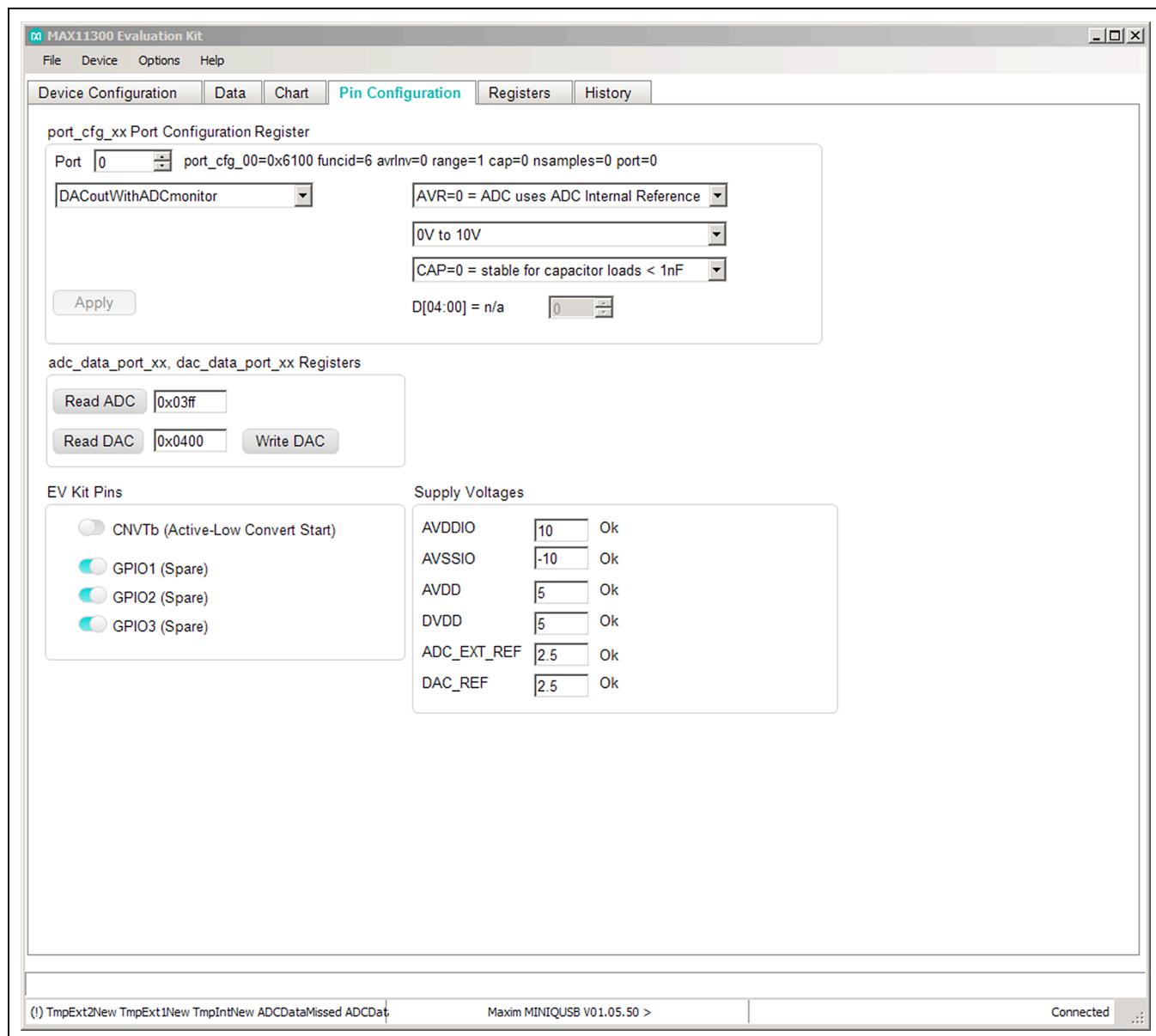


Figure 5. Pin Configuration Tab

The **Registers** tab (Figure 6) provides a tabular display of all registers of the device, supporting low-level read and write operations in hexadecimal. Write is effective by the

**Write** button. Refer to the MAX11300 IC data sheet for the meaning and format of the various registers.

The **History** tab provides a diagnostic log of the commands sent to the EV kit.

| Register Name          | Address | Read                                     | Value  | Write                          |
|------------------------|---------|--|--------|--------------------------------|
| dev_id                 | 0x00    | <input checked="" type="checkbox"/> Read | 0x0024 | <input type="checkbox"/> Write |
| interrupt              | 0x01    | <input checked="" type="checkbox"/> Read | 0x30c2 | <input type="checkbox"/> Write |
| adc_status_15_to_0     | 0x02    | <input checked="" type="checkbox"/> Read | 0x05c1 | <input type="checkbox"/> Write |
| adc_status_19_to_16    | 0x03    | <input checked="" type="checkbox"/> Read | 0x0000 | <input type="checkbox"/> Write |
| dac_oi_status_15_to_0  | 0x04    | <input checked="" type="checkbox"/> Read | 0x0000 | <input type="checkbox"/> Write |
| dac_oi_status_19_to_16 | 0x05    | <input checked="" type="checkbox"/> Read | 0x0000 | <input type="checkbox"/> Write |
| gpi_status_15_to_0     | 0x06    | <input checked="" type="checkbox"/> Read | 0x0000 | <input type="checkbox"/> Write |
| gpi_status_19_to_16    | 0x07    | <input checked="" type="checkbox"/> Read | 0x0000 | <input type="checkbox"/> Write |
| tmp_int_data           | 0x08    | <input checked="" type="checkbox"/> Read | 0x0800 | <input type="checkbox"/> Write |
| tmp_ext1_data          | 0x09    | <input checked="" type="checkbox"/> Read | 0x00e4 | <input type="checkbox"/> Write |
| tmp_ext2_data          | 0x0a    | <input checked="" type="checkbox"/> Read | 0x0800 | <input type="checkbox"/> Write |
| gpi_data_15_to_0       | 0x0b    | <input checked="" type="checkbox"/> Read | 0x0000 | <input type="checkbox"/> Write |
| gpi_data_19_to_16      | 0x0c    | <input checked="" type="checkbox"/> Read | 0x0000 | <input type="checkbox"/> Write |
| gpo_data_15_to_0       | 0x0d    | <input checked="" type="checkbox"/> Read | 0x0000 | <input type="checkbox"/> Write |
| gpo_data_19_to_16      | 0x0e    | <input checked="" type="checkbox"/> Read | 0x0000 | <input type="checkbox"/> Write |
| reserved_0F            | 0x0f    | <input type="checkbox"/> Read            |        | <input type="checkbox"/> Write |

Figure 6. Registers Tab

## Detailed Description of Hardware

The MAX11300 EV kit uses an on-board MAXQ2000 microcontroller (U120) to send SPI commands to the device. On-board level translators (U101, U102, and U105) convert from 3.3V to 5V levels. On-board MAX6071 voltage references (U3, U6) provide ADC and DAC reference voltages. Remote temperature sensing can be simulated by on-board 3904 npn transistors (D0, D1). See Figure 7.

## Connecting to User-Supplied Circuitry

The EV kit connects to external, user-supplied circuitry through header J1 or J2. These two headers have the same signals; J1 is for vertical 50-pin ribbon-cable connection and J2 is for right-angle connection to a sideboard by standard 0.100in right-angle pins.

If remote temperature sensing is used, disconnect on-board npn transistors D0 and D1 by moving the shunts of JUD0P, JUD0N, JUD1P, and J1D1N to the 1-4 position.

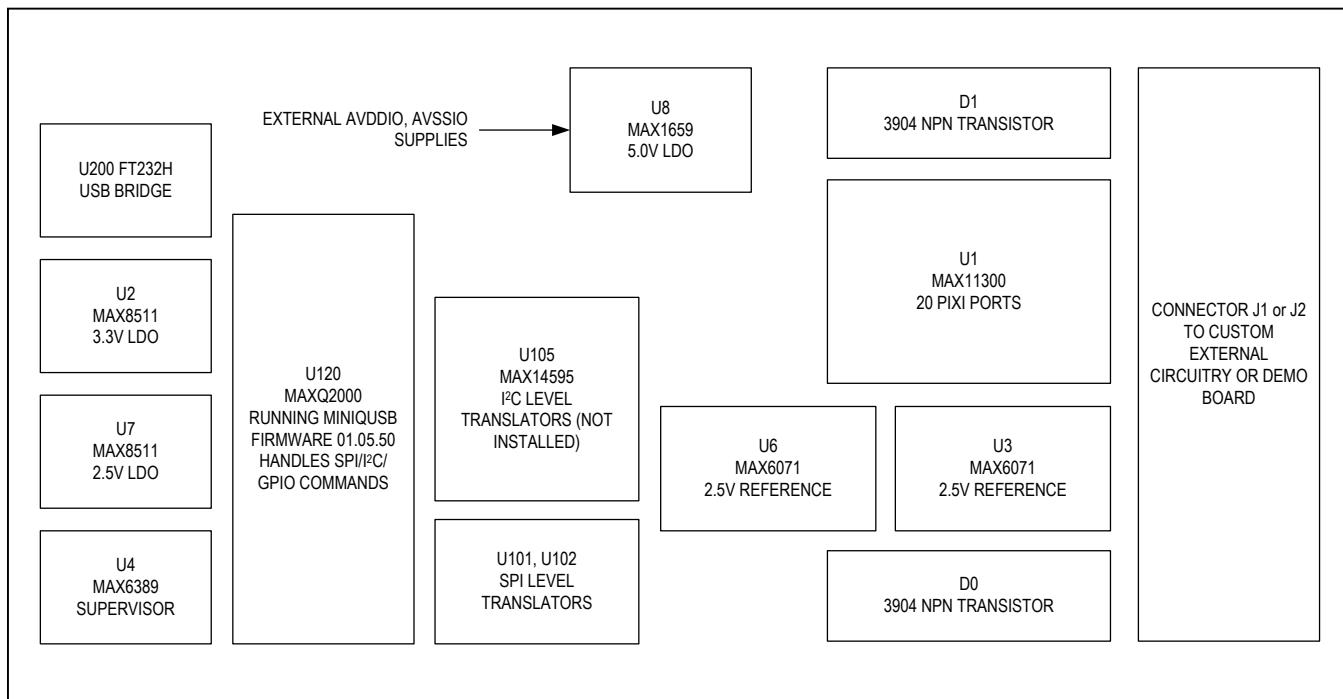


Figure 7. MAX11300 EV Kit Hardware Overview

**Table 1. Jumper Configuration (Power Supply)**

| JUMPER        | SIGNAL | SHUNT POSITION | DESCRIPTION   |
|---------------|--------|----------------|---|
| JU_AVSSIO_GND | AVSSIO | No Shunt*      | AVSSIO must be supplied by user negative power supply     |
|               |        | 1-2            | AVSSIO = GND  |
| JU_DVDD       | DVDD   | 1-2*           | DVDD is supplied from MAX1659 +5V LDO powered from AVDDIO |
|               |        | 2-3            | DVDD is supplied from USB                                 |
|               |        | No Shunt       | DVDD must be supplied by user power supply                |
| JU_AVDD       | AVDD   | 1-2*           | AVDD is supplied from DVDD directly                       |
|               |        | 2-3            | AVDD is supplied from DVDD, filtered by RAVDD and CAVDD   |
|               |        | No Shunt       | AVDD must be supplied by user power supply                |

**Table 1. Jumper Configuration (Power Supply) (continued)**

| JUMPER       | SIGNAL | SHUNT POSITION | DESCRIPTION  |
|--------------|--------|----------------|--|
| JU_U1_AVDDIO | AVDDIO | 1-2**          | Measure the supply current by putting a current meter in series with the jumper. |
| JU_U1_AVSSIO | AVSSIO | 1-2**          | Measure the supply current by putting a current meter in series with the jumper. |
| JU_U1_AVDD   | AVDD   | 1-2**          | Measure the supply current by putting a current meter in series with the jumper. |
| JU_U1_DVDD   | DVDD   | 1-2**          | Measure the supply current by putting a current meter in series with the jumper. |

\*Default position.

\*\*Default connection by a trace on the PCB; jumper pins not installed; shunt not included.

**Table 2. Jumper Configuration (Digital Interface)**

| JUMPER      | SIGNAL   | SHUNT POSITION | DESCRIPTION                                       |
|-------------|----------|----------------|---|
| JU_SDA_DIN  | SDA_DIN  | 1-2**          | SDA_DIN = MAXQ_MOSI (SPI interface mode)          |
|             |          | 2-3            | SDA_DIN = MAXQ_SDA (reserved)                     |
|             |          | No Shunt       | SDA_DIN = User-supplied connection                |
| JU_SDA      | SDA      | 1-2            | SDA pullup to DVDD by R103 (reserved)             |
|             |          | No Shunt*      | R103 is not connected (SPI interface mode)        |
| JU_SCL_SCLK | SCL_SCLK | 1-2**          | SCL_SCLK = MAXQ_SCLK (SPI interface mode)         |
|             |          | 2-3            | SCL_SCLK = MAXQ_SCL (reserved)                    |
|             |          | No Shunt       | SCL_SCLK = User-supplied connection               |
| JU_SCL      | SCL      | 1-2            | SCL pullup to DVDD by R104 (reserved)             |
|             |          | No Shunt*      | R104 is not connected (SPI interface mode)        |
| JU_AD0_CSB  | AD0/CSB  | 1-2**          | AD0/CSB = MAXQ_CS (SPI interface mode)            |
|             |          | 3-4            | AD0/CSB = DVDD (reserved)                         |
|             |          | 5-6            | AD0/CSB = SCL_SCLK (reserved)                     |
|             |          | 7-8            | AD0/CSB = SDA_DIN (reserved)                      |
|             |          | 9-10           | AD0/CSB = DGND. (reserved)                        |
| JU_AD1_DOUT | AD1/DOUT | 1-2            | AD1/DOUT = DGND (reserved)                        |
|             |          | 1-3**          | AD1/DOUT = MAXQ_MOSI.(SPI interface mode)         |
|             |          | 1-4            | AD1/DOUT = DVDD (reserved)                        |
| JU_INTB     | INTB     | 1-2**          | INTB = MAXQ_K5 interrupt input to microcontroller |
|             |          | Open           | INTB = user-supplied connection                   |
| JU_CNVTB    | CNVTB    | 1-2**          | CNVTB = MAXQ_K4 output from microcontroller       |
|             |          | Open           | CNVTB = user-supplied connection                  |

\*Default position.

\*\*Default connection by a trace on the PCB; jumper pins not installed; shunt not included.

**Table 3. MAX11300EVKIT Jumper Configuration (Temperature Sensor)**

| JUMPER | SIGNAL | SHUNT POSITION | DESCRIPTION   |
|--------|--------|----------------|---|
| JUD0P  | D0P    | 1-2            | 10Ω resistor RD0P emulates long connection wire series resistance, using on-board MMBT3904 as temp sensor |
|        |        | 1-3*           | Direct connection to on-board MMBT3904 used as temp sensor  |
|        |        | 1-4            | Connect external temperature sense diode junction to D0P_ext / D0N_ext pair on header J1, J2, or J3       |
| JUD0N  | D0N    | 1-2            | 10Ω resistor RD0N emulates long connection wire series resistance, using on-board MMBT3904 as temp sensor |
|        |        | 1-3*           | Direct connection to on-board MMBT3904 used as temp sensor  |
|        |        | 1-4            | Connect external temperature sense diode junction to D0P_ext / D0N_ext pair on header J1, J2, or J3       |
| JUD1P  | D1P    | 1-2            | 10Ω resistor RD1P emulates long connection wire series resistance, using on-board MMBT3904 as temp sensor |
|        |        | 1-3*           | Direct connection to on-board MMBT3904 used as temp sensor  |
|        |        | 1-4            | Connect external temperature sense diode junction to D1P_ext / D1N_ext pair on header J1, J2, or J3       |
| JUD1N  | D1N    | 1-2            | 10Ω resistor RD1N emulates long connection wire series resistance, using on-board MMBT3904 as temp sensor |
|        |        | 1-3*           | Direct connection to on-board MMBT3904 used as temp sensor  |
|        |        | 1-4            | Connect external temperature sense diode junction to D1P_ext / D1N_ext pair on header J1, J2, or J3       |

\*Default position.

**Table 4. MAX11300EVKIT Jumper Configuration (On-Board External References)**

| JUMPER      | SIGNAL      | SHUNT POSITION | DESCRIPTION  |
|-------------|-------------|----------------|--|
| JU_ADC_REF  | ADC_EXT_REF | 1-2*           | On-board MAX6071 reference U2 drives ADC_EXT_REF                       |
|             |             | Open           | On-board MAX6071 reference U2 is disconnected from ADC_EXT_REF         |
| JU_DAC_REF  | DAC_REF     | 1-2*           | On-board MAX6071 reference U3 drives DAC_REF (Kelvin connection force) |
|             |             | Open           | On-board MAX6071 reference U3 is disconnected from DAC_REF             |
| JU_DAC_REFS | DAC_REFS    | 1-2*           | On-board MAX6071 reference U3 drives DAC_REF (Kelvin connection sense) |
|             |             | Open           | On-board MAX6071 reference U3 is disconnected from DAC_REF             |

\*Default position.

**Table 5. MAX11300EVKIT Jumper Configuration (Microcontroller)**

| JUMPER  | SIGNAL  | SHUNT POSITION | DESCRIPTION   |
|---------|---------|----------------|---|
| JU_LED1 | MAXQ_K1 | 1-2*           | MAXQ2000 port 0.0 (MINIQUUSB firmware signal K1) drives diagnostic indicator LED1 |
|         |         | Open           | MAXQ2000 port 0.0 (MINIQUUSB firmware signal K1) is disconnected from LED1        |
| JU_LED2 | MAXQ_K2 | 1-2*           | MAXQ2000 port 0.1 (MINIQUUSB firmware signal K2) drives diagnostic indicator LED2 |
|         |         | Open           | MAXQ2000 port 0.1 (MINIQUUSB firmware signal K2) is disconnected from LED2        |
| JU_LED3 | MAXQ_K3 | 1-2*           | MAXQ2000 port 0.2 (MINIQUUSB firmware signal K3) drives diagnostic indicator LED3 |
|         |         | Open           | MAXQ2000 port 0.2 (MINIQUUSB firmware signal K3) is disconnected from LED3        |

\*Default position.

**Table 6. Microcontroller Resources**

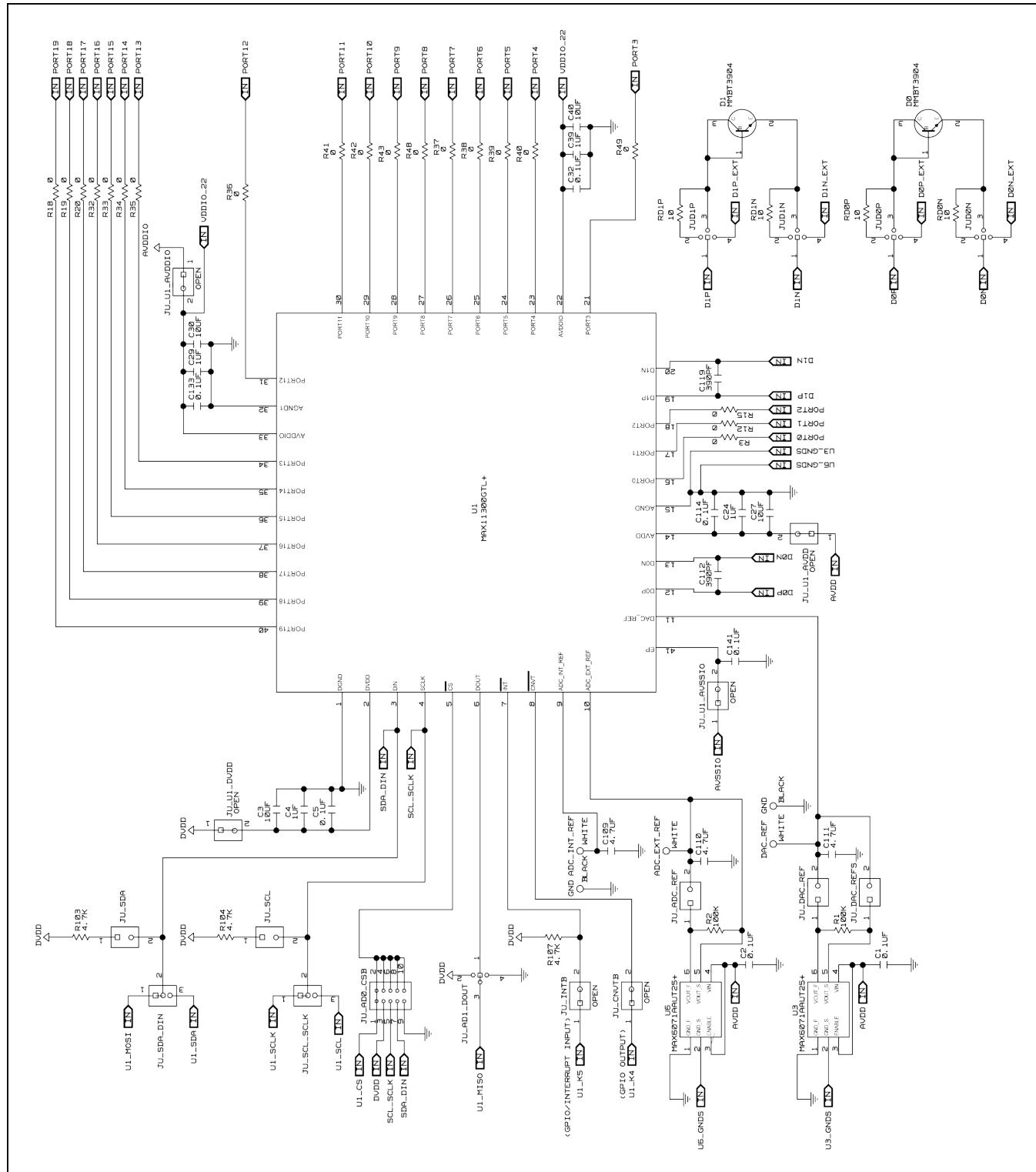
| GPIO SIGNAL | DIRECTION                   | JUMPER   | DESCRIPTION   |
|-------------|-----------------------------|----------|---|
| MAXQ_K1     | Output from MAXQ2000        | JU_LED1  | Diagnostic indicator LED1   |
| MAXQ_K2     | Output from MAXQ2000        | JU_LED2  | Diagnostic indicator LED2   |
| MAXQ_K3     | Output from MAXQ2000        | JU_LED3  | Diagnostic indicator LED3   |
| MAXQ_K4     | Output from MAXQ2000        | JU_CNVBT | Convert-Start signal to MAX11300 CVNBT input  |
| MAXQ_K5     | Interrupt input to MAXQ2000 | JU_INTB  | Active-low Interrupt from MAX11300 INTB output; can also be triggered by momentary pushbutton INT0. |
| MAXQ_K6     | Interrupt input to MAXQ2000 | —        | Active-low Interrupt from momentary pushbutton INT1   |
| MAXQ_K7     | Interrupt input to MAXQ2000 | —        | Active-low Interrupt from momentary pushbutton INT2   |
| MAXQ_K8     | Interrupt input to MAXQ2000 | —        | Active-low Interrupt from momentary pushbutton INT3   |

**Table 7. Test Point Voltages**

| TEST POINT                   | VOLTAGE (V) |         |         |
|------------------------------|-------------|---------|---------|
|                              | NOMINAL     | MINIMUM | MAXIMUM |
| +3.3V TP142 from U2 MAX8511  | 3.3         | 3.267   | 3.333   |
| +2.5V TP132 from U7 MAX8511  | 2.5         | 2.475   | 2.52    |
| +5V from U8 MAX1659          | 5.0         | 4.85    | 5.15    |
| DVDD from U8 MAX1659         | 5.0         | 4.85    | 5.15    |
| ADC_INT_REF from U1 MAX11300 | 2.5         | 2.494   | 2.506   |
| ADC_EXT_REF from U6 MAX6071  | 2.5         | 2.4     | 2.6     |
| DAC_REF from U3 MAX6071      | 2.5         | 2.4     | 2.6     |

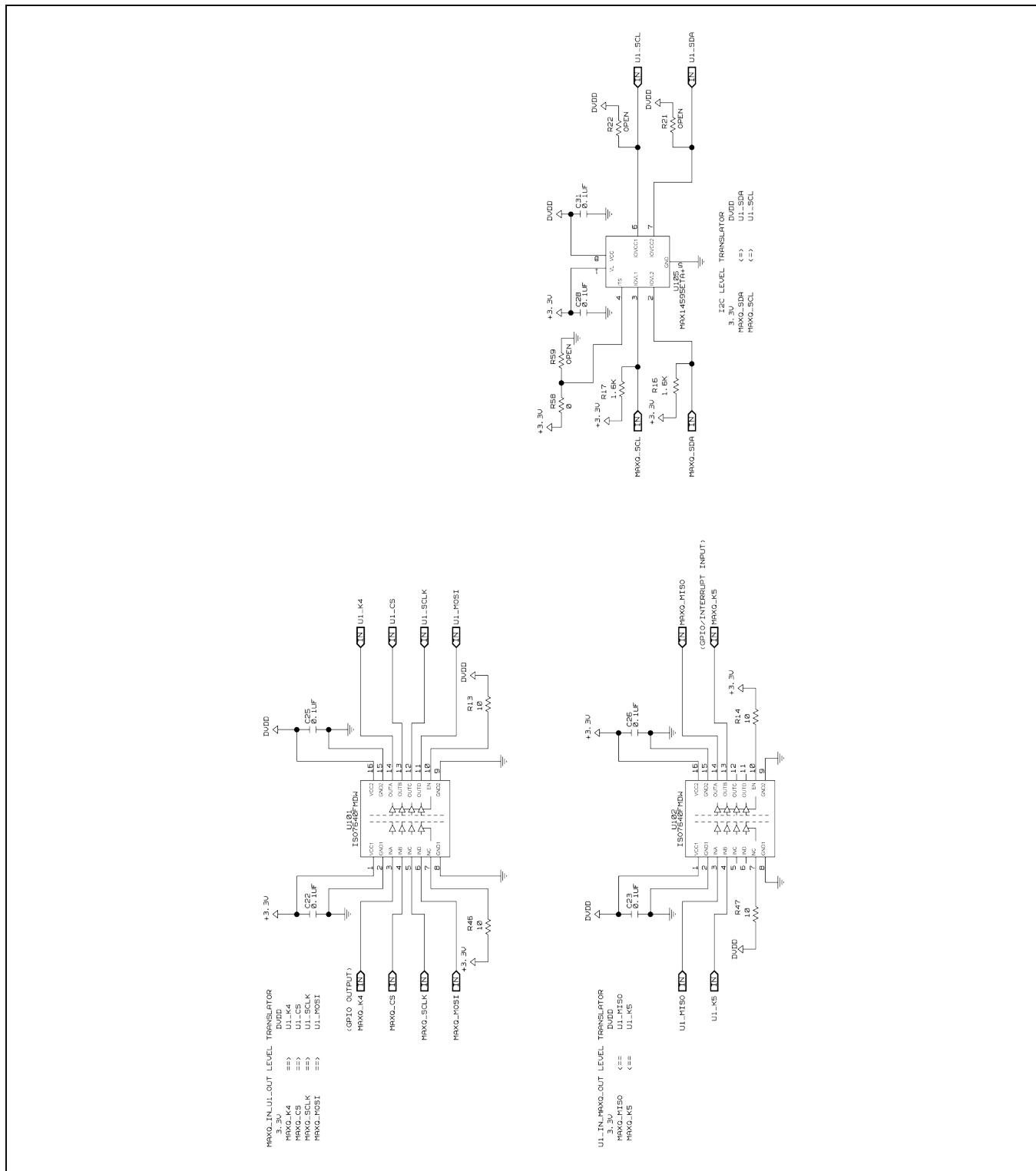
# MAX11300 Evaluation Kit

Evaluates: MAX11300



MAX11300 Evaluation Kit

Evaluates: MAX11300



*Figure 8b. MAX11300 EV Kit Schematic (Sheet 2 of 5)*

# MAX11300 Evaluation Kit

Evaluates: MAX11300

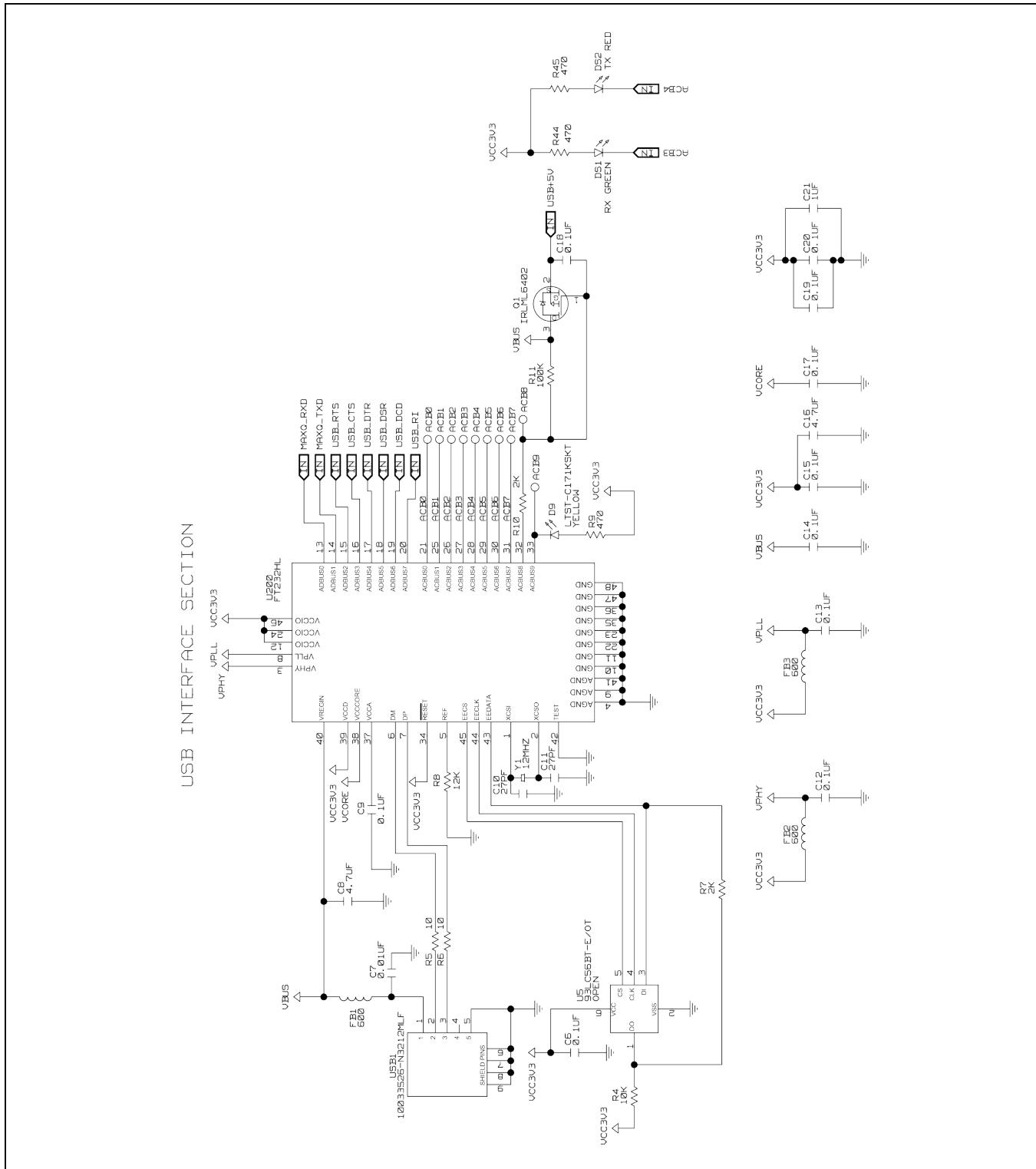


Figure 8c. MAX11300 EV Kit Schematic (Sheet 3 of 5)

## MAX11300 Evaluation Kit

Evaluates: MAX11300

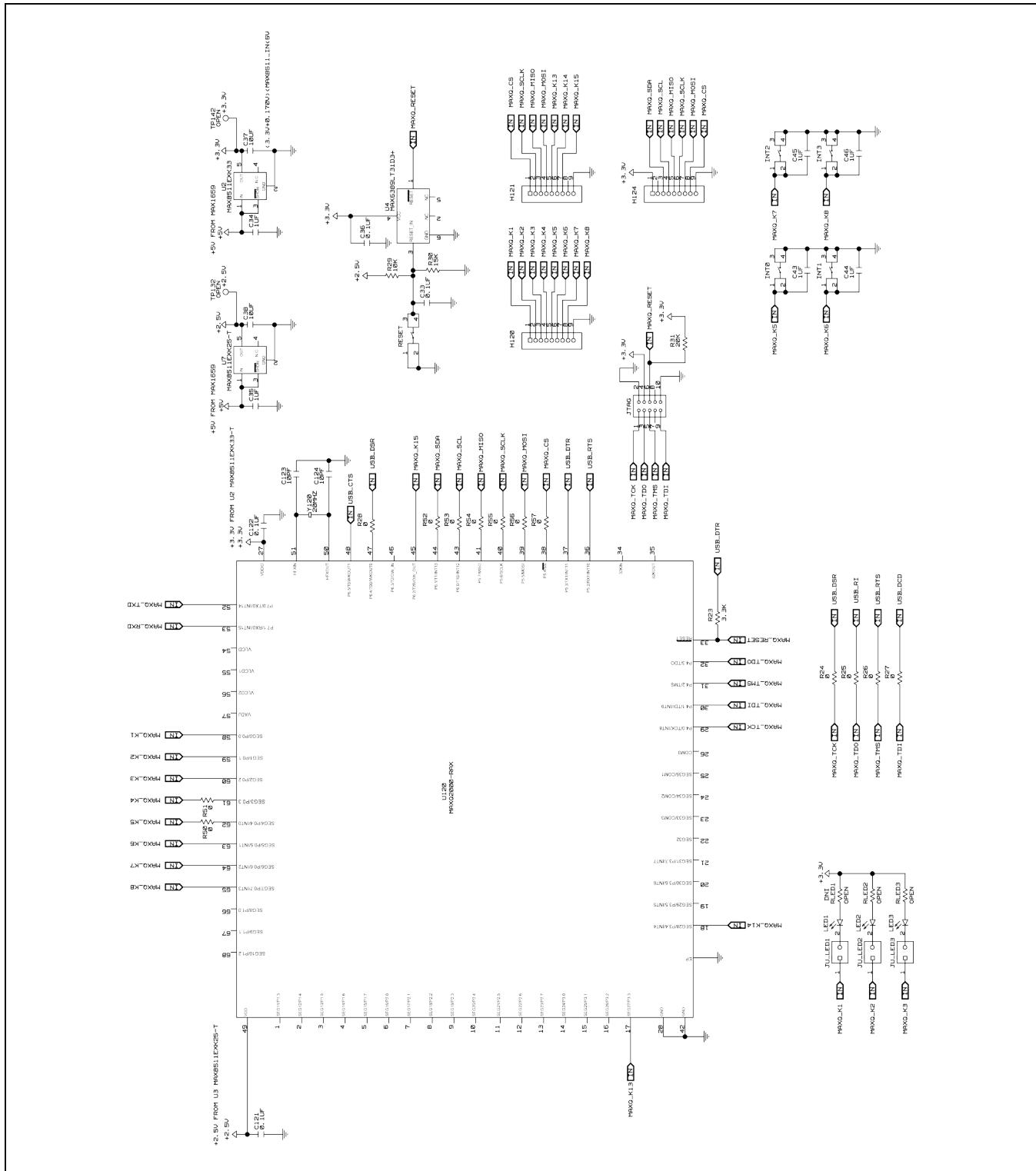


Figure 8d. MAX11300 EV Kit Schematic (Sheet 4 of 5)

# MAX11300 Evaluation Kit

Evaluates: MAX11300

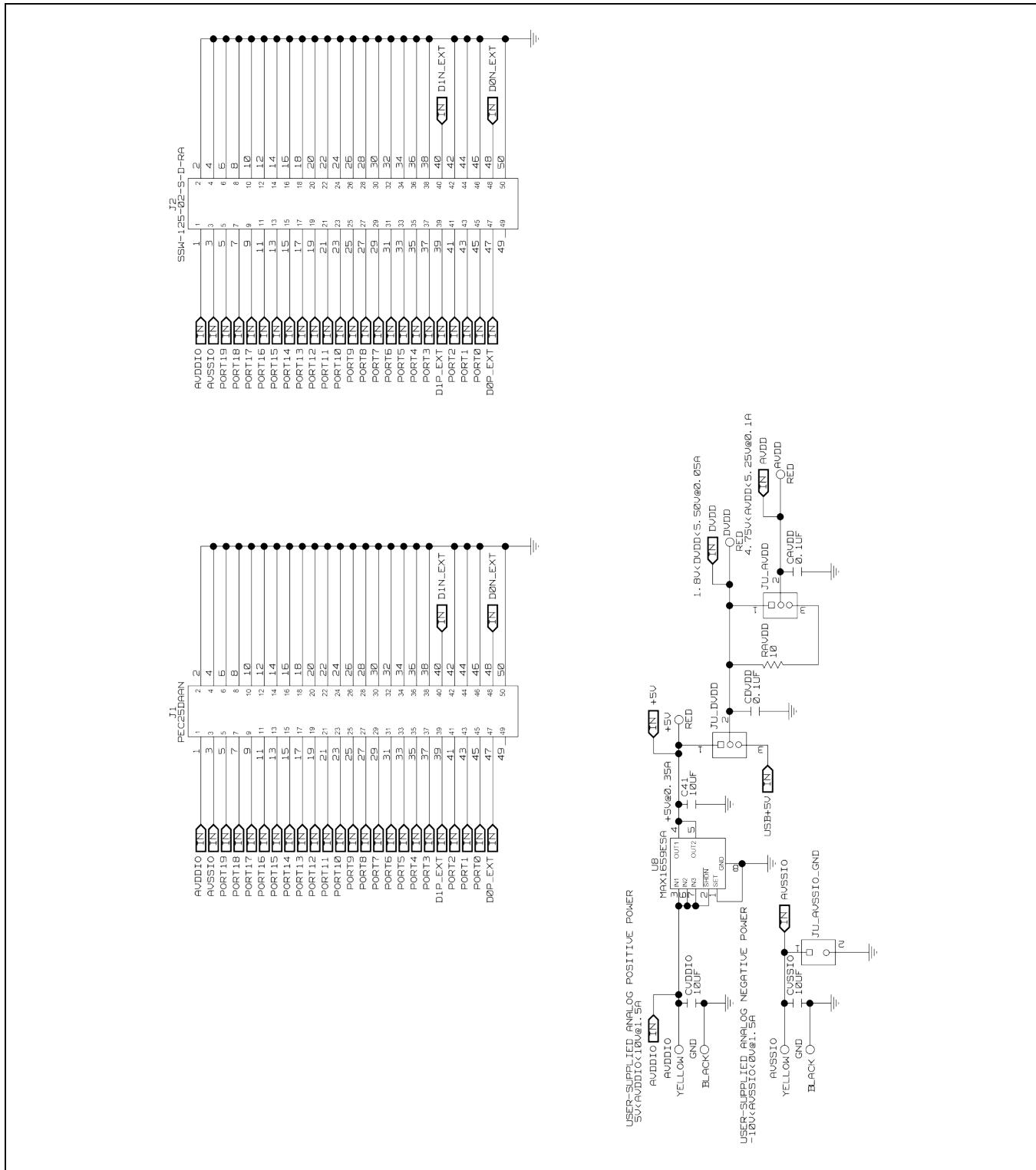
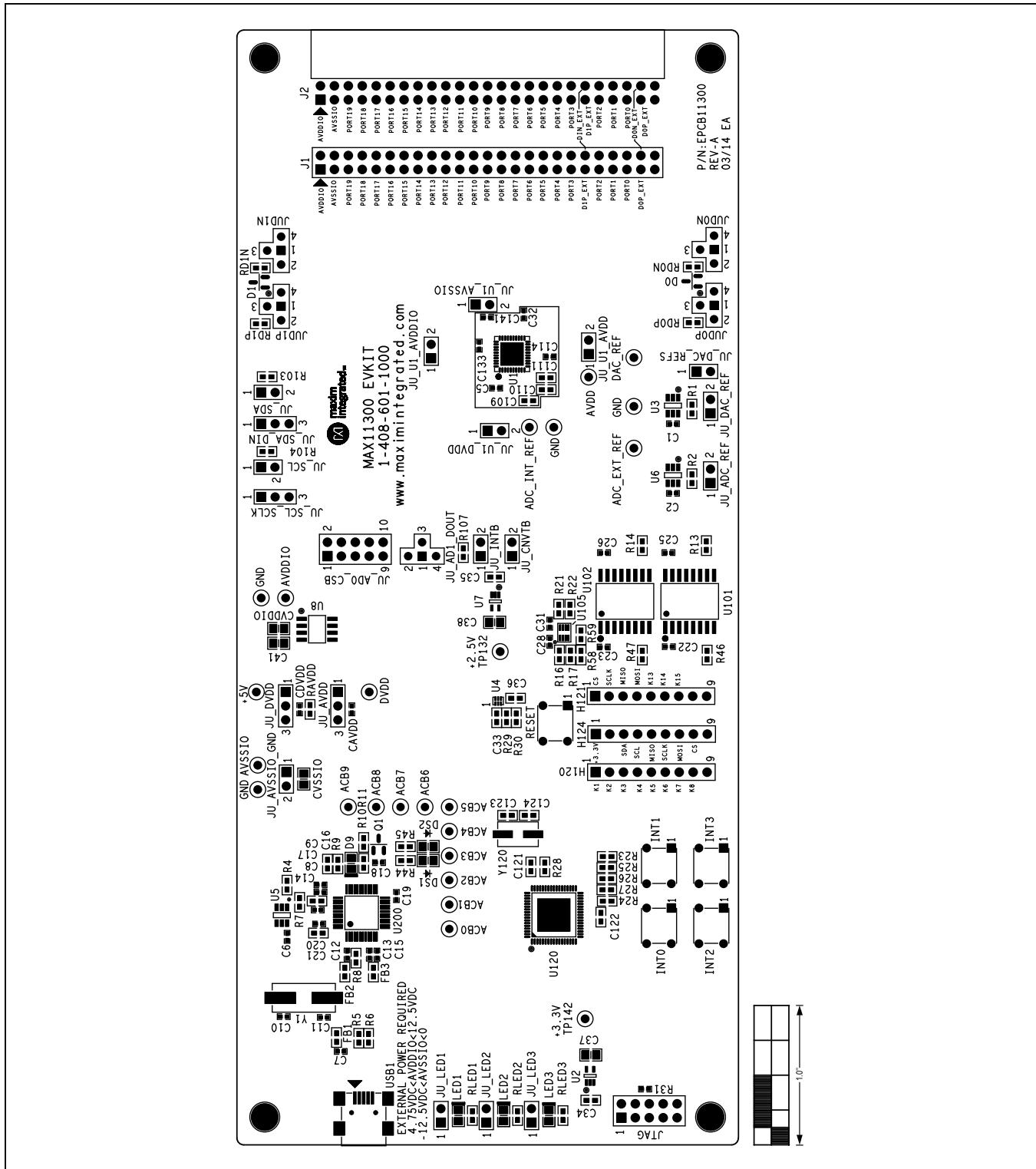


Figure 8e. MAX11300 EV Kit Schematic (Sheet 5 of 5)

# MAX11300 Evaluation Kit

Evaluates: MAX11300



*Figure 9. MAX11300 EV Kit Component Placement Guide—Component Side*

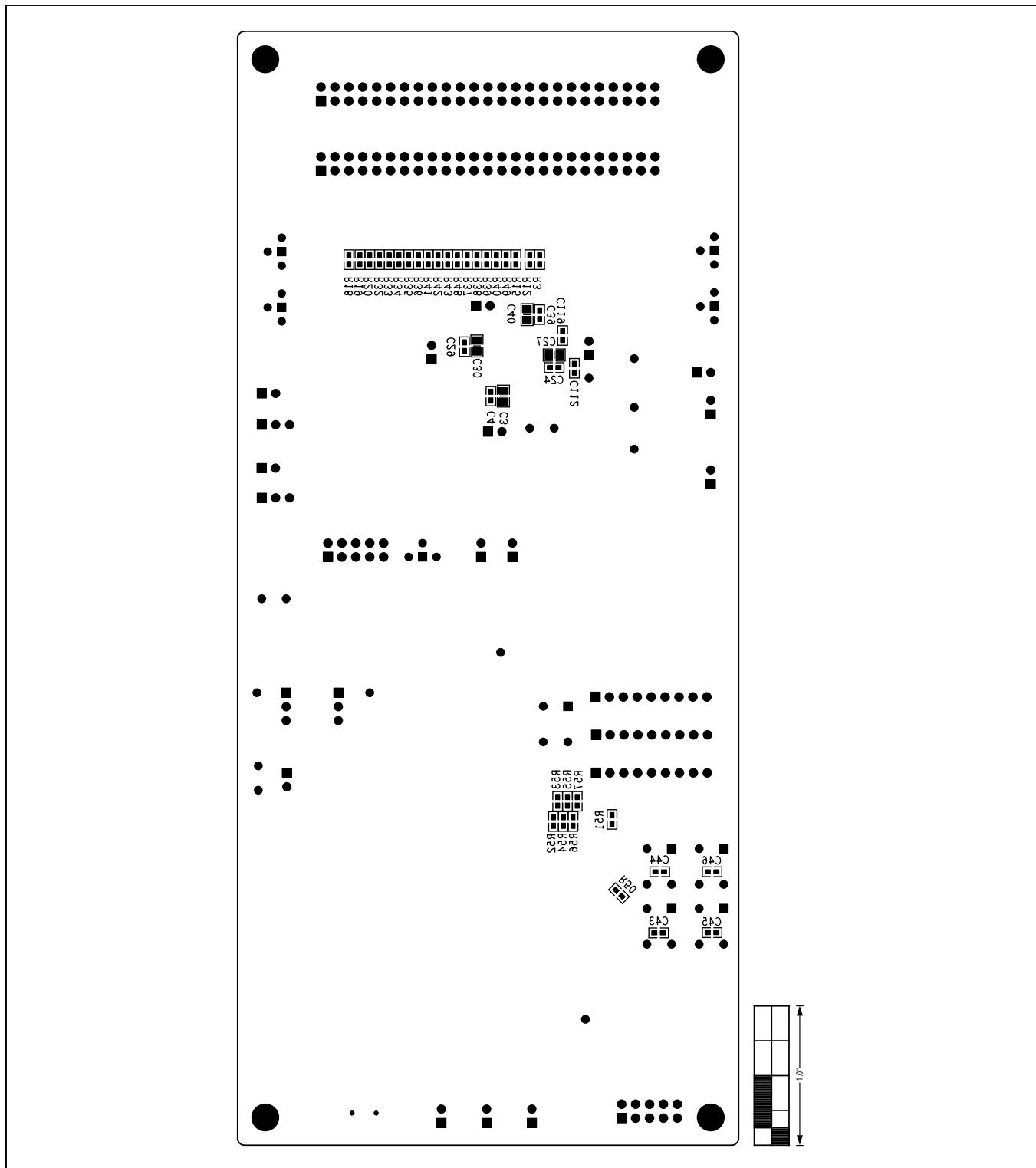


Figure 10. MAX11300 EV Kit Component Placement Guide—Solder Side

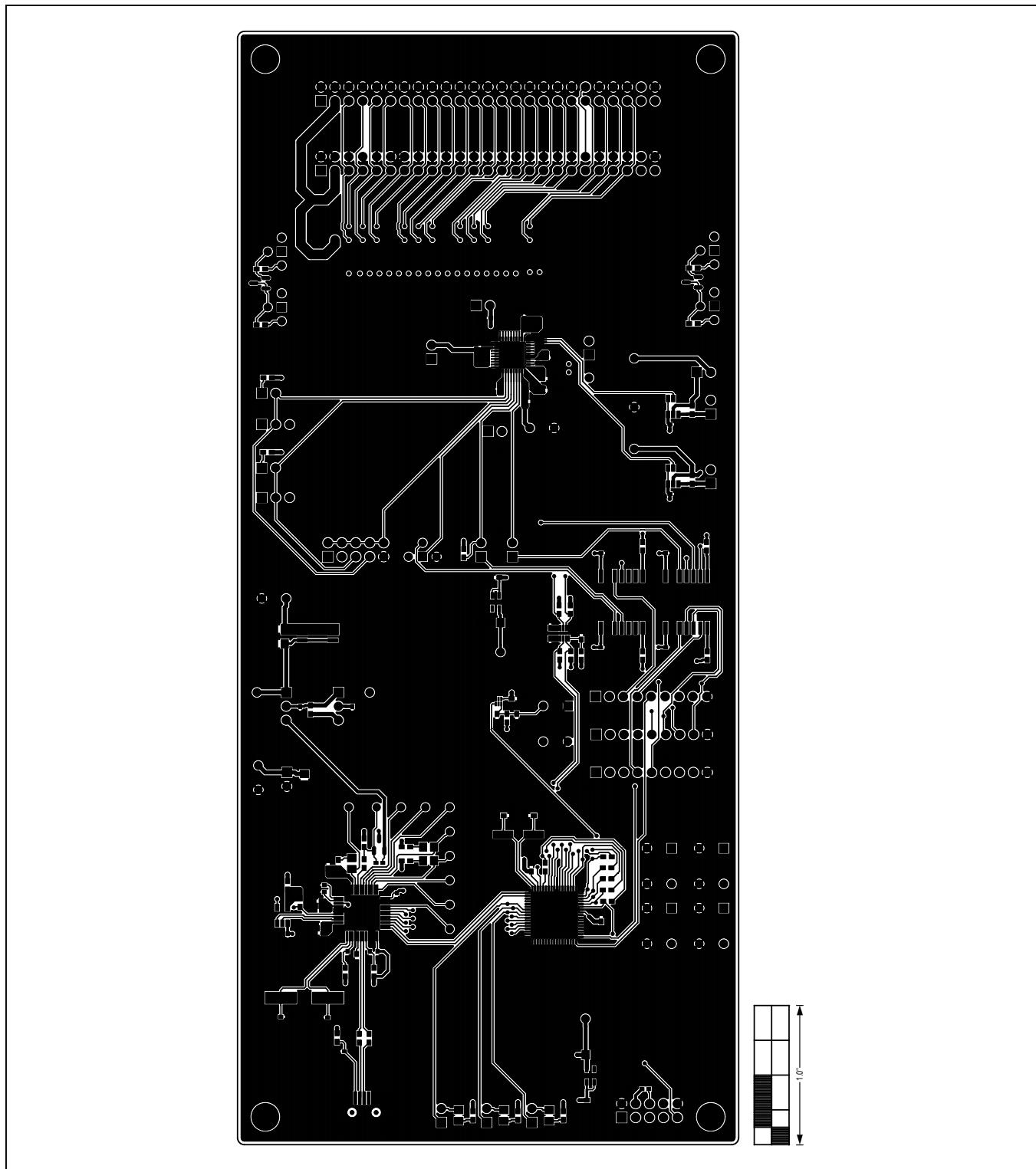


Figure 11. MAX11300 EV Kit PCB Layout—Component Side

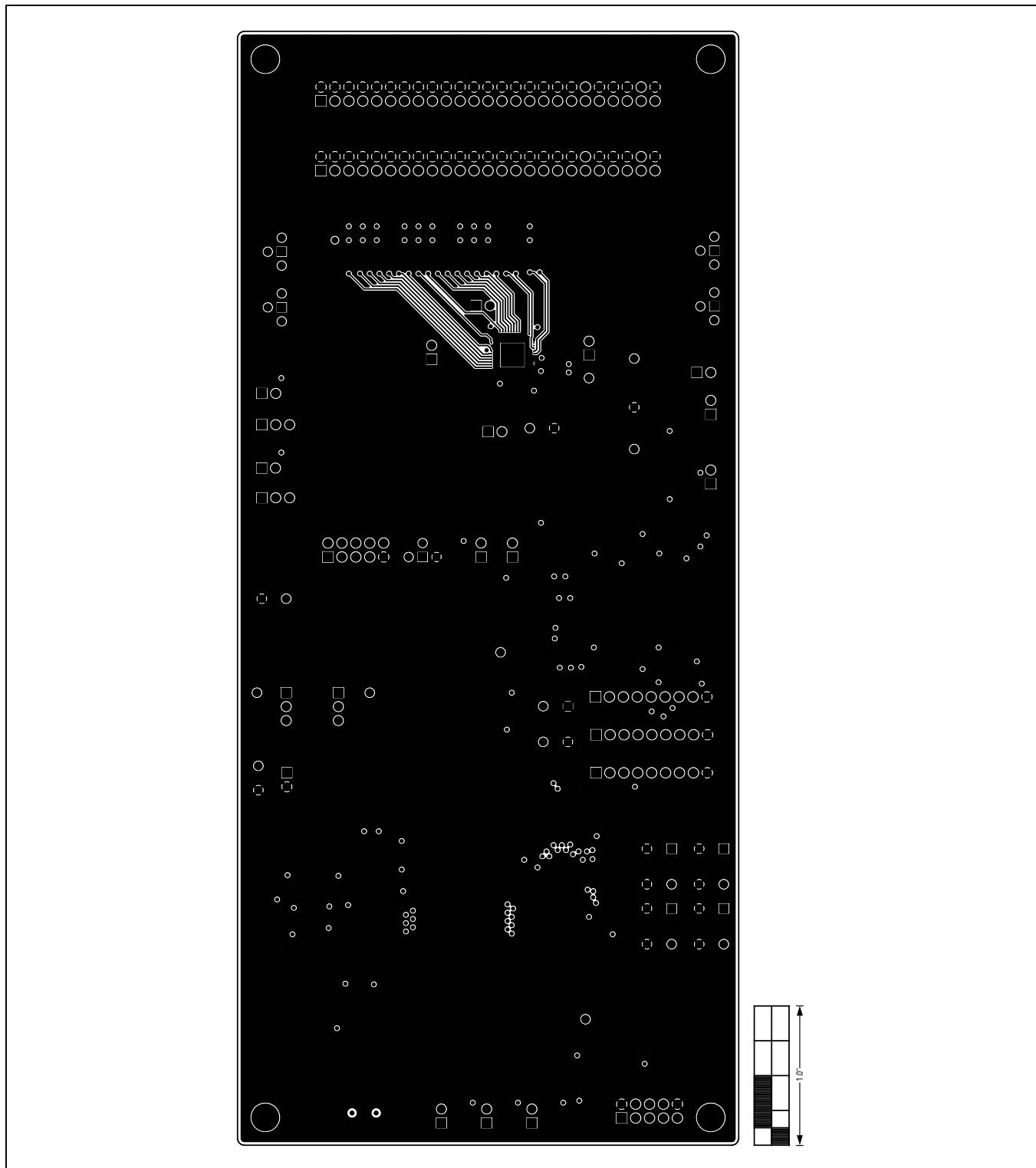


Figure 12. MAX11300 EV Kit PCB Layout—Ground Layer 2

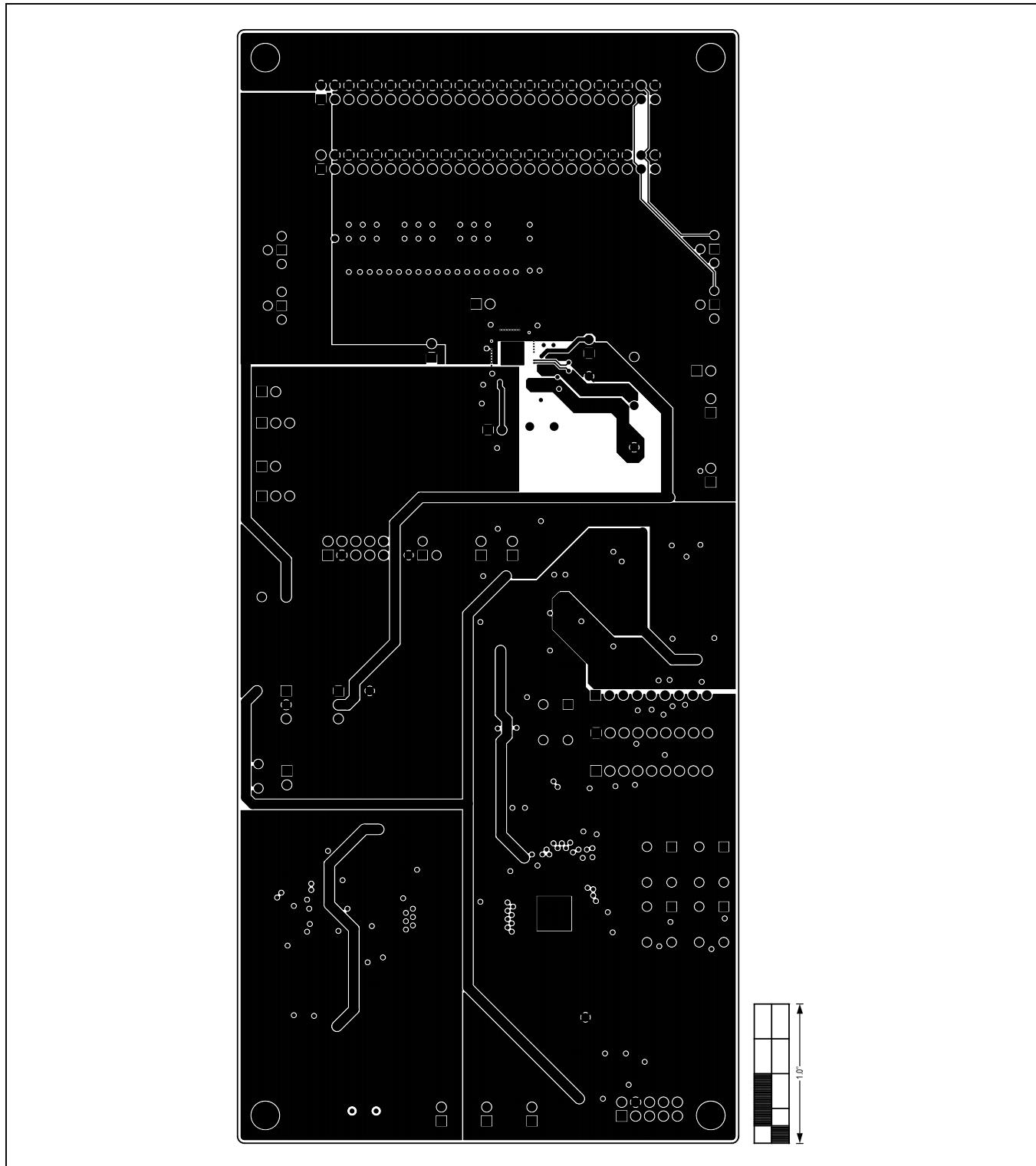


Figure 13. MAX11300 EV Kit PCB Layout—Power Layer 3

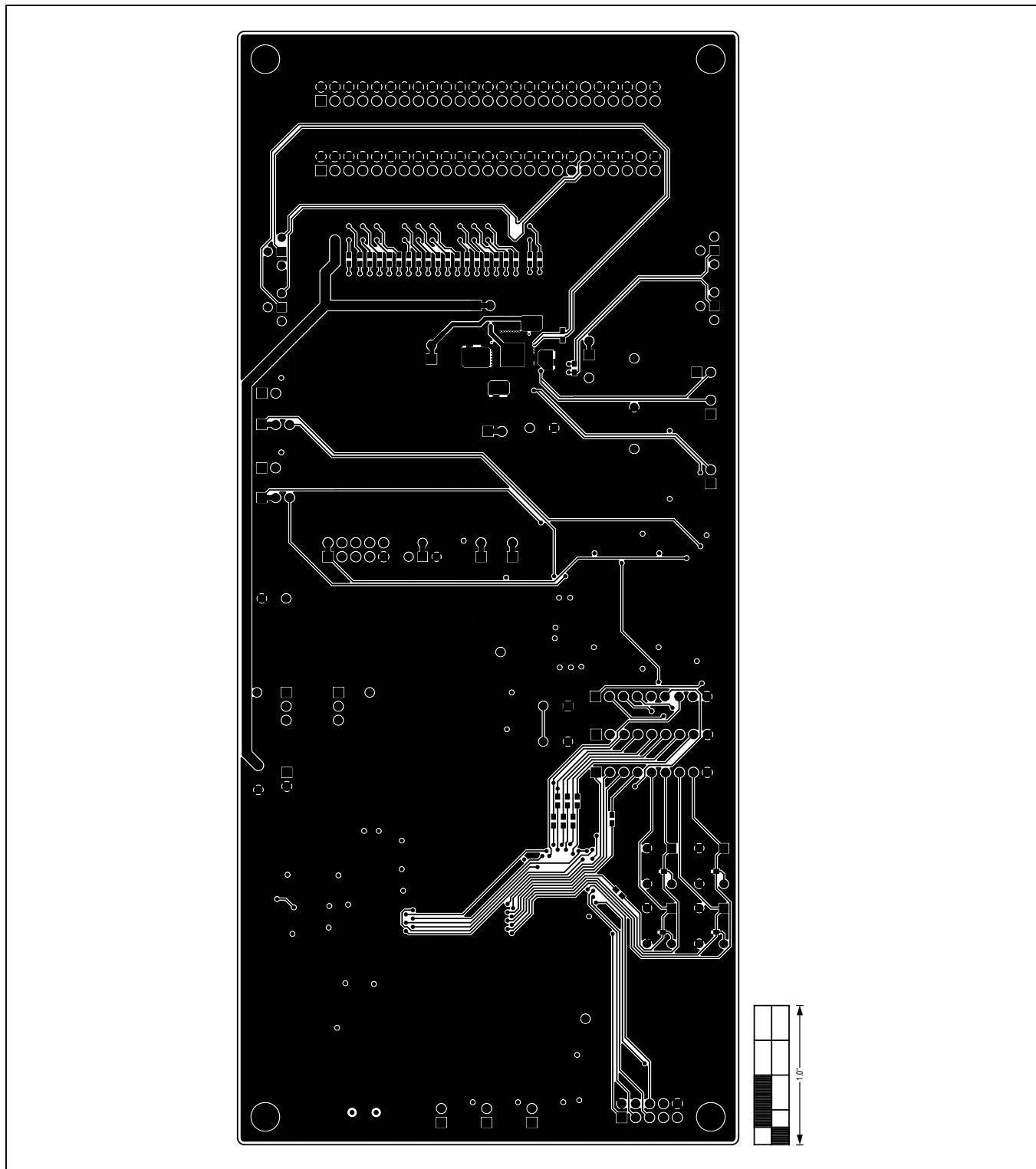


Figure 14. MAX11300 EV Kit PCB Layout—Solder Side

### Component List

Click on the link below for component information:

- [MAX11300 BOM](#)

### Ordering Information

| PART           | TYPE   |
|----------------|--------|
| MAX11300EVKIT# | EV Kit |

#Denotes RoHS compliant.

## Revision History

| REVISION NUMBER | REVISION DATE | DESCRIPTION       | PAGES CHANGED |
|-----------------|---------------|-------------------|---------------|
| 0               | 5/14          | Initial release   | —             |
| 1               | 1/15          | Replaced Figure 1 | 2             |

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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TITLE: Bill of Materials

DATE: 03/20/2014

DESIGN: max11300\_evkit\_a

TEMPLATE: \\cavndsa02a.maxim-ic.com\tp\_loc\hw\_cardcat\allegrolib\site\cdssetup\BOM\_Templates\evkit\_build\_template.bom

CALLOUT:

VARIANT: openvariant

Revision\_Type : PRODUCTION

| ITEM | QTY | REF DES   | Var Status | MAXINV           | MFG PART #        | MANUFACTURER | VALUE | DESCRIPTION   | COMMENTS |
|------|-----|---|------------|------------------|-------------------|--------------|-------|---|----------|
| 1    | 3   | +5V, AVDD, DVDD   | Pref       | 02-TPMINI5000-00 | 5000              | ?            | N/A   | TEST POINT; PIN DIA=0.1IN; TOTAL LENGTH=0.3IN; BOARD HOLE=0.04IN; RED; PHOSPHOR BRONZE WIRE SILVER PLATE FINISH; RECOMMENDED FOR BOARD THICKNESS=0.062IN; NOT FOR COLD TEST |          |
| 2    | 10  | ACB0-ACB9   | Pref       | N/A              | N/A               | ?            | N/A   | TEST POINT; PAD DIA=0.06IN  |          |
| 3    | 3   | DAC_REF, ADC_EXT_REF,<br>ADC_INT_REF  | Pref       | 02-TPMINI5002-00 | 5002              | ?            | N/A   | TEST POINT; PIN DIA=0.1IN; TOTAL LENGTH=0.3IN; BOARD HOLE=0.04IN; WHITE; PHOSPHOR BRONZE WIRE SILVER; NOT FOR COLD TEST   |          |
| 4    | 25  | C1, C2, C5, C6, C9, C12-C15, C17-C20,<br>C22, C23, C25, C26, C28, C31, C32,<br>C114, C133, C141, CAVDD, CDVDD | Pref       | 20-000U1-B8      | N/A               | ?            | 0.1UF | CAPACITOR; SMT (0402); CERAMIC CHIP; 0.1UF; 10V; TOL=10%; MODEL=GRM SERIES; TG=-55 DEGC TO +125 DEGC; TC=X7R; NOT RECOMMENDED FOR NEW DESIGN- USE 20-000u1-04A              |          |
| 5    | 9   | C3, C27, C30, C37, C38, C40, C41,<br>CVDDIO, CVSSIO   | Pref       | 20-0010U-S6      | GRM21BR71A106KE51 | ?            | 10UF  | CAPACITOR; SMT (0805); CERAMIC CHIP; 10UF; 10V; TOL=10%; MODEL=GRM SERIES; TG=-55 DEGC TO +125 DEGC; TC=X7R   |          |

|    |    |   |      |              |     |   |        |   |  |
|----|----|---|------|--------------|-----|---|--------|---|--|
| 6  | 11 | C4, C21, C24, C29, C34, C35, C39, C43-C46 | Pref | 20-0001U-63  | N/A | ? | 1UF    | CAPACITOR; SMT (0603); CERAMIC CHIP; 1UF; 16V; TOL=10%; MODEL=-; TG=-55 DEGC TO +125 DEGC; TC=X7R   |  |
| 7  | 1  | C7  | Pref | 20-00U01-B19 | N/A | ? | 0.01UF | CAPACITOR; SMT (0402); CERAMIC CHIP; 0.01UF; 16V; TOL=10%; MODEL=-; TG=-55 DEGC TO +125 DEGC; TC=X7R  |  |
| 8  | 5  | C8, C16, C109-C111                        | Pref | 20-004U7-X3  | N/A | ? | 4.7UF  | CAPACITOR; SMT (0603); CERAMIC; 4.7UF; 6.3V; TOL=20%; MODEL=C SERIES; TG=-55 DEGC TO +85 DEGC; TC=X5R   |  |
| 9  | 2  | C10, C11                                  | Pref | 20-0027P-27  | N/A | ? | 27PF   | CAPACITOR; SMT; 0402; CERAMIC; 27pF; 50V; 5%; COG; -55degC to +125degC; 0 +/-30PPM/degC   |  |
| 10 | 4  | C33, C36, C121, C122                      | Pref | 20-000U1-03  | N/A | ? | 0.1UF  | CAPACITOR; SMT; 0603; CERAMIC; 0.1uF; 25V; 10%; X7R; -55degC to +125degC; +/-15% from -55degC to +125degC; NOT RECOMMENDED FOR NEW DESIGN USE - 20-000u1-01 |  |
| 11 | 2  | C112, C119                                | Pref | 20-0390P-E4  | N/A | ? | 390PF  | CAPACITOR; SMT (0603); CERAMIC CHIP; 390PF; 100V; TOL=10%; MODEL=COG; TG=-55 DEGC TO +125 DEGC; TC=+  |  |
| 12 | 2  | C123, C124                                | Pref | 20-0010P-25  | N/A | ? | 10PF   | CAPACITOR; SMT; 0603; CERAMIC; 10pF; 50V; 5%; COG; -55degC to +125degC, USE 20-0010p-E4 FOR NEW DESIGN  |  |

|    |   |                  |      |                    |               |                                 |               |   |  |
|----|---|------------------|------|--------------------|---------------|---------------------------------|---------------|---|--|
| 13 | 2 | D0, D1           | Pref | 90-MMBT3904-16     | MMBT3904      | N/A                             | MMBT3904      | TRANSISTOR, NPN, SOT-23,<br>PD=0.225W, IC=0.2A, VCEO=40V  |  |
| 14 | 4 | D9, LED1-LED3    | Pref | 30-LTSTC171KSKT-00 | LTST-C171KSKT | LITE-ON<br>ELECTRONICS<br>INC   | LTST-C171KSKT | DIODE; LED; STANDARD; YELLOW;<br>SMT (0805); PIV=5.0V; IF=0.08A   |  |
| 15 | 1 | DS1              | Pref | 30-LTSTC171GKT-00  | LTST-C171GKT  | LITE-ON<br>ELECTRONICS;<br>INC. | LTST-C171GKT  | DIODE; LED; STANDARD; GREEN;<br>SMT (0805); PIV=5.0V; IF=0.12A; -55<br>DEGC TO +85 DEGC   |  |
| 16 | 1 | DS2              | Pref | 30-LTSTC171KRKT-00 | LTST-C171KRKT | LITE-ON<br>ELECTRONICS;<br>INC. | LTST-C171KRKT | DIODE; LED; STANDARD; RED; SMT<br>(0805); PIV=5.0V; IF=0.08A; -55<br>DEGC TO +85 DEGC   |  |
| 17 | 3 | FB1-FB3          | Pref | 50-00600-S8        | MMZ1608B601C  | TDK                             | 600           | INDUCTOR; SMT (0603); FERRITE-<br>BEAD; 600; TOL=+/-25%; 0.5A; -55<br>DEGC TO +125 DEGC   |  |
| 18 | 4 | GND_TP1-GND_TP4  | Pref | 02-TPMINI5001-00   | 5001          | ?                               | N/A           | TEST POINT; PIN DIA=0.1IN; TOTAL<br>LENGTH=0.3IN; BOARD<br>HOLE=0.04IN; BLACK; PHOSPHOR<br>BRONZE WIRE SILVER PLATE FINISH;<br>RECOMMENDED FOR BOARD<br>THICKNESS=0.062IN; NOT FOR COLD<br>TEST |  |
| 19 | 3 | H120, H121, H124 | Pref | 01-PEC09SAAN9P-21  | PEC09SAAN     | SULLINS<br>ELECTRONICS<br>CORP  | PEC09SAAN     | CONNECTOR; MALE; THROUGH<br>HOLE; BREAKAWAY; STRAIGHT;<br>9PINS; -65 DEGC TO +125 DEGC  |  |
| 20 | 5 | INT0-INT3, RESET | Pref | 11-B3F1000-00      | B3F-1000      | OMRON                           | B3F-1000      | SWITCH; SPST; THROUGH HOLE;<br>24V; 0.05A; NORMALLY OPEN-HIGH<br>FORCE TACTILE SWITCH; RCOIL=<br>OHM; RINSULATION= OHM;<br>OMRON  |  |

|    |    |  |      |                       |                   |                           |                   |   |  |
|----|----|--|------|-----------------------|-------------------|---------------------------|-------------------|---|--|
| 21 | 1  | J1   | Pref | 01-PEC25DAAN50P-21    | PEC25DAAN         | SULLINS ELECTRONICS CORP. | PEC25DAAN         | CONNECTOR; MALE; THROUGH HOLE; BREAKAWAY; STRAIGHT; 50PINS; -65 DEGC TO +125 DEGC |  |
| 22 | 1  | J2   | Pref | 01-SSW12502SDRA50P-17 | SSW-125-02-S-D-RA | SAMTEC                    | SSW-125-02-S-D-RA | CONNECTOR; FEMALE; THROUGH HOLE; SQ POST SOCKET; RIGHT ANGLE; 50PINS              |  |
| 23 | 1  | JTAG   | Pref | 01-PEC05DAAN10P-21    | PEC05DAAN         | SULLINS ELECTRONICS CORP. | PEC05DAAN         | CONNECTOR; MALE; THROUGH HOLE; BREAKAWAY; STRAIGHT; 10PINS; -65 DEGC TO +125 DEGC |  |
| 24 | 4  | JUDON, JUD0P, JUD1N, JUD1P   | Pref | 01-222840434P-21      | 22-28-4043        | MOLEX                     | 22-28-4043        | CONNECTOR; MALE; THROUGH HOLE; FLAT VERTICAL BREAKAWAY; STRAIGHT; 4PINS           |  |
| 25 | 7  | JU_LED1-JU_LED3, JU_ADC_REF, JU_DAC_REF, JU_DAC_REFS, JU_VSSIO_GND | Pref | 01-PEC02SAAN2P-21     | PEC02SAAN         | SULLINS                   | PEC02SAAN         | CONNECTOR; MALE; THROUGH HOLE; BREAKAWAY; STRAIGHT; 2PINS; -65 DEGC TO +125 DEGC  |  |
| 26 | 2  | JU_AVDD, JU_DVDD   | Pref | 01-PEC03SAAN3P-21     | PEC03SAAN         | SULLINS                   | PEC03SAAN         | CONNECTOR; MALE; THROUGH HOLE; BREAKAWAY; STRAIGHT; 3PINS; -65 DEGC TO +125 DEGC  |  |
| 27 | 1  | Q1   | Pref | 90-IRLML6402-16       | IRLML6402         | INTERNATIONAL RECTIFIER   | IRLML6402         | TRAN; HEXFET POWER MOSFET; PCH; SOT-23; PD-(1.3W); I-(-3.7A); V-(-20V)            |  |
| 28 | 3  | R1, R2, R11  | Pref | 80-0100K-24           | N/A               | ?                         | 100K              | RESISTOR; 0603; 100K; 1%; 100PPM; 0.10W; THICK FILM                               |  |
| 29 | 28 | R3, R12, R15, R18-R20, R32-R43, R48-R57                            | Pref | 80-0000R-27A          | N/A               | ?                         | 0                 | RESISTOR; 0603; 0 OHM; 5%; JUMPER; 0.10W; THICK FILM                              |  |
| 30 | 2  | R4, R29  | Pref | 80-0010K-24           | N/A               | ?                         | 10K               | RESISTOR; 0603; 10K; 1%; 100PPM; 0.10W; THICK FILM                                |  |
| 31 | 11 | R5, R6, R13, R14, R46, R47, RD0N, RD0P, RD1N, RD1P, RAVDD          | Pref | 80-0010R-24           | N/A               | ?                         | 10                | RESISTOR; 0603; 10 OHM; 1%; 100PPM; 0.10W; THICK FILM                             |  |

|    |    |                               |      |                  |              |       |              |  |              |
|----|----|-------------------------------|------|------------------|--------------|-------|--------------|--|--------------|
| 32 | 2  | R7, R10                       | Pref | 80-0002K-24      | N/A          | ?     | 2K           | RESISTOR, 0603, 2K OHM, 1%,<br>100PPM, 0.10W, THICK FILM   |              |
| 33 | 1  | R8                            | Pref | 80-0012K-24      | N/A          | ?     | 12K          | RESISTOR, 0603, 12K OHM, 1%,<br>100PPM, 0.10W, THICK FILM  |              |
| 34 | 3  | R9, R44, R45                  | Pref | 80-0470R-24      | N/A          | ?     | 470          | RESISTOR, 0603, 470 OHM, 1%,<br>100PPM, 0.10W, THICK FILM  |              |
| 35 | 2  | R16, R17                      | Pref | 80-001K6-53      | N/A          | ?     | 1.6K         | RESISTOR; 0603; 1.6K OHM; 5%;<br>200PPM; 0.10W; THICK FILM   |              |
| 36 | 1  | R23                           | Pref | 80-003K3-24      | N/A          | ?     | 3.3K         | RESISTOR, 0603, 3.3K OHM, 1%,<br>100PPM, 0.10W, THICK FILM   |              |
| 37 | 6  | R24-R28, R58                  | Pref | 80-0000R-27      | N/A          | ?     | 0            | RESISTOR; 0603; 0 OHM; 0%;<br>JUMPER; 0.10W; THICK FILM  |              |
| 38 | 1  | R30                           | Pref | 80-0015K-24      | N/A          | ?     | 15K          | RESISTOR, 0603, 15K OHM,1%,<br>100PPM, 0.10W, THICK FILM   |              |
| 39 | 1  | R31                           | Pref | 80-0020K-23      | N/A          | ?     | 20K          | RESISTOR; 0402; 20K OHM; 1%;<br>100PPM; 0.063W; THICK FILM   |              |
| 40 | 3  | R103, R104, R107              | Pref | 80-004K7-19      | N/A          | ?     | 4.7K         | RESISTOR; 0603; 4.7K; 1%; 100PPM;<br>0.10W; THICK FILM   |              |
| 41 | 1  | RUBBER_BUMPS                  | Pref | N/A              | SJ-5007      | 3M    | SJ-5007      | EVKIT BUMPERS; SQUARE TAPERED;<br>WHITE-SET TO OBSOLETE; PLEASE<br>USE 02-SJ5007-09                              |              |
| 42 | 12 | SU1, SU2, SU7-SU13, SU15-SU17 | Pref | 02-JMPFS1100B-00 | SX1100-B     | KYCON | SX1100-B     | TEST POINT; JUMPER; STR; TOTAL<br>LENGTH=0.24IN; BLACK;<br>INSULATION=PBT;PHOSPHOR<br>BRONZE CONTACT=GOLD PLATED |              |
| 43 | 1  | U1                            | Pref | MAX11300GTL+     | MAX11300GTL+ | MAXIM | MAX11300GTL+ | EVKIT PART - IC; MAX11300GTL+;<br>PACKAGE CODE T4066-3   | MAX11300GTL+ |

|    |   |            |      |                          |                   |                                     |                   |  |                |
|----|---|------------|------|--------------------------|-------------------|-------------------------------------|-------------------|--|----------------|
| 44 | 1 | U2         | Pref | MAX8511EXK33+            | MAX8511EXK33+     | MAXIM                               | MAX8511EXK33      | IC; VREG; ULTRA-LOW-NOISE, HIGH PSRR, LOW-DROPOUT, LINEAR REGULATOR; SC70-5 ; -40 DEGC TO +85 DEGC | MAX8511EXK33+  |
| 45 | 2 | U3, U6     | Pref | MAX6071AAUT25+           | MAX6071AAUT25+    | MAXIM                               | MAX6071AAUT25+    | IC; VREF; LOW NOISE; HIGH-PRECISION SERIES VOLTAGE REFERENCE; SOT23-6                              | MAX6071AAUT25+ |
| 46 | 1 | U4         | Pref | MAX6389LT31D3+           | MAX6389LT31D3+    | MAXIM                               | MAX6389LT31D3+    | IC; UP; DUAL LOW-VOLTAGE; LOW-POWER UP RESET CIRCUIT; UDFN6  | MAX6389LT31D3+ |
| 47 | 1 | U7         | Pref | MAX8511EXK25+            | MAX8511EXK25+     | MAXIM                               | MAX8511EXK25-T    | IC; VREG; ULTRA-LOW-NOISE HIGH PSRR LOW-DROPOUT LINEAR REGULATOR; SC70-5 ; -40 DEGC TO +85 DEGC    | MAX8511EXK25+  |
| 48 | 1 | U8         | Pref | MAX1659ESA               | MAX1659ESA        | MAXIM                               | MAX1659ESA        | IC; VREG; LOW-DROPOUT LINEAR REGULATOR; NSOIC8   | MAX1659ESA     |
| 49 | 2 | U101, U102 | Pref | 10-ISO7640FMDW-W         | ISO7640FMDW       | TEXAS INSTRUMENTS                   | ISO7640FMDW       | IC; DISO; LOW POWER QUAD CHANNELS DIGITAL ISOLATOR; WSOIC16 300MIL                                 |                |
| 50 | 1 | U105       | Pref | MAX14591ETA+             | MAX14591ETA+      | MAXIM                               | MAX14591ETA+      | IC; TRANS; HIGH-SPEED; OPEN-DRAIN CAPABLE LOGIC-LEVEL TRANSLATOR; TDFN8                            | MAX14591ETA+   |
| 51 | 1 | U120       | Pref | MAXQ2000-RAX+            | MAXQ2000-RAX+     | MAXIM                               | MAXQ2000-RAX      | IC, CTRL, LOW-POWER LCD MICROCONTROLLER, QFN68   | MAXQ2000-RAX+  |
| 52 | 1 | U200       | Pref | 10-FT232HL-C             | FT232HL           | FUTURE TECHNOLOGY DEVICES INTL LTD. | FT232HL           | IC; INFC; SINGLE CHANNEL HI-SPEED USB TO MULTIPURPOSE UART/FIFO; LQFP48                            |                |
| 53 | 1 | USB1       | Pref | 01-10033526N3212MLF5P-26 | 10033526-N3212MLF | FCI CONNECT                         | 10033526-N3212MLF | CONNECTOR; FEMALE; SMT; MINI USB B-TYPE SMT RECEPTACLE; RIGHT ANGLE; 5PINS                         |                |

| 54              | 2   | VDDIO, VSSIO                   | Pref       | 02-TPMINI5004-00   | 5004          | ?               | N/A        | TEST POINT; PIN DIA=0.1IN; TOTAL LENGTH=0.3IN; BOARD HOLE=0.04IN; YELLOW; PHOSPHOR BRONZE WIRE SILVER PLATE FINISH; RECOMMENDED FOR BOARD THICKNESS=0.062IN; NOT FOR COLD TEST |          |
|-----------------|-----|--------------------------------|------------|--------------------|---------------|-----------------|------------|--|----------|
| 55              | 1   | Y1                             | Pref       | 60-0012M-12B       | ATS12ASM-1E   | CTS             | 12MHZ      | CRYSTAL; SMT ; ATS SERIES; 12PF; 12MHZ; +/-30PPM; +/-50PPM; -40 DEGC TO +85 DEGC   |          |
| 56              | 1   | Y120                           | Pref       | 60-0020M-24A       | ECS-200-20-3X | ECS INC.        | 20MHZ      | CRYSTAL; SMT ; CSM-3X SERIES; 20PF; 20MHZ; +/-30PPM; +/-50PPM; -10 DEGC TO +70 DEGC  |          |
| 57              | 1   |                                | Pref       | EPCB11300          | EPCB11300     | MAXIM           | PCB        | PCB: EPCB11300   |          |
| TOTAL           | 212 |                                |            |                    |               |                 |            |  |          |
| DO NOT PURCHASE |     |                                |            |                    |               |                 |            |  |          |
| ITEM            | QTY | REF DES                        | Var Status | MAXINV             | MFG PART #    | MANUFACTURER    | VALUE      | DESCRIPTION  | COMMENTS |
| 1               | 1   | JU_ADO_CSB                     | DNI        | 01-PEC05DAAN10P-21 | PEC05DAAN     | SULLINS ELECTRC | PEC05DAAN  | CONNECTOR; MALE; THROUGH HOLE; BREAKAWAY; STRAIGHT; 10PINS; -65 DEGC TO +125 DEGC  |          |
| 2               | 1   | JU_AD1_DOUT                    | DNI        | 01-222840434P-21   | 22-28-4043    | MOLEX           | 22-28-4043 | CONNECTOR; MALE; THROUGH HOLE; FLAT VERTICAL BREAKAWAY; STRAIGHT; 4PINS  |          |
| 3               | 6   | JU_INTB, JU_CNVTB, JU_U1_AVDD, | DNI        | 01-PEC02SAAN2P-21  | PEC02SAAN     | SULLINS         | PEC02SAAN  | CONNECTOR; MALE; THROUGH HOLE; BREAKAWAY; STRAIGHT; 2PINS; -65 DEGC TO +125 DEGC   | DNB      |
| 4               | 2   | JU_SCL, JU_SDA                 | DNI        | 01-PEC02SAAN2P-21  | PEC02SAAN     | SULLINS         | PEC02SAAN  | CONNECTOR; MALE; THROUGH HOLE; BREAKAWAY; STRAIGHT; 2PINS; -65 DEGC TO +125 DEGC   |          |

| 5       | 2   | JU_SDA_DIN, JU_SCL_SCLK | DNI           | 01-PEC03SAAN3P-21 | PEC03SAAN     | SULLINS   | PEC03SAAN   | CONNECTOR; MALE; THROUGH HOLE; BREAKAWAY; STRAIGHT; 3PINS; -65 DEGC TO +125 DEGC |
|---------|-----|-------------------------|---------------|-------------------|---------------|-----------|---|--|
| 6       | 3   | R21, R22, R59           | DNI           | N/A               | N/A           | N/A       | OPEN  | PACKAGE OUTLINE 0603 RESISTOR - EVKIT  |
| 7       | 3   | RLED1-RLED3             | DNI           | N/A               | N/A           | N/A       | OPEN  | PACKAGE OUTLINE 0603 RESISTOR - EVKIT  |
| 8       | 2   | TP132, TP142            | DNI           | 02-TPMINI5000-00  | 5000?         | N/A       | TEST POINT; PIN DIA=0.1IN; TOTAL LENGTH=0.3IN; BOARD HOLE=0.04IN; RED; PHOSPHOR BRONZE WIRE SILVER PLATE FINISH; RECOMMENDED FOR BOARD THICKNESS=0.062IN; NOT FOR COLD TEST | DNB  |
| 9       | 1   | U5                      | DNI           | 10-93LC56BTEOT-U  | 93LC56BT-E/OT | MICROCHIP | 93LC56BT-E/OT   | IC; EEPROM; 2K; 16-BIT MICROWIRE COMPATIBLE SERIAL EEPROM; SOT23-6               |
| TOTAL   | 21  |                         |               |                   |               |           |   |  |
|         |     |                         |               |                   |               |           |   |  |
|         |     |                         |               |                   |               |           |   |  |
| PACKOUT |     |                         |               |                   |               |           |   |  |
| ITEM    | QTY | REF DES                 | MAXINV        | MFG PART #        | MANUFACTURER  | VALUE     | DESCRIPTION   | STATUS   |
| 1       | 1   | PACKOUT                 | 88-00711-SML  | 88-00711-SML      | N/A           | ?         | BOX;SMALL BROWN 9 3/16"X7"X1 1/4" - PACKOUT   | ACTIVE   |
| 2       | 1   | PACKOUT                 | 87-02163-000  | 87-02163-000      | N/A           | ?         | ESD BAG;+;BAG; STATIC SHIELD ZIP 8"X10"; W/ ESD LOGO  | ACTIVE   |
| 3       | 1   | PACKOUT                 | 85-MAXKIT-PNK | 85-MAXKIT-PNK     | N/A           | ?         | PINK FOAM;FOAM;ANTI-STATIC PE 12inX12inX5MM - PACKOUT   | ACTIVE   |
| 4       | 1   | PACKOUT                 | EVINSET       | EVINSET           | N/A           | ?         | WEB INSTRUCTIONS FOR MAXIM DATA SHEET   | ACTIVE   |
| 5       | 1   | PACKOUT                 | 85-84003-006  | 85-84003-006      | N/A           | ?         | LABEL(EV KIT BOX) - PACKOUT   | ACTIVE   |
| TOTAL   | 5   |                         |               |                   |               |           |   |  |



**Стандарт  
Электрон  
Связь**

Мы молодая и активно развивающаяся компания в области поставок электронных компонентов. Мы поставляем электронные компоненты отечественного и импортного производства напрямую от производителей и с крупнейших складов мира.

Благодаря сотрудничеству с мировыми поставщиками мы осуществляем комплексные и плановые поставки широчайшего спектра электронных компонентов.

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