

KITPF0100SKTEVBE Programming Socket

Configures PF Family Devices

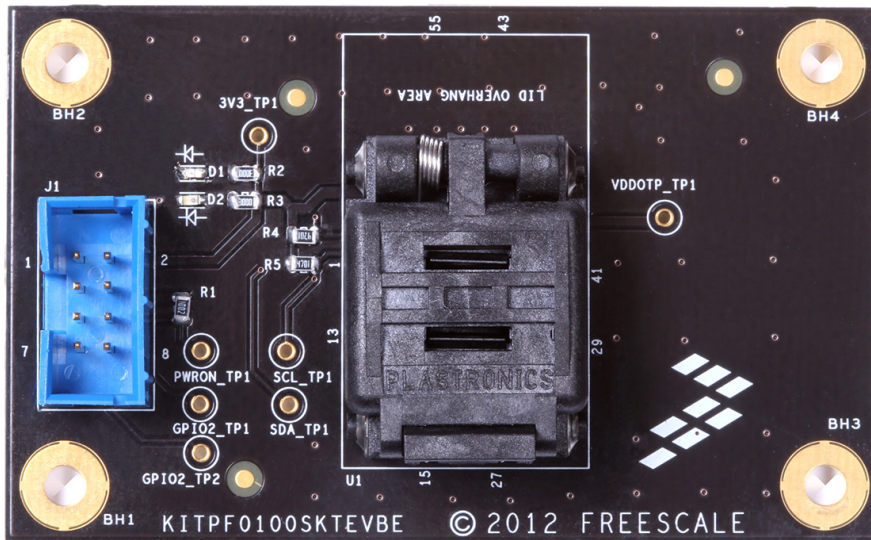


Figure 1. PF Programming Socket (KITPF0100SKTEVBE)

Table of Contents

1 Kit Contents/Packing List	2
2 Jump Start	2
3 Important Notice	3
4 Introduction	4
5 PF Programmer	4
6 Additional Required Equipment	4
7 Setting Up and Using the Hardware	5
8 Schematic	7
9 Board Layout	8
10 References	10
11 Revision History	11

1 Kit Contents/Packing List

- KITPF0100SKTEVBE socket board
- Warranty card and technical support brochure

2 Jump Start

- Go to www.freescale.com/analogtools
- Locate your kit
- Review your Tool Summary Page
- Look for



Jump Start Your Design

- Download documents, software and other information

3 Important Notice

Freescale provides the enclosed product(s) under the following conditions:

This evaluation kit is intended for use of ENGINEERING DEVELOPMENT OR EVALUATION PURPOSES ONLY. It is provided as a sample IC pre-soldered to a printed circuit board to make it easier to access inputs, outputs, and supply terminals. This EVB may be used with any development system or other source of I/O signals by simply connecting it to the host MCU or computer board via off-the-shelf cables. This EVB is not a Reference Design and is not intended to represent a final design recommendation for any particular application. Final device in an application will be heavily dependent on proper printed circuit board layout and heat sinking design as well as attention to supply filtering, transient suppression, and I/O signal quality.

The goods provided may not be complete in terms of required design, marketing, and or manufacturing related protective considerations, including product safety measures typically found in the end product incorporating the goods. Due to the open construction of the product, it is the user's responsibility to take any and all appropriate precautions with regard to electrostatic discharge. In order to minimize risks associated with the customers applications, adequate design and operating safeguards must be provided by the customer to minimize inherent or procedural hazards. For any safety concerns, contact Freescale sales and technical support services.

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4 Introduction

The KITPF0100SKTEVBE is an interface tool featuring a 56-pin QFN socket that is designed for programming the PF0x00 one-time programmable (OTP) registers in standalone PF0x00 parts by using the KITPFPGMEVME programmer.

5 PF Programmer

The PF Programmer (KITPFPGMEVME) is a development tool designed to provide easy configuration of the PF Series devices and to facilitate prototyping and programming the device's (OTP) one-time programmable fuses. The programmer kit comes with a PF series programmer, a flat ribbon cable (eight-conductor) and a mini-USB cable, as shown in [Figure 2](#).



Figure 2. KITPFPGMEVME PF Series Programmer

6 Additional Required Equipment

- USB-enabled PC with Windows XP or higher
- PF Series Programmer
- Flat ribbon cable (8-conductor)
- Mini USB cable

7 Setting Up and Using the Hardware

1. Insert the PF0x00 chip into the socket U1. Make sure pin 1 is correctly located on the top-left corner of the socket as shown in [Figure 3](#).

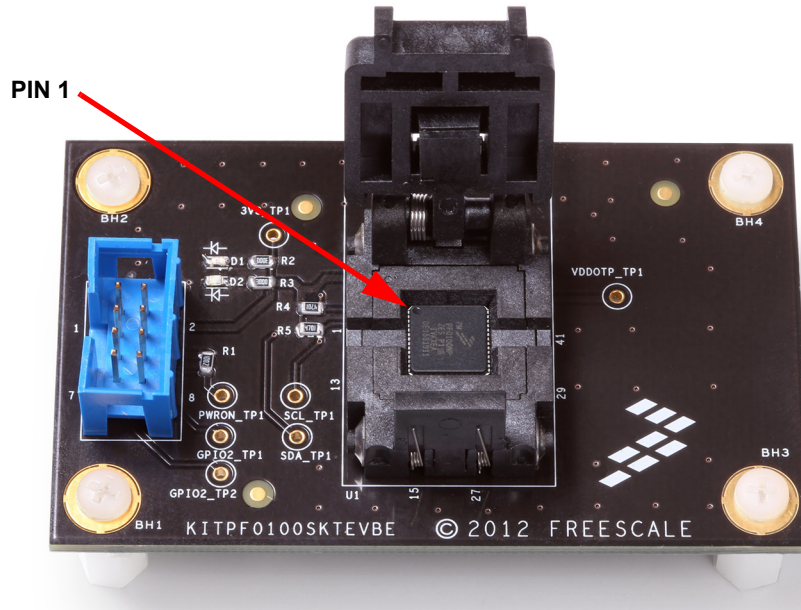


Figure 3. PF0x00 Pin 1 Location

2. Connect the communication ribbon cable (not included) on J1. [Figure 4](#) shows the correct signal allocation from the PF Programmer (KITPFGMEVME) to the KITPF0100SKTEVBE socket board.

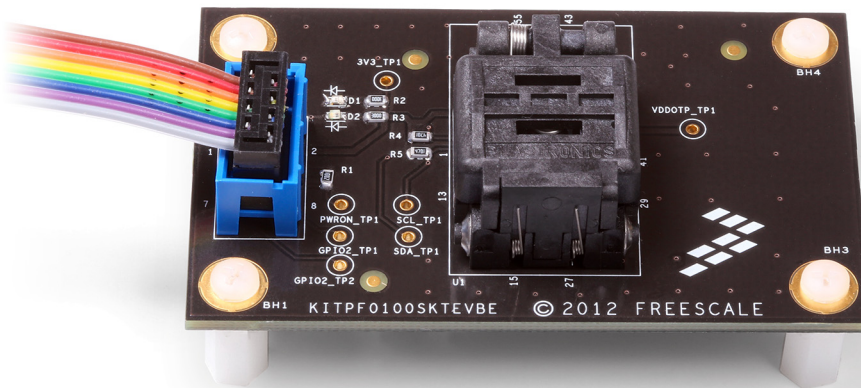
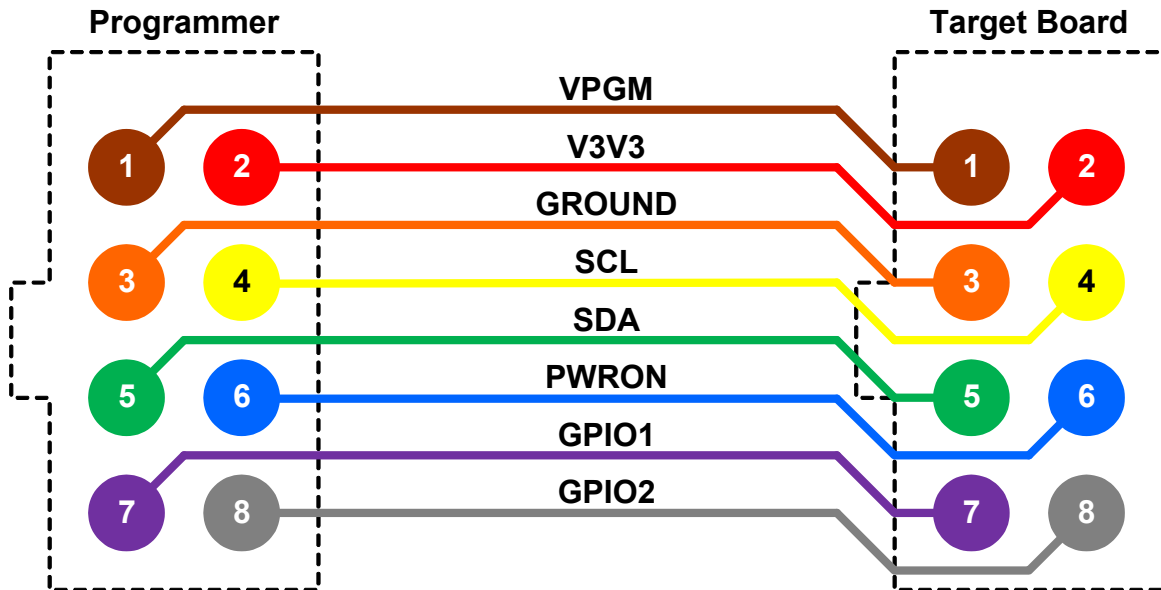
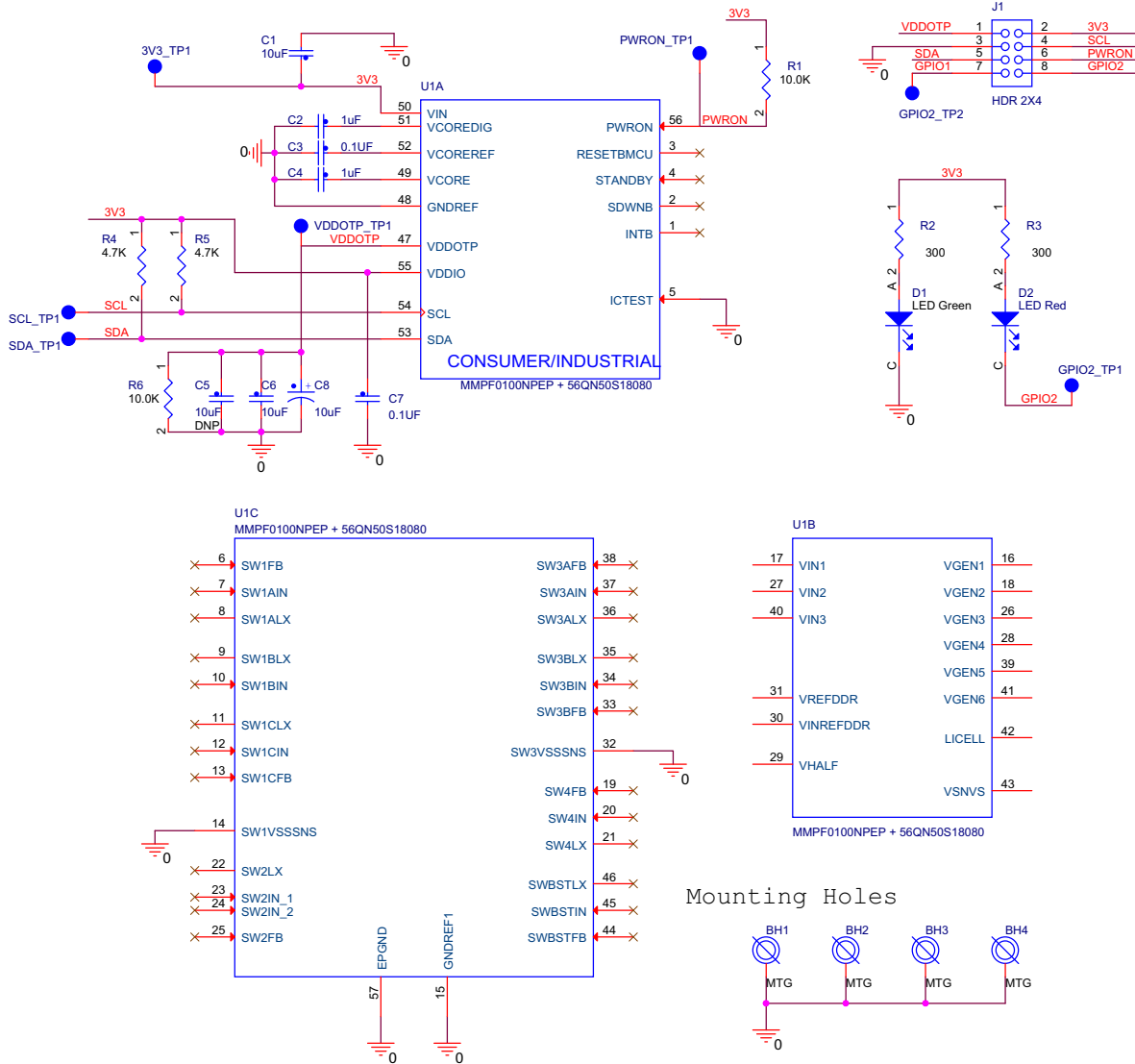


Figure 4. KITPF0100SKTEVBE Connection Diagram

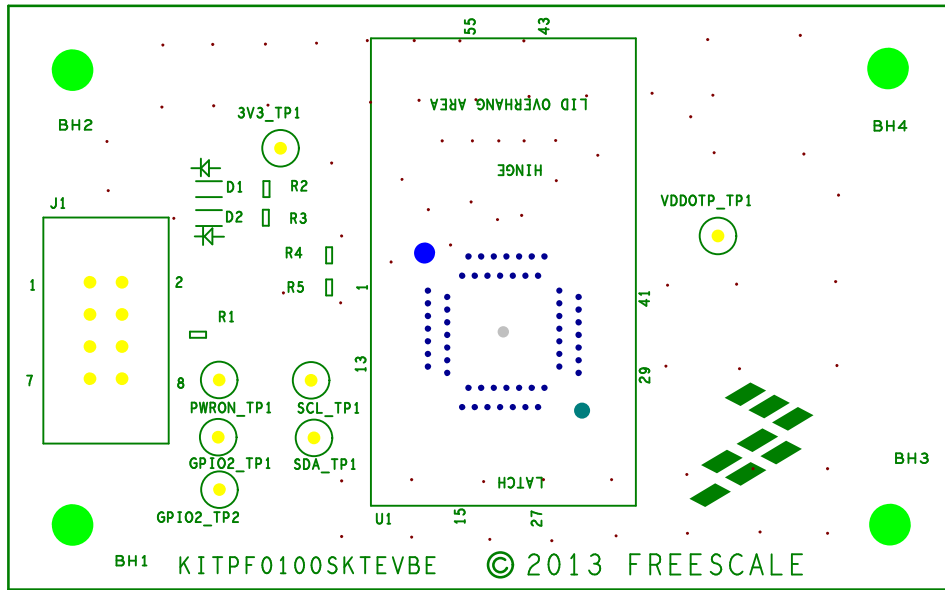
3. Follow the programming procedure outlined in the user's guide "KITPFGMEVME Programmer for PF Series Devices" (document number KTFPFGMEVMEUG). See the ["References"](#) section for details on this document as well as related resources.

8 Schematic

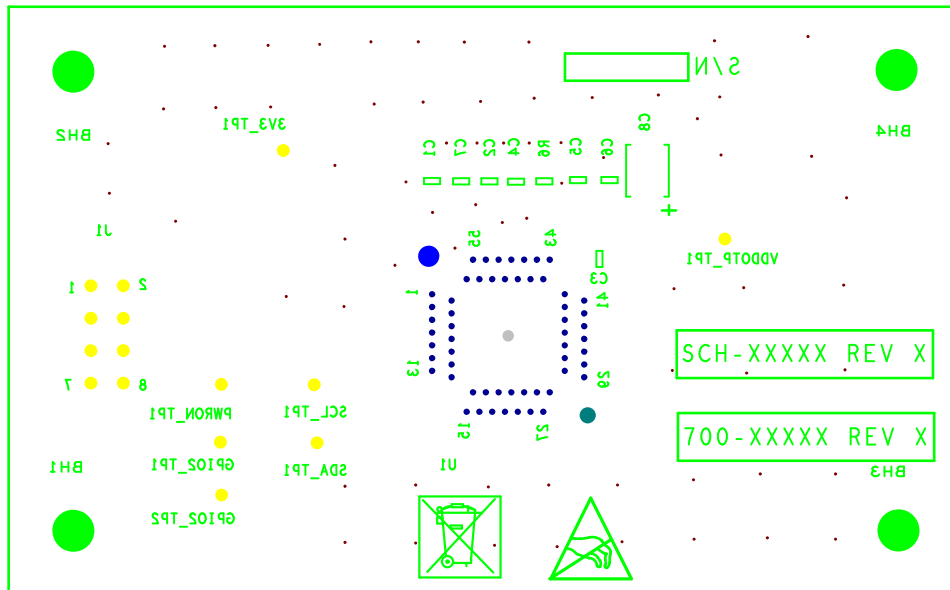


9 Board Layout

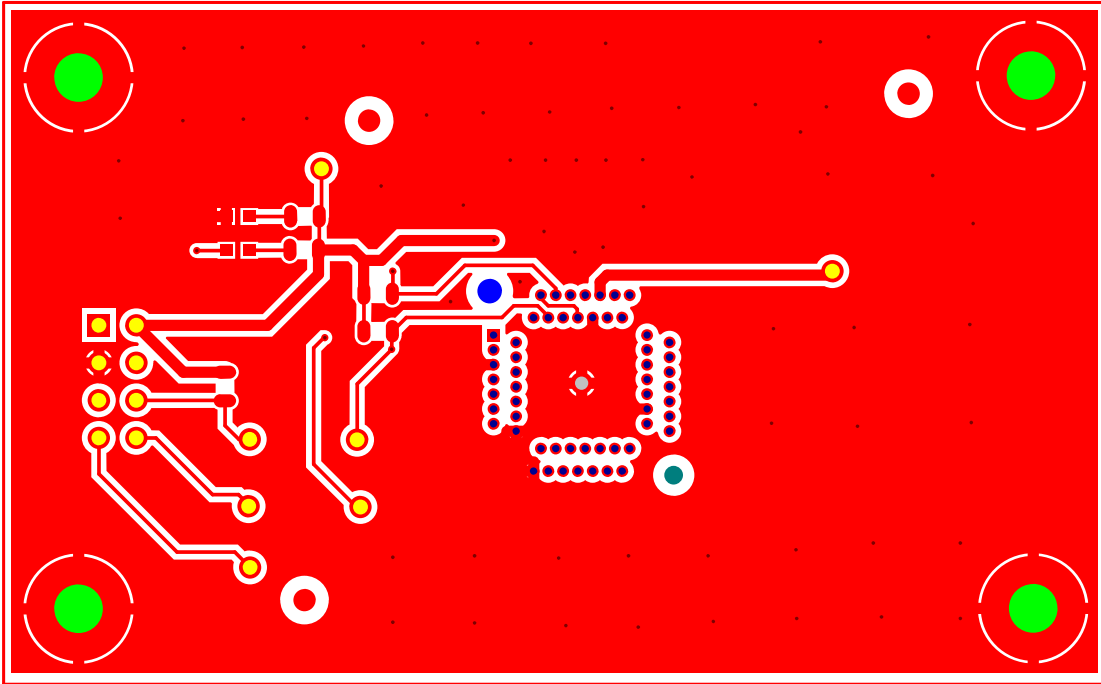
9.1 Assembly Layer Top



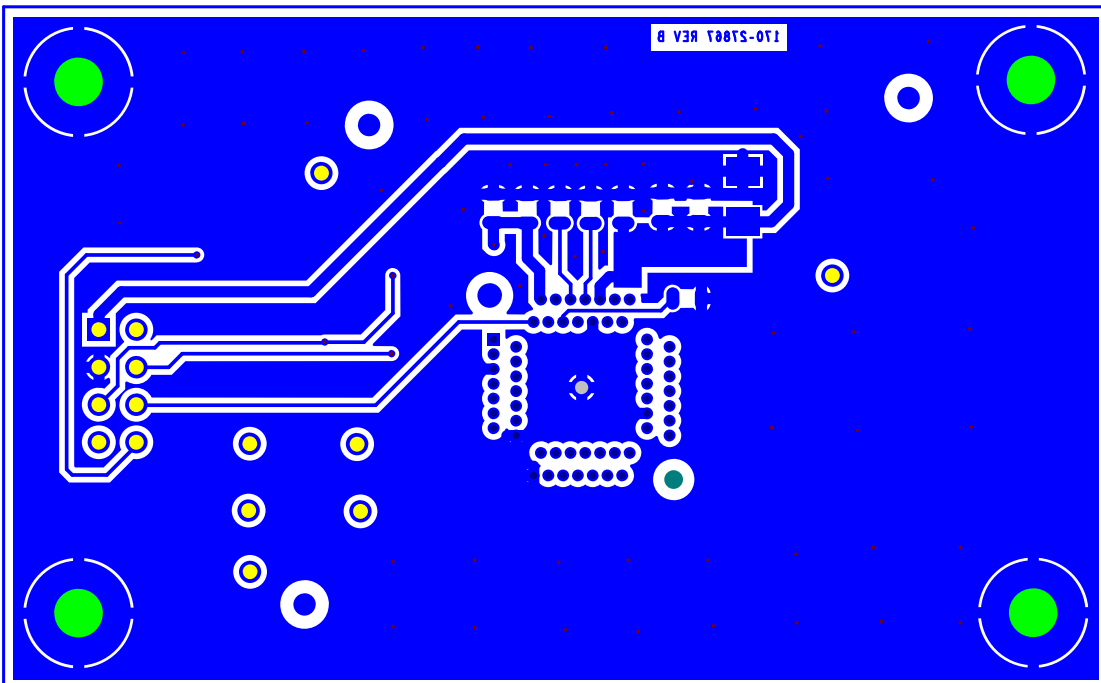
9.2 Assembly Layer Bottom



9.3 Top Layer Routing



9.4 Bottom Layer Routing



10 References

Document Number and Description		URL
MMPF0100	Data sheet	http://www.freescale.com/files/analog/doc/data_sheet/MMPF0100.pdf
MMPF0100ER	Errata	http://www.freescale.com/files/analog/doc/errata/MMPF0100ER.pdf
PFSERIESFS	Fact Sheet	http://www.freescale.com/files/analog/doc/fact_sheet/PFSeriesFS.pdf
KTPFPGMEVMEUG	User's Guide	http://www.freescale.com/files/analog/doc/user_guide/KTPFPGMEVMEUG.pdf
Freescale.com Support Pages		URL
Product Summary Page		http://www.freescale.com/webapp/sps/site/prod_summary.jsp?code=MMPF0100
Power Management Home Page		http://www.freescale.com/PMIC
Analog Home Page		http://www.freescale.com/analog

11 Revision History

Revision	Date	Description of Changes
1.0	6/2013	Initial Release

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