

## Evaluates: MAX14906

## MAX14906 Peripheral Module

### General Description

The MAX14906 peripheral module provides the hardware to evaluate the MAX14906 four-channel configurable industrial digital input/output (DIO) device. Refer to the [MAX14906 IC data sheet](#) for detailed information regarding the operation of the IC. The module takes advantage of the features in the MAX14906 that allow DOI\_ to be configured as a high-side or push-pull digital output, or a type 1/3 or type 2 digital input. The external pMOS on board allows the DOI\_ to go higher than the 24V field supply for full IEC 61131-2 digital input compatibility.

**Note:** The module provides a subset of the MAX14906 features. For greater flexibility, refer to the [MAX14906 Evaluation Kit](#).

The MAX14906PMB# has a 12-pin Pmod™-compatible connector for SPI communication. The peripheral module can be used in various ways; Analog Devices sells the low-cost USB2PMB2# and USB2GPIO# adapter boards that use the Munich GUI software for SPI communication through a USB cable. This is not included with this board but is available from Analog Devices or one of its distributors. Alternatively, any microcontroller or FPGA with a 12-pin Pmod-compatible connector for SPI communication can be used.

The PCB dimension is just 62mm x 22.6mm, with the width determined by the size of the DOI terminal block J2. [Figure 1](#) shows the MAX14906PMB# board photo.

### Features

- Easy Evaluation of the MAX14906
- Configurable as Type 1/3 or Type 2 Digital Input or High-Side or Push-Pull Digital Output
- SafeDemag™ for Safe Turn-Off of Unlimited Inductance in Digital Output Modes
- Accurate Internal Current Limiter for Type 1/3 or Type 2 Digital Inputs
- Support Load Current Up to 1.2A per Channel
- Works with USB2PMB2# or USB2GPIO# Adapter and Munich GUI Software
- Fully Assembled and Tested
- Proven PCB Layout
- RoHS Compliant

### Contents

- MAX14906PMB# with the MAX14906ATM+
- 24V DC power adapter

### MAX14906PMB# EV Kit Files

FILE	DESCRIPTION
Munich GUISetupV2.24.exe or later	Munich GUI software for use with the USB2PMB2# or USB2GPIO# adapter

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

### MAX14906PMB# Photo

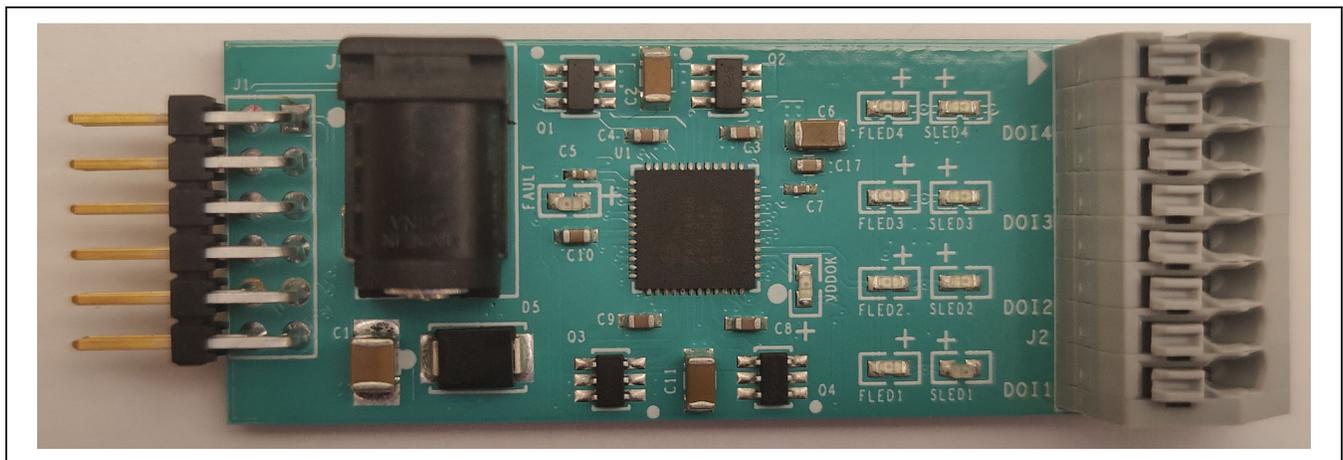


Figure 1. MAX14906PMB# Board Photo

Pmod is a trademark of Digilent Inc.

SafeDemag is a trademark of Analog Devices, Inc.

319-100875; Rev 0; 01/22

System Diagram

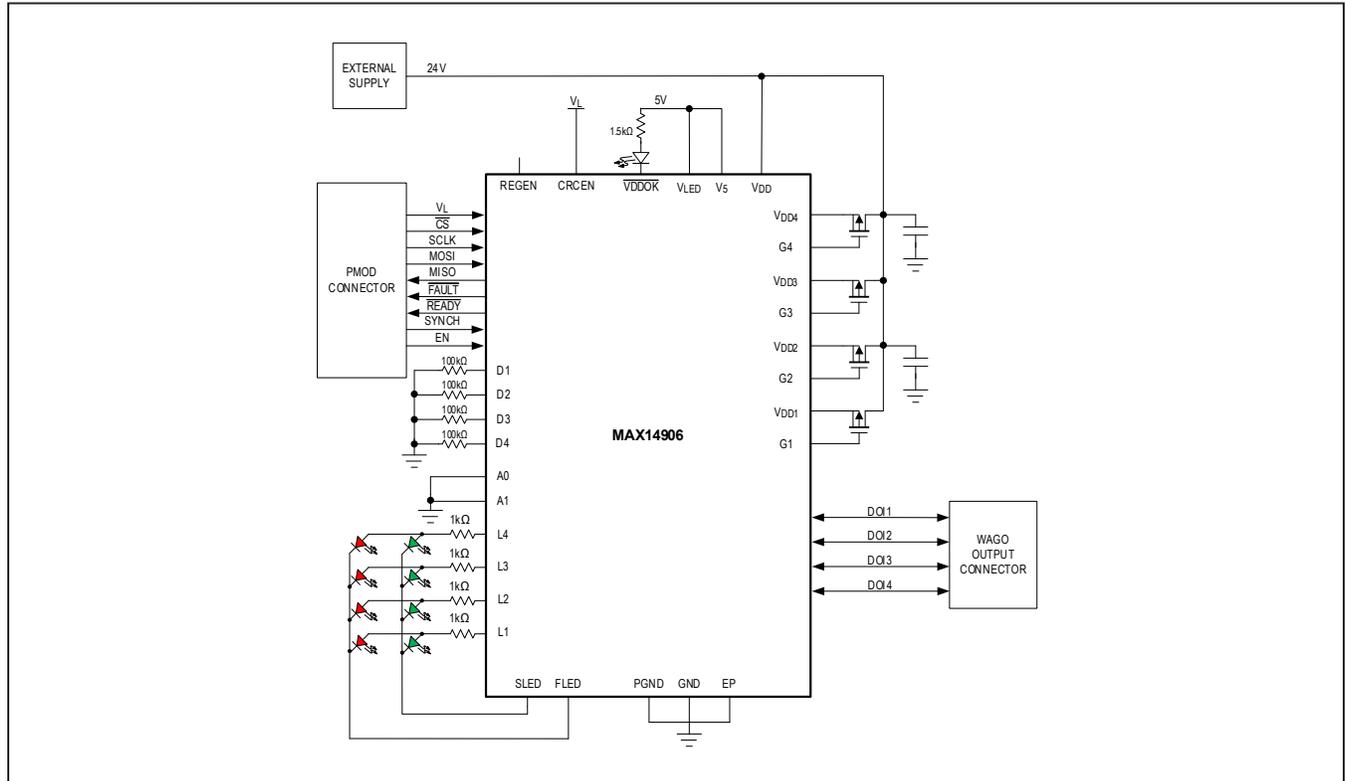


Figure 2. MAX14906PMB# Block Diagram

Quick Start

Required Equipment

- MAX14906PMB#
- 24V DC power adapter
- USB2PMB2# or USB2GPIO# adapter board
- Micro-USB cable
- Windows 10 PC with a spare USB port
- Munich GUI v2.24 or higher

**Note:** In the following section(s), software-related items are identified by bolding. Text in **bold** refers to items directly from the Munich GUI software. Text in **bold and underline** refers to items from the Windows operating system.

Procedure

The Pmod board is fully assembled and tested. Follow the steps below to verify board operation. If the USB2PMB2# or USB2GPIO# adapter is used, the user can download software by following the steps below to get started. In this description, the USB2PMB2# adapter is used.

- 1) Visit [www.maximintegrated.com](http://www.maximintegrated.com) to download the latest version of the Munich GUI software, version 2.24 or later.
- 2) Save the software to a temporary folder. Double-click the .exe file to run the installer. A message box **Do you want to allow the following program to make changes to this computer?** might appear. If so, click **Yes**.
- 3) The installer includes the drivers for the hardware and software. Follow the instructions on the installer, and once complete, click **Finish**. The default location of the software is in the program files directory.

- 4) Connect the 24V DC power adapter to J3 of the MAX14906PMB# to power up the board. The  $\overline{\text{VDDOK}}$  LED (green) turns on.
- 5) Connect the MAX14906PMB# Pmod connector J1 to the Pmod connector on the USB2PMB2#.
- 6) Connect the USB2PMB2# to the PC with the micro-USB cable. The  $\overline{\text{FAULT}}$  LED (red) turns on.
- 7) Once the hardware is ready to use, launch the Munich GUI software. The status bar in the GUI should display **Disconnected** in the bottom right corner. To configure the MAX14906PMB#, go to the **Device** tab, select **Industrial Digital**, then select the **MAX14906PMB** as shown in [Figure 3](#).
- 8) The GUI should automatically detect the USB-2PMB2# board serial number and show it in the **USB2PMB Adapter** drop-down menu list. If no serial number is displayed, check the USB connection and click **Scan Adapters** button. Select the USB2PMB2# board serial number from the drop-down menu list once it shows up.
- 9) Click **Connect** button and observe that the  $\overline{\text{FAULT}}$  LED (red) turns off.
- 10) Connect the DOI1 (pin 8) and GND (pin 7) from the J2 connector to an oscilloscope or digital multimeter. The MAX14906PMB# is configured in High-Impedance mode (**High-Z**) by default after power-up. In the **DO Mode** section, the digital output type selected by default is **PP (Simple)**, simple push-pull mode. Using the CH1 drop-down menu, drive DOI1 high by setting the signal type from the default **High-Z** to **Static High**. Observe that SLED1 LED (green) is turned on, the Munich GUI shows **HI** on the **Readback** column for CH1 as shown in [Figure 7](#), and the multimeter or oscilloscope shows a 24V DC signal.
- 11) Using the CH1 drop-down menu, drive DOI1 low by setting the signal type from **Static High** to **Static Low**. Observe that SLED1 LED (green) turns off, the Munich GUI shows **LO** on the **Readback** column for CH1, and the multimeter or oscilloscope shows a 0V signal.
- 12) Configure the DOI2 channel to digital input mode by selecting **Digital Input** from the CH2 drop-down menu as shown in [Figure 8](#). A radio button menu appears to allow the user to select digital input type between **DI Type 1/3** and **DI Type 2**, as shown in [Figure 9](#). Make sure that **DI Type 1/3** is selected.
- 13) Connect the DOI2 (pin 6) and GND (pin 5) from the J2 connector to a power supply capable of sourcing 24V.
- 14) Observe that when the DC voltage applied is below the input threshold voltage (minimum 6.7V), SLED2 LED stays off, and the Munich GUI shows **LO** on the **Readback** column for CH2 as shown in [Figure 9](#). When the DC voltage applied is above the input threshold voltage (maximum 8V), observe that SLED2 LED turns on, and the Munich GUI shows **HI** on the **Readback** column for CH2. The input current should not increase above 2.3mA (typ) as the voltage increases.

### Detailed Description of Hardware

The MAX14906 is an IEC 61131-2 compliant, high-speed, four-channel industrial digital input/digital output device that can be configured on a per-channel basis as a high-side (HS) switch, push-pull (PP) driver, or a Type 1 and 3, or Type 2 digital input. The MAX14906 is specified for operation with a field supply voltage of 24V typical and tolerant to 65V. The MAX14906PMB# comes with a standard 2.1mm barrel connector as the main supply connector. A 24V DC power adapter is included with the module for user's convenience. For ease of use, this module only supports a subset of the MAX14906 features. For greater flexibility, refer to the [MAX14906 Evaluation Kit](#).

The MAX14906PMB# hardware provides everything needed to evaluate the MAX14906 using the Pmod interface. An optional USB2PMB2# or USB2GPIO# adapter can be used with the Munich GUI to provide the USB-to-SPI interface to communicate with the MAX14906. The adapter generates a 3.3V output from the USB interface, providing  $V_L$  to the MAX14906.

The MAX14906PMB# does not feature galvanic isolation. If the user wishes to isolate the module, select the USB2GPIO# adapter board and use it with the USB2GPIOISO# isolation module. Both modules work seamlessly with the Munich GUI.

### Pmod Style Connector

The MAX14906PMB# can plug directly into a Pmod-compatible port through J1.

The pin definitions are determined by the USB2PMB2# or USB2GPIO# adapter, and if the user wishes to use this board with their own host, they must configure the microcontroller or FPGA to match the MAX14906PMB# J1 pinout. See [MAX14906PMB# Schematic](#) for the J1 pinout. For more information on the SPI interface and control, refer to the [MAX14906 IC datasheet](#).

## Power Supply

A 24V DC power adapter, SDI65-24-UDC-P5, with a maximum of 2.71A output current is included with the MAX14906PMB# and is required to be connected to J3 for normal operation. If the user requires a higher load current on DOI\_ pins than the power adapter can provide, they can choose to use their own DC power supply.

**Note:** The MAX14906 is specified for operation with a supply voltage up to 40V and is tolerant to 65V. The barrel connector J3 is rated up to 5A maximum. Do not operate beyond these maximum ratings.

## LEDs

The MAX14906PMB# comes with 4x2 LED matrix, providing 4 green LEDs (SLED1 – SLED4) indicating per-channel input or output status, and 4 red LEDs (FLED1 – FLED4) indicating per channel fault conditions. If a FLED\_ LED is turned on for a channel, the corresponding SLED\_ LED is always turned off. This mitigates false information about the status of the affected DOI\_ channel.

The field supply ( $V_{DD}$ ) diagnostic faults are provided through the VDDOK LED. The global diagnostic faults are provided through the FAULT LED. The Munich GUI provides limited access to the diagnostic features of the MAX14906. If user wishes to explore the full diagnostic capabilities of the MAX14906, refer to the [MAX14906 Evaluation Kit](#).

## Transient Immunity Protection

No external surge suppression is needed on DOI\_ pins as they are protected against negative 1kV surge pulses per IEC 61000-4-5. A TVS diode should be connected between  $V_{DD}$  and GND to clamp positive surge pulses on the DOI\_ pins. The MAX14906PMB# DOI\_ pins are protected against  $\pm 1$ kV surge transients with TVS diode D5, SMBJ36A, connected between  $V_{DD}$  and GND.

The DOI\_ pins are also protected against  $\pm 8$ kV ESD contact discharge and  $\pm 15$ kV ESD air-gap discharge per IEC 61000-4-2 with 470pF capacitor on each DOI\_ to GND and 1 $\mu$ F capacitor on the  $V_{DD}$  side of the external pMOS to GND.

## External pMOS Transistors

The MAX14906PMB# has an external pMOS transistor for each channel to protect the MAX14906 against reverse current flow into the DOI\_ pins and allows the input voltages in DI modes to be higher than the field supply  $V_{DD}$  for full IEC 61131-2 digital input compatibility.

## Addressable SPI

The MAX14906 supports addressable SPI and allows direct communication with up to four MAX14906 devices. By default, the MAX14906PMB# is configured as SPI address 00, with A1 = 0 and A0 = 0. It is possible to change the SPI address using the provided resistor footprints by connecting A1 and A0 to  $V_L$  (R12 and R8) or GND (R16 and R18).

**Note:** If the SPI address is changed from the default value, it no longer works with the provided Munich GUI software and the user needs to develop their own software to support the new SPI address. For more information on SPI device address selection, refer to the [MAX14906 IC datasheet](#).

## Digital Input Operation

The MAX14906 has four DOI channels which can be configured as either Type 1 and 3, or Type 2 digital inputs. However, it is not possible to mix input types as the internal current sink is globally set to either 2.3mA (typ) for Type 1 and 3, or 7mA (typ) for Type 2 inputs. All DOI channels support a minimal voltage range of -3V to +30V which is compliant with IEC 61131-2 digital input standard.

## Digital Output Operation

The MAX14906 has four DOI channels which can be configured as either a high-side (HS) switch or push-pull (PP) driver. The high-side switch current limit is selectable for four operating ranges: 130mA, 300mA, 600mA, and 1.2A with the option of 2x inrush load current. The high-side driver has 120m $\Omega$  (typ) on-resistance at 25°C ambient temperature. The push-pull modes allow the high-speed driving of the cables and speed up the discharge of capacitive loads. There are two push-pull modes; simple push-pull and active-clamp push-pull. The simple push-pull mode switches the DOI voltage rail-to-rail inside the  $V_{DD}$  -to-GND range even when an inductive load is present. The active-clamp push-pull mode allows fast demagnetization of inductive load by clamping the DOI\_ at a negative voltage ( $V_{DD} - V_{CL}$ ) when low-side switch is turned on subsequent to the high-side switch being on. Both push-pull modes behave similarly when resistive and capacitive loads are driven. For full details about the four DO modes, refer to the [MAX14906 IC datasheet](#).

### Detailed Description of Software

For easy development and testing, Analog Devices provides the Munich GUI to communicate with the MAX14906PMB#. The Munich GUI supports a number of different Pmod boards using low-cost USB adapters, USB2PMB2# or USB2GPIO#, also available from Analog Devices.

### Connection to Hardware

The **Device** menu has options to select peripheral module as shown in [Figure 3](#). In this case, select **Industrial Digital**, then select the **MAX14906PMB**. Use the **Scan**

**Adapters** option to search for the USB2PMB2# or USB2GPIO# modules connected to the PC if the GUI does not automatically find the Pmod adapters. If adapters are found, the serial number of the adapters are listed in the **USB2PMB Adapter** drop-down list. Select the serial number of the adapter for the Munich GUI to communicate with. The software can only communicate to one module at a time. Select **Connect** and notice how status changes from **Disconnected** to **Connected** in the lower-right area of the GUI. The **Short-VDD** per channel monitoring is automatically enabled, and all **Global Faults** are **Low**, if the Munich GUI successfully communicates with the MAX14906PMB# as shown in [Figure 4](#).

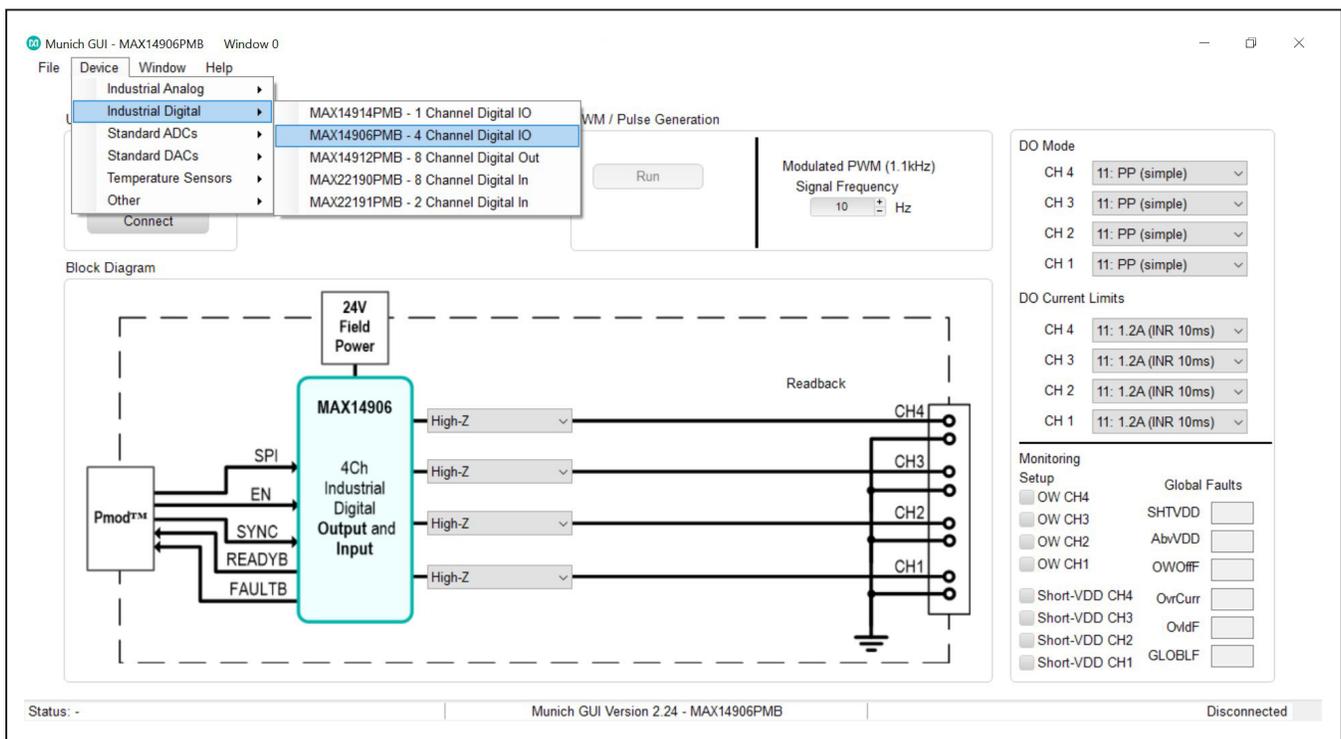


Figure 3. MAX14906PMB# Software (Munich GUI)

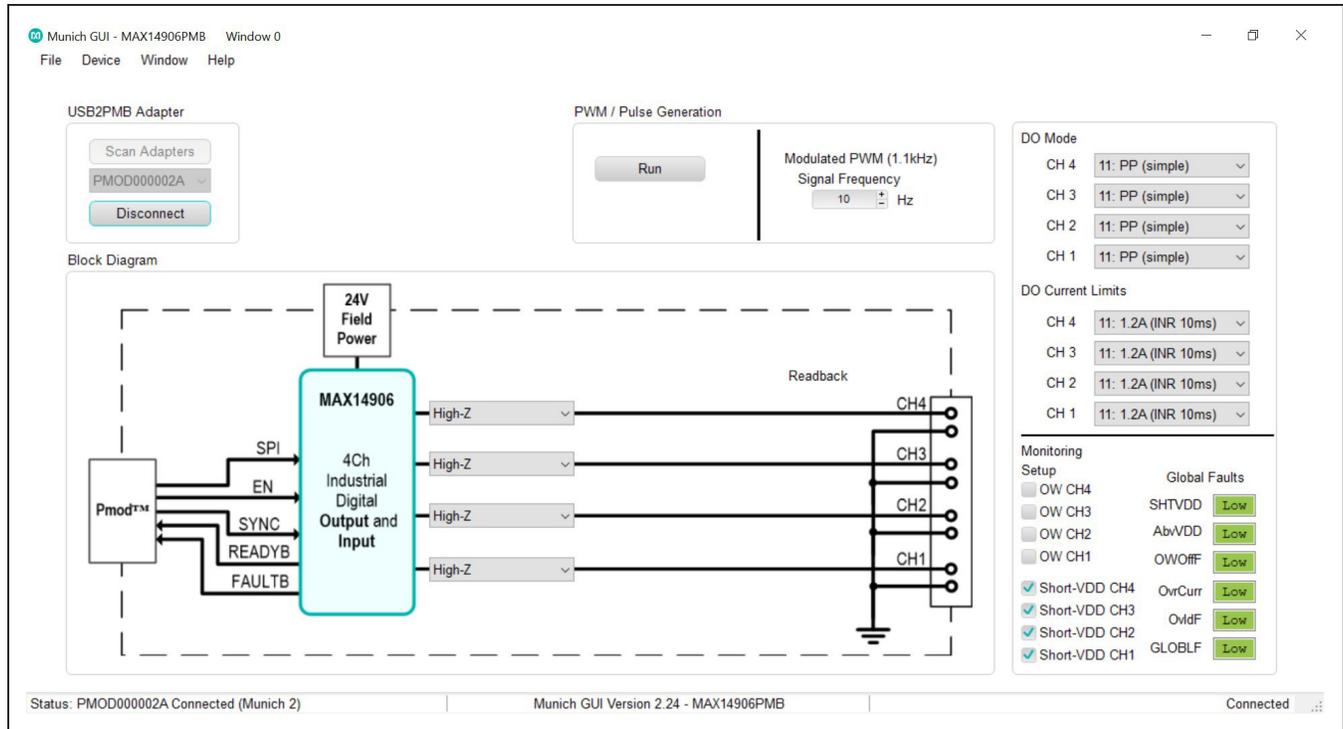


Figure 4. MAX14906PMB# Connected in Munich GUI

### Digital Output Configurations

All DOI channels of the MAX14906PMB# are configured in Low-Leakage High-Impedance mode by default after power up. The **DO Mode** section controls the output mode if a channel is configured as a digital output. The default digital output mode is **PP (Simple)**, simple push-pull mode. The user can change the DO mode by using the drop-down menu selecting among **High-side**, **High-side 2x INR**, **PP (active clamp)**, and **PP (simple)** modes as shown in [Figure 5](#).

The **DO Current Limits** section controls the high-side switch current limiting for each output channel. The default DO current limit is **1.2A (INR 10ms)**. The user can change DO current limit by using the drop-down menu selecting

among **600mA (INR 20ms)**, **130mA (INR 50ms)**, **300mA (INR 40ms)**, and **1.2A (INR 10ms)** as shown in [Figure 6](#).

The CH1-CH4 drop-down menus allow the user to configure the operation mode for each DOI channel. When operating as a digital output, the DOI\_channel can be driven to **Static Low**, **Static High**, **Static PWM**, **Modulated PWM**, or **Pulses (Ton/Toff)** as shown in [Figure 7](#). When configured to **Static Low**, the DOI\_channel is driven to 0V, and the **Readback** column of the corresponding channel is updated to **LO**. When configured to **Static High**, the DOI\_channel is driven to  $V_{DD}$ , and the **Readback** column is updated to **HI**. The PWM modes and Pulse mode are discussed in the [PWM Generation](#) and [Pulse Mode](#) sections.

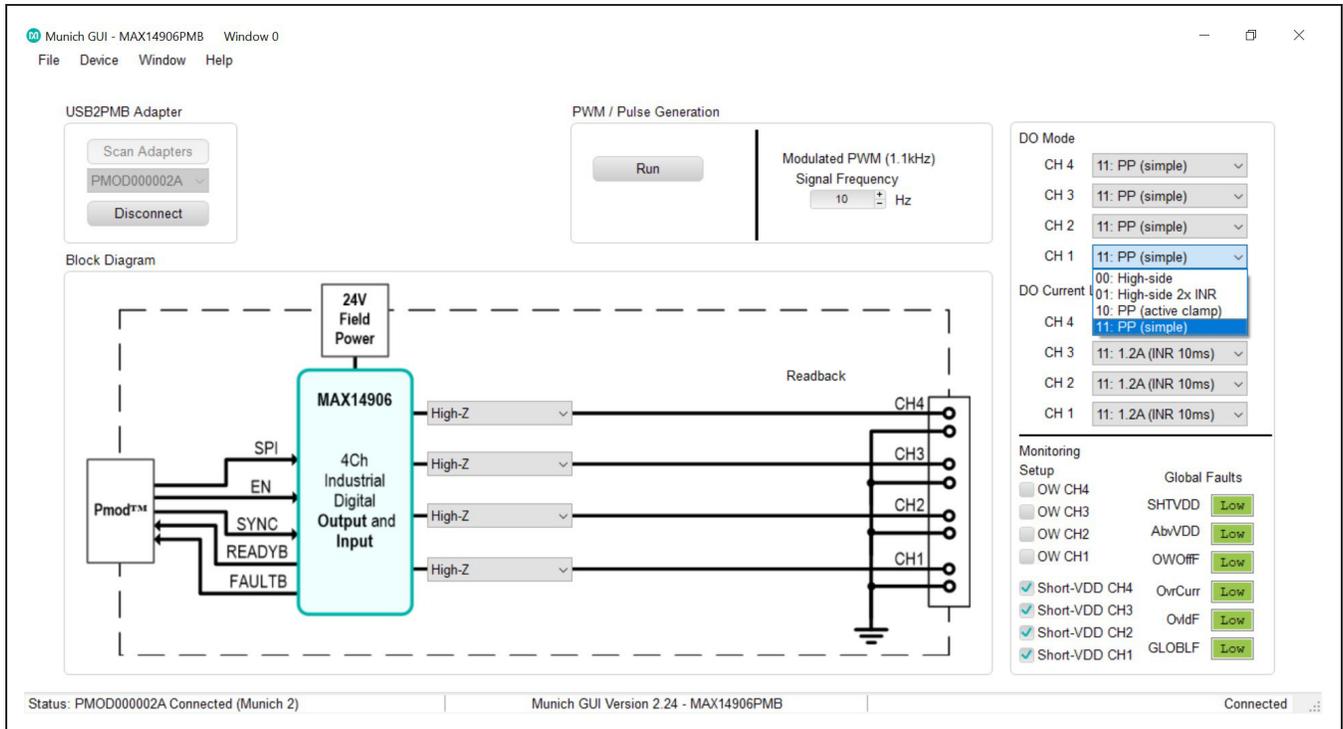


Figure 5. Digital Output Mode Configuration

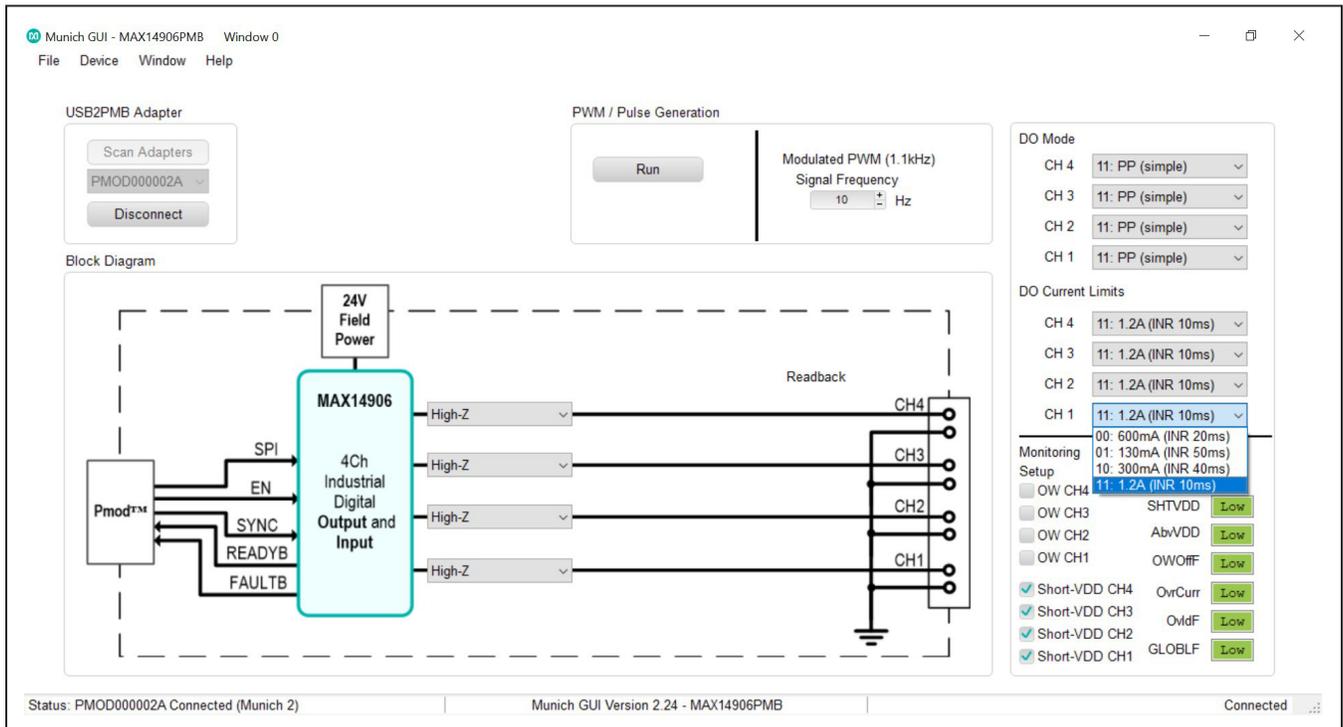


Figure 6. DO Current Limit Configuration

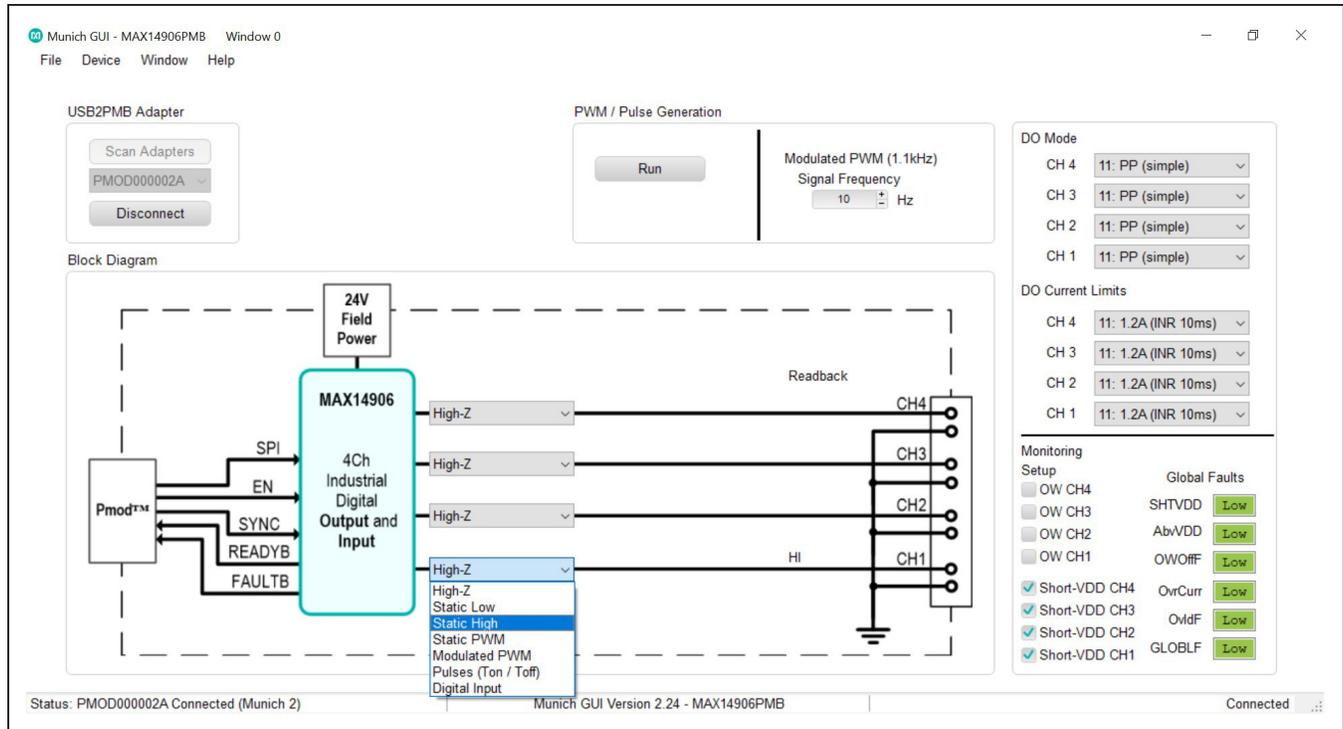


Figure 7. Digital Output Operation Mode Configuration

### Digital Input Configurations

To configure the DOI\_ channel to digital input mode, select **Digital Input** from the drop-down menu of the appropriate channel as shown in [Figure 8](#). In DI mode, the user can choose between the **DI Type 1/3** or **DI Type 2** using the radio button menu that appears, as shown in [Figure 9](#).

**Note:** It is not possible to mix input types as the internal current sink is globally set to either 2.3mA (typ) for type 1 and 3, or 7mA (typ) for type 2. By default, it is set to type 1/3 DI.

The **Readback** column of the input channel changes between **HI** and **LO**, and the SLED\_ LED of the channel turns on and off, depending on whether the signal level applied on the channel is above or below the digital input threshold voltage. Refer to the [MAX14906 IC datasheet](#) for detailed information on the digital input mode.

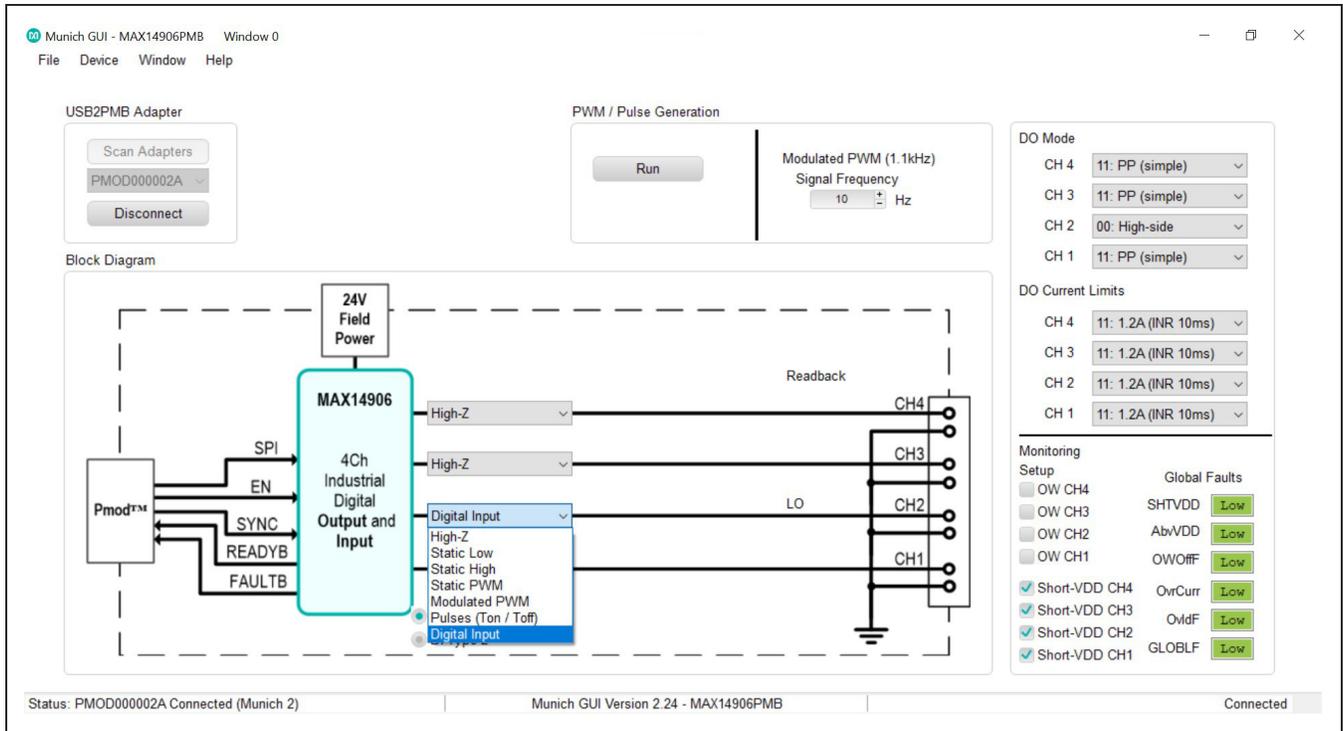


Figure 8. Digital Input Configuration

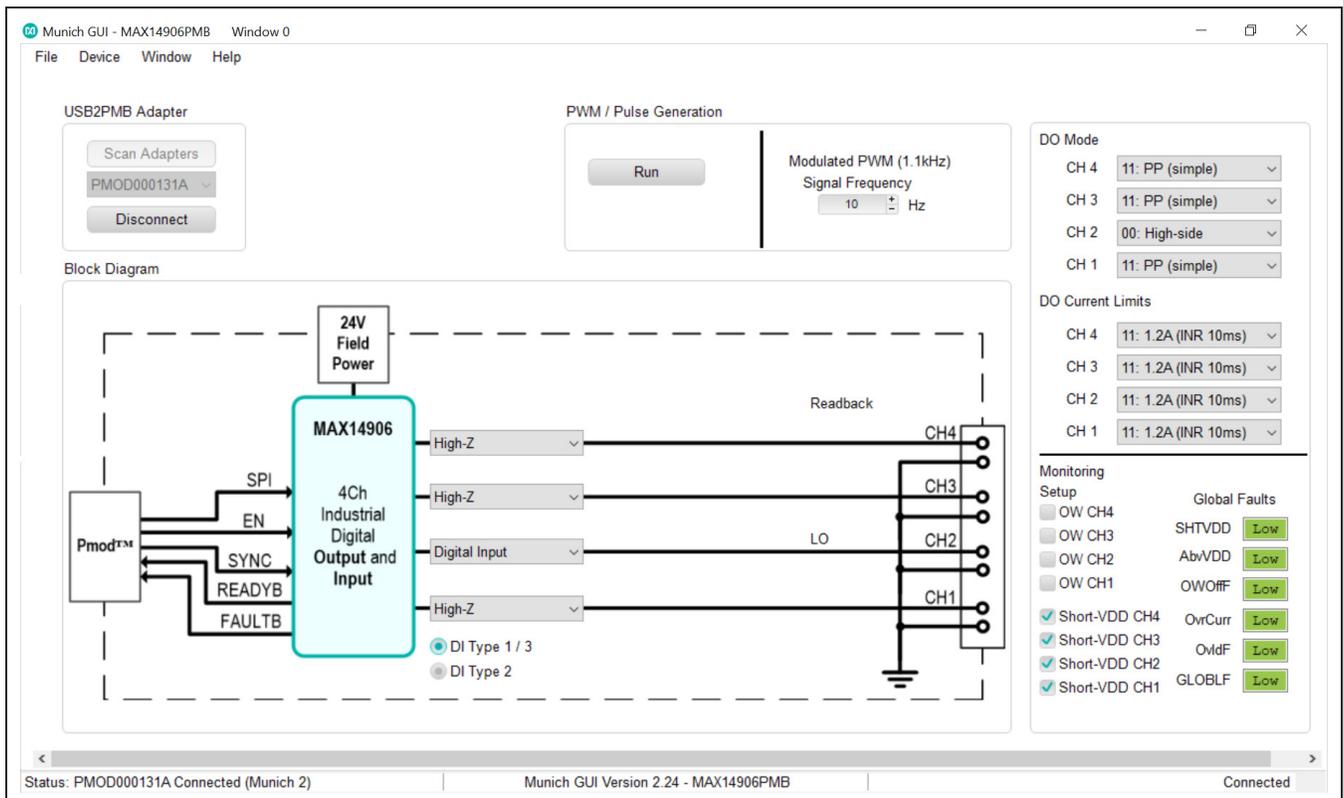


Figure 9. DI Type 1/3 or DI Type 2 Configuration in Digital Input Mode

**Diagnostic Features**

The MAX14906PMB# takes advantage of the built-in diagnostic features of the MAX14906 and provides basic fault monitoring using the Munich GUI. To explore the full diagnostic capabilities of the MAX14906, refer to the [MAX14906 Evaluation Kit](#).

Six global faults are provided on SDO in each SPI cycle and are displayed in the **Monitoring** section in the Munich GUI, which include **SHTVDD** (short-to-VDD), **AbvVDD** (above-VDD), **OWoffF** (open-wire detection in off-state), **OvrCurr** (current limit), **OvldF** (overload), as well as the **GLOBLF** (global diagnostic). The global fault bit

(GLOBLF) is the logical OR of the ComErr, SupplyErr, and ThrmShutd bits in the Interrupt and GlobalErr registers. The user can also enable or disable per-channel open-wire detection (**OW CH1 – OW CH4**) and per-channel short-to-VDD monitoring (**Short-VDD CH1 – Short-VDD CH4**), as shown in [Figure 10](#).

Both open-wire detection and short-to-VDD monitoring work in the high-side digital output mode when the switch is in the off state. For more details on the per-channel and global diagnostics features, refer to the [MAX14906 IC datasheet](#).

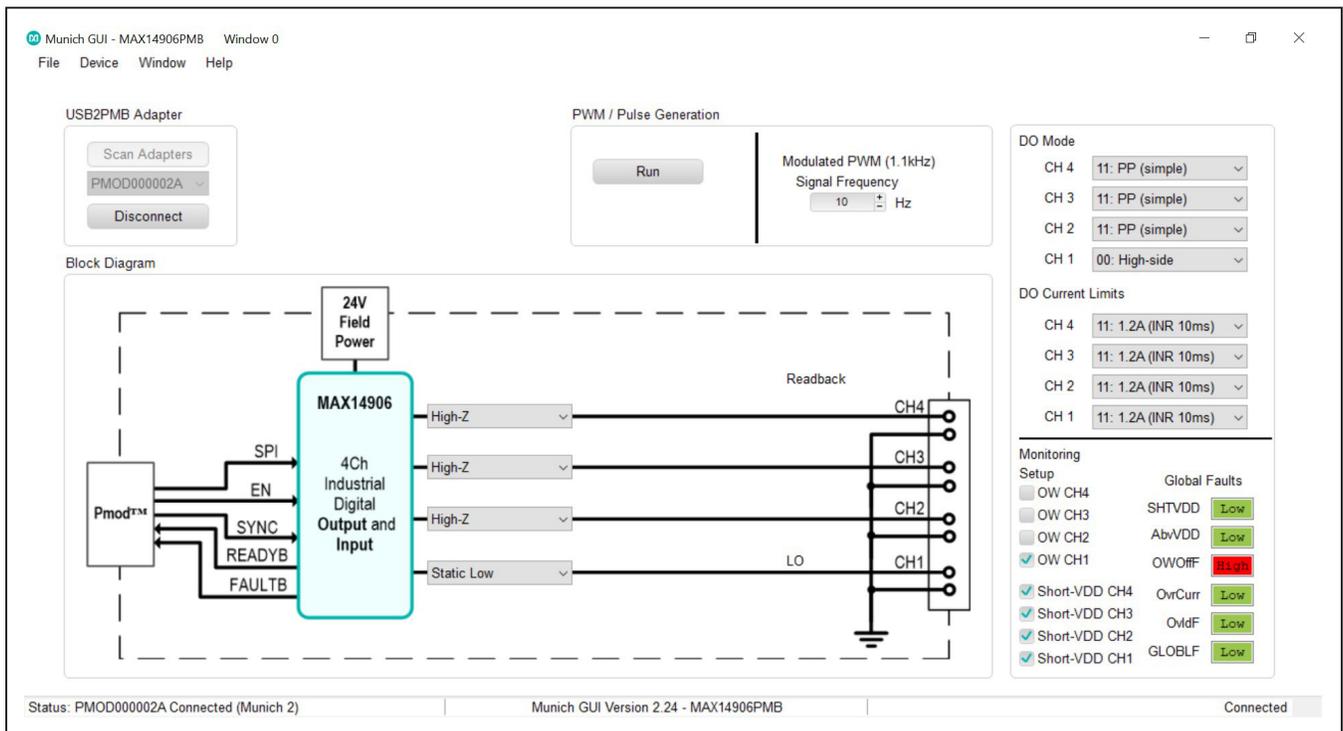


Figure 10. Diagnostic Features

**PWM Generation**

Two types of PWM generation are provided in the Munich GUI when a channel is configured as digital output: **Static PWM** and **Modulated PWM**. To drive a Static PWM signal on a DOI\_ channel, select the **Static PWM** from the drop-down menu. Once selected, the duty cycle can be adjusted using the second drop-down menu that appears shown in [Figure 11](#). The signal frequency can be

adjusted using the **Signal Frequency** box in the **PWM/ Pulse Generation** section. Click **Run** button to drive the DOI\_ channel. The user can change the duty cycle while actively driving a DOI\_ channel.

**Note:** The maximum signal frequency depends on the DOI\_ load condition and the selected DO mode of the channel.

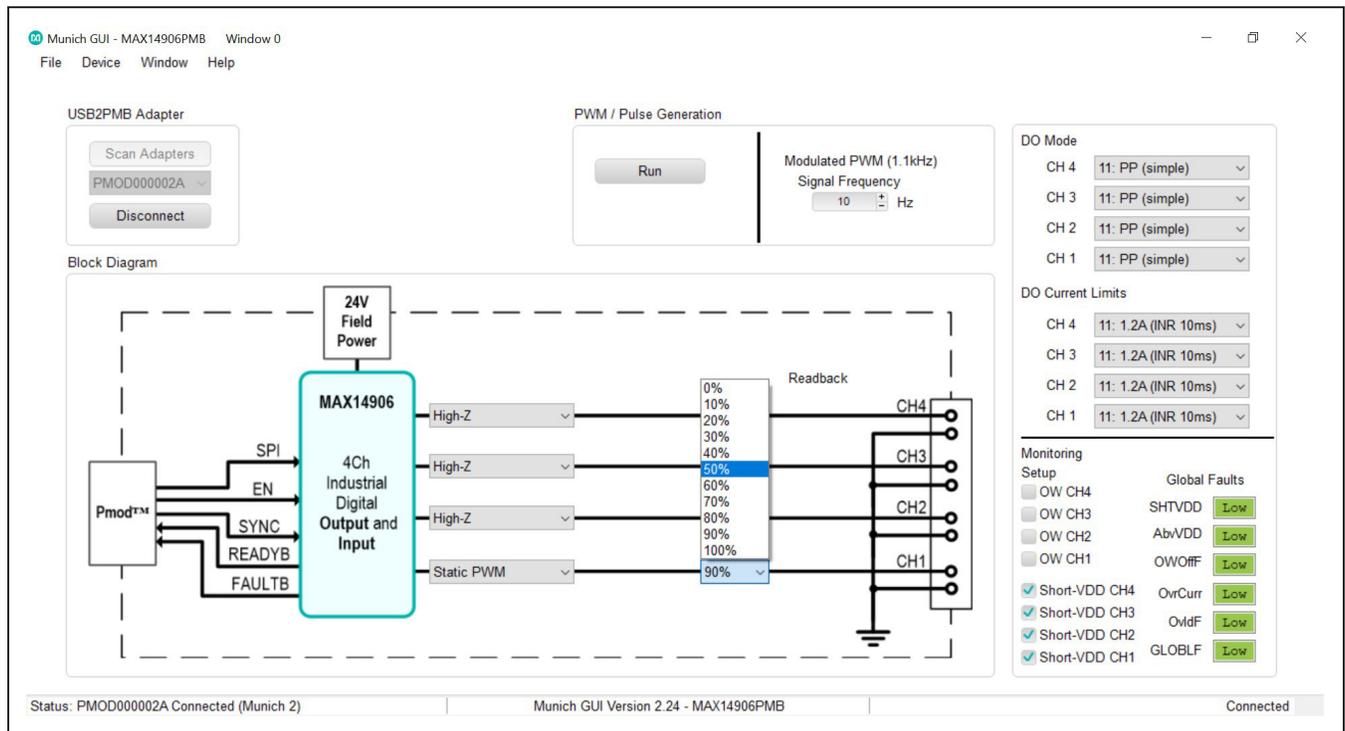


Figure 11. Static PWM Generation

To drive a modulated PWM signal on a DOI\_ channel, select the **Modulated PWM** from the drop-down menu. A second drop-down menu appears where the user can choose different signal types: **Sine**, **Sine+60°**, **Sine+120°**, **Sine+180°**, **Sine+240°**, **Sine+300°**, **Triangle**, **Sawtooth L**, and **Sawtooth R**. A third drop-down menu appears where the duty cycle can also be adjusted as shown in [Figure 12](#). The signal frequency can be adjusted using the

**Signal Frequency** box in the **PWM/Pulse Generation** section. Click **Run** button to drive the DOI\_ channel.

**Note:** The maximum signal frequency depends on the DOI\_ load condition and the selected DO mode of the channel. The modulation signal frequency is fixed at 1.1kHz.

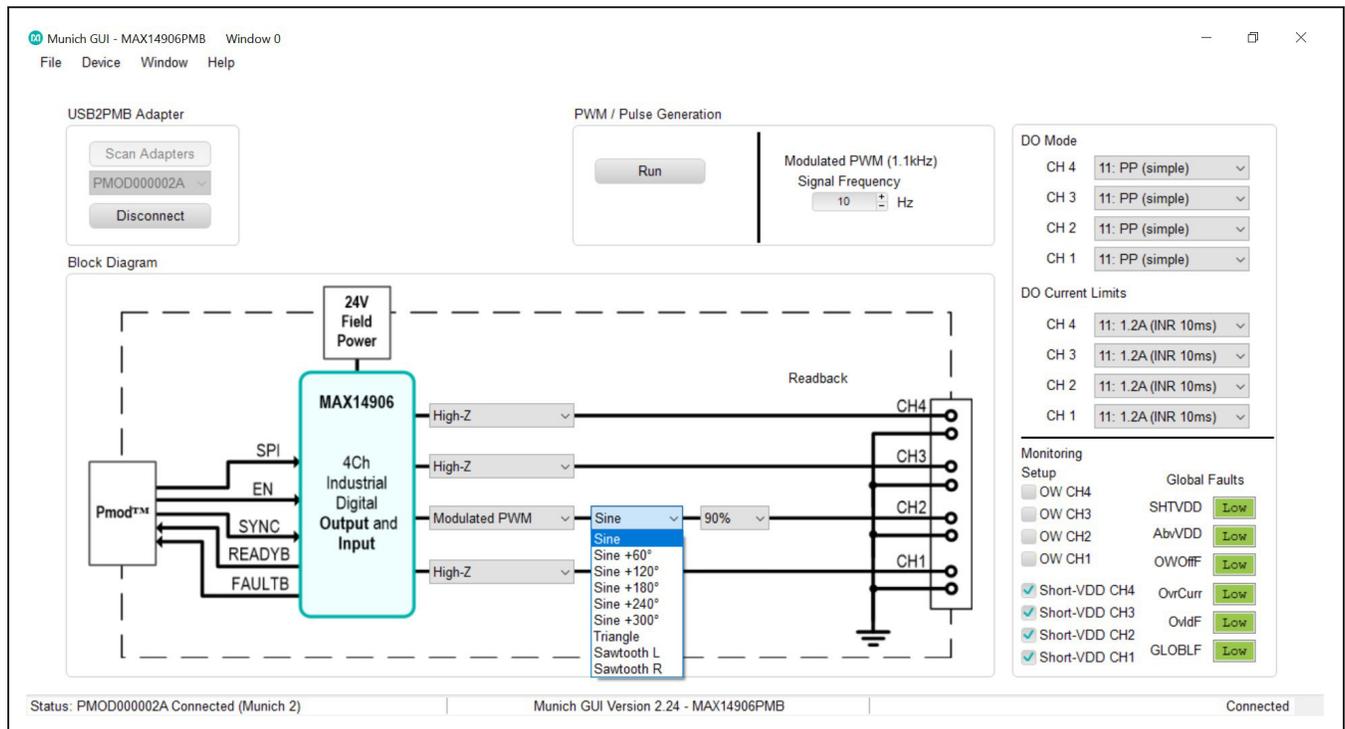


Figure 12. Modulated PWM Generation

**Pulse Mode**

The user can drive a pulse signal for each DOI\_ channel and configure its on and off time by selecting **Pulses (Ton/Toff)** from the drop-down menu, as shown in [Figure 13](#). To configure the on and off time, first set up the **Ton** for each channel, and then adjust **Toff** only for one

channel. The cycle is automatically equalized so that the pulse periods on all DOI\_ channels that are configured in pulse mode are the same. Different cycle lengths between different DOI\_ channels are not supported, and the total time (Ton + Toff) should be less than 1000ms. Once the appropriate Ton and Toff values are entered, click **Run** button to activate the pulse output.

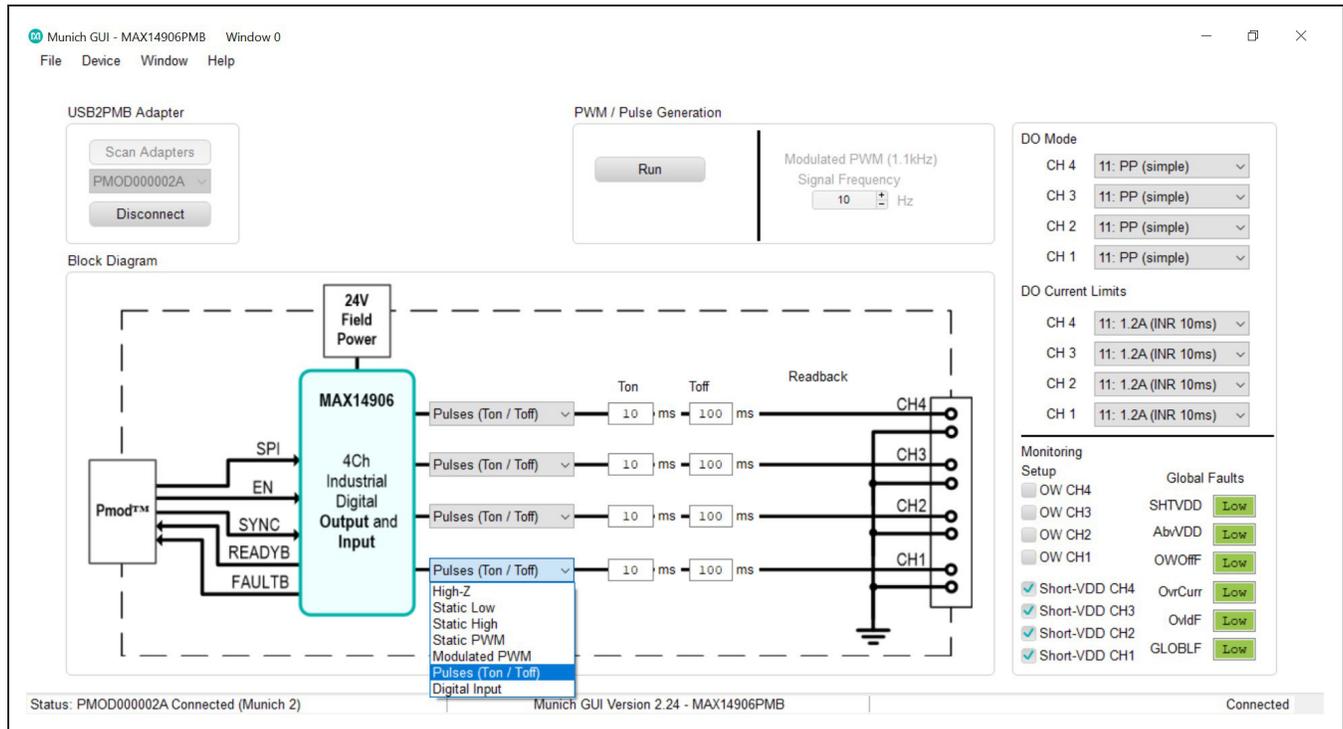


Figure 13. Pulse Generation

**Ordering Information**

PART	TYPE
MAX14906PMB#	Peripheral Module

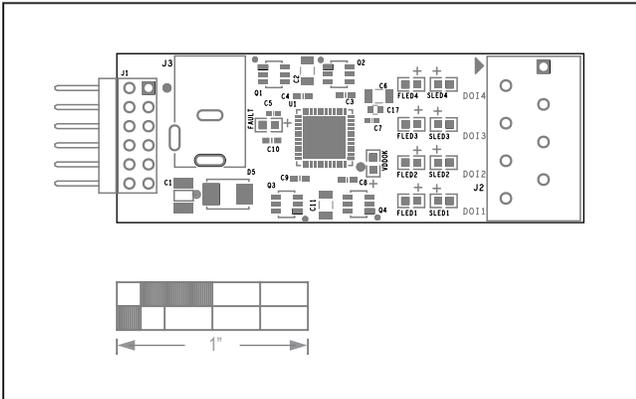
#Denotes RoHS compliance.

MAX14906PMB# Bill of Materials

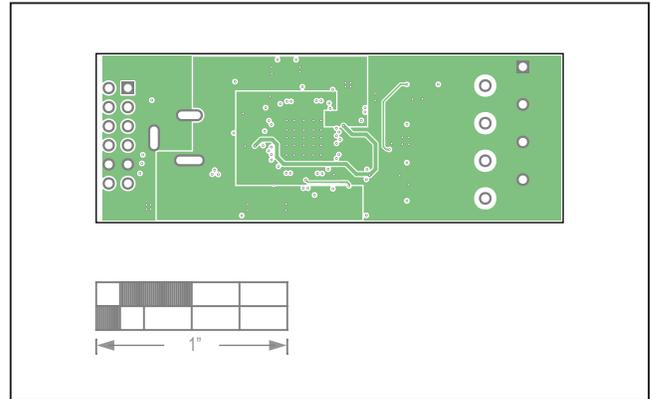
ITEM	REF_DES	DNI/DNP	QTY	MFG PART #	MANUFACTURER	VALUE	DESCRIPTION	COMMENTS
1	C1	-	1	GRM32EC72A106KE05	MURATA	10UF	CAP; SMT (1210); 10UF; 10%; 100V; X7S; CERAMIC	
2	C2, C6, C11	-	3	C3216X7R2A105K160AA; GCH31CR72A105KE01; HMK316B7105KLH	MURATA;TDK;MURATA; TAIYO YUDEN	1UF	CAP; SMT (1206); 1UF; 10%; 100V; X7R; CERAMIC	
3	C3, C4, C8, C9	-	4	C0603C471K1GAC	KEMET	470PF	CAP; SMT (0603); 470PF; 10%; 100V; C0G; CERAMIC	
4	C5	-	1	GRM155R71A104KA01; C1005X7R1A104K050BB; C0402C104K8RAC	MURATA;TDK;KEMET	0.1UF	CAP; SMT (0402); 0.1UF; 10%; 10V; X7R; CERAMIC	
5	C7	-	1	GRM155R71E104KE14; C1005X7R1E104K050BB; TMK105B7104KVH; CGJ2B3X7R1E104K050BB	MURATA;TDK;TAIYO YUDEN;TDK	0.1UF	CAP; SMT (0402); 0.1UF; 10%; 25V; X7R; CERAMIC	
6	C10	-	1	C0603C105K4RAC; C1608X7R1C105K080AC; EMK107B7105KA; CGA3E1X7R1C105K080AC; 0603YC105KAT2A	KEMET;MURATA;TDK; TAIYO YUDEN;TDK;AVX	1UF	CAP; SMT (0603); 1UF; 10%; 16V; X7R; CERAMIC	
7	C17	-	1	CC0603KRX7R0BB104; GRM188R72A104KA35; HMK107B7104KA; 06031C104KAT2A; GRM188R72A104K	YAGEO;MURATA;TAIYO YUDEN;AVX;MURATA	0.1UF	CAP; SMT (0603); 0.1UF; 10%; 100V; X7R; CERAMIC	
8	D5	-	1	SMBJ36A-E3	VISHAY GENERAL SEMICONDUCTOR	36V	DIODE; TVS; SMB (DO-214AA); VRM=36V; IPP=10.3A	
9	FAULT, FLED1-FLED4	-	5	LS L29K-G1J2-1-Z	OSRAM	LS L29K-G1J2-1-Z	DIODE; LED; SMART; RED; SMT (0603); PIV=1.8V; IF=0.02A; -40 DEGC TO +100 DEGC	
10	J1	-	1	TSW-106-08-S-D-RA	SAMTEC	TSW-106-08-S-D-RA	CONNECTOR; THROUGH HOLE; DOUBLE ROW; RIGHT ANGLE; 12PINS;	
11	J2	-	1	250-408	WAGO	250-408	CONNECTOR; FEMALE; THROUGH HOLE; COMPACT TERMINAL STRIP WITH PUSH BUTTON; STRAIGHT; 8PINS	
12	J3	-	1	PJ-202AH	CUI INC.	PJ-202AH	CONNECTOR; MALE; THROUGH HOLE; DC POWER JACK; RIGHT ANGLE; 3PINS	
13	Q1-Q4	-	4	SI3127DV-T1-GE3	VISHAY	SI3127DV-T1-GE3	TRAN; P-CHANNEL; 60V (D-S) MOSFET; PCH; TSOP6; PD-(4.2W); I(-5.1A); V(-60V)	
14	R1, R2, R17, R19	-	4	CRCW0402100FK; RC0402FR-07100KL	VISHAY;YAGEO	100K	RES; SMT (0402); 100K; 1%; +/-100PPM/DEGC; 0.0630W	
15	R3, R4, R10, R20-R24	-	8	CRCW040220R0FK	VISHAY DALE	20	RES; SMT (0402); 20; 1%; +/-100PPM/DEGC; 0.0630W	
16	R5, R6	-	2	RC0402FR-0710KL	YAGEO PHICOMP	10K	RES; SMT (0402); 10K; 1%; +/-100PPM/DEGC; 0.0630W	
17	R7	-	1	ERJ-2RKF1001	PANASONIC	1K	RES; SMT (0402); 1K; 1%; +/-100PPM/DEGC; 0.1000W	
18	R9, R25	-	2	ERJ-2RKF1002	PANASONIC	10K	RES; SMT (0402); 10K; 1%; +/-100PPM/DEGC; 0.1000W	
19	R11, R13-R15	-	4	RC0402FR-071KL; MCR01MZPF1001	YAGEO;ROHM SEMICONDUCTOR	1K	RES; SMT (0402); 1K; 1%; +/-100PPM/DEGC; 0.0630W	
20	R16, R18	-	2	ERJ-2GE0R00	PANASONIC	0	RES; SMT (0402); 0; JUMPER; JUMPER; 0.1000W	
21	R26	-	1	CRCW04021K50FK	VISHAY DALE	1.5K	RES; SMT (0402); 1.5K; 1%; +/-100PPM/DEGC; 0.0630W	
22	SLED1-SLED4, VDDOK	-	5	LGL29K-G2J1-24-Z	OSRAM	LGL29K-G2J1-24-Z	DIODE; LED; SMARTLED; GREEN; SMT; PIV=1.7V; IF=0.02A	
23	U1	-	1	MAX14906ATM+	MAXIM	MAX14906ATM+	EVKIT PART - IC; MAX14906ATM+; TQFN48-EP; PACKAGE CODE: T4866+6C; PACKAGE OUTLINE: 21-0144; PACKAGE LAND PATTERN: 90-0130	
24	PCB	-	1	MAX14906PMB	MAXIM	PCB	PCB:MAX14906PMB	-
25	R8, R12	DNP	0	ERJ-2GE0R00	PANASONIC	0	RES; SMT (0402); 0; JUMPER; JUMPER; 0.1000W	
TOTAL			56					



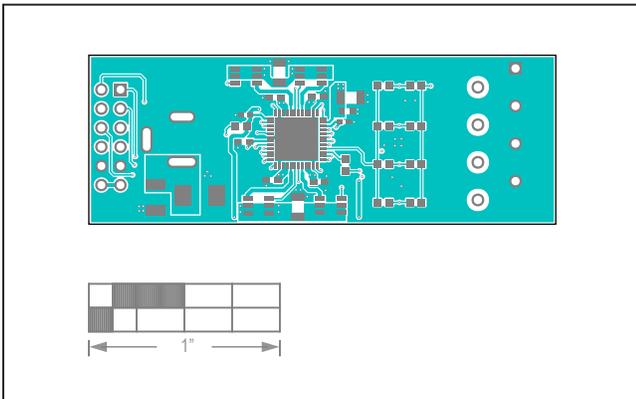
MAX14906PMB# PCB Layout Diagrams



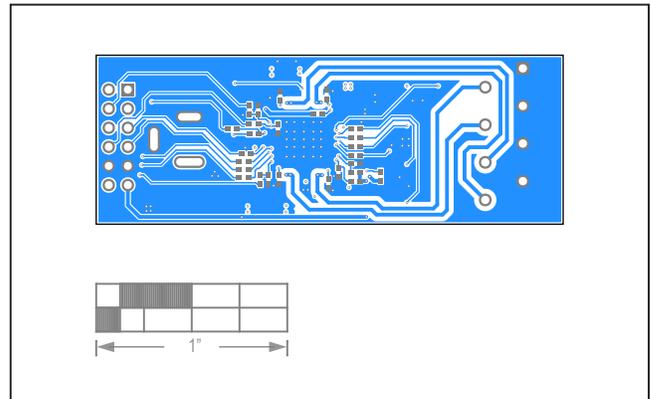
MAX14906PMB#—Silk Top



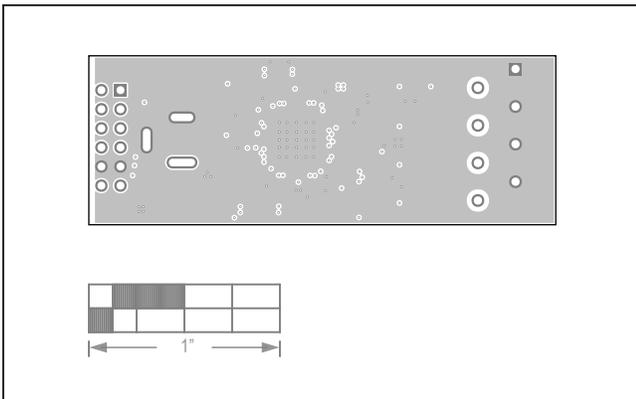
MAX14906PMB#—Layer3



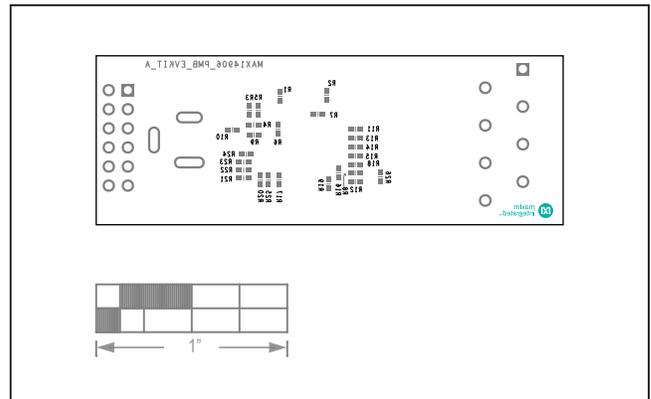
MAX14906PMB#—Top



MAX14906PMB#—Bottom



MAX14906PMB#—Layer2



MAX14906PMB#—Silk Bottom

Revision History

REVISION NUMBER	REVISION DATE	DESCRIPTION	PAGES CHANGED
0	01/22	Initial release	—

