

GreenPAK SLG46801V Socket Adapter

Description

GreenPAK SLG46801V Socket Adapter (SA) is a compact, easy-to-use tool that provides hardware support for design emulation, programming, and real-time testing. SA is controlled by Go Configure Software Hub with emulation and IC programming functionality.

Specifications

The GreenPAK SLG46801V Socket Adapter works under the following operating conditions:

- V_{DD} Voltage Range: 1.71 V to 5.50 V
- Static PIN current: up to 30 mA

Features

- Can be used with GreenPAK Advanced Development Board
- Can be used with GreenPAK Lite Development Board
- Can be used with Go Configure Development Board
- Includes a footprint for I²C addressing resistor installation

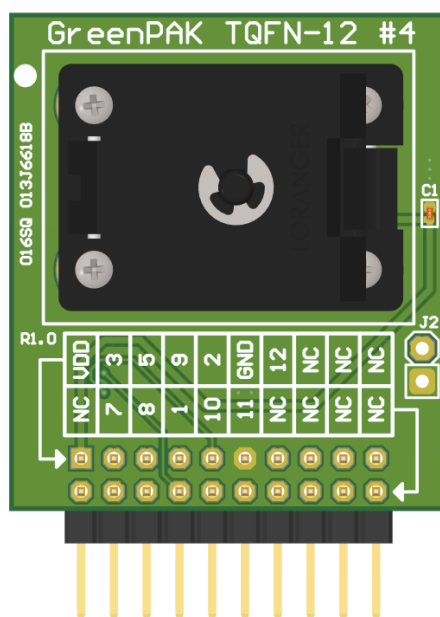


Figure 1. GreenPAK SLG46801V Socket Adapter

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1. Terms and Definitions

ACMP	Analog Comparator
GPI	General Purpose Input
GPIO	General Purpose Input/Output
GPO	General Purpose Output
IC	Integrated Circuit
OSC	Oscillator
SA	Socket Adapter
SCL	Serial Clock Line
SDA	Serial Data Line
TP	Test Point

2. References

1 – SLG46801 Datasheet, Renesas Electronics

3. Introduction and Board Overview

SLG46801V SA J1 connectors and PIN functions are displayed in [Figure 2](#) and described in [Table 1](#).

Note: J1 top marking numbers reflect a corresponding SLG46801V's PIN number.

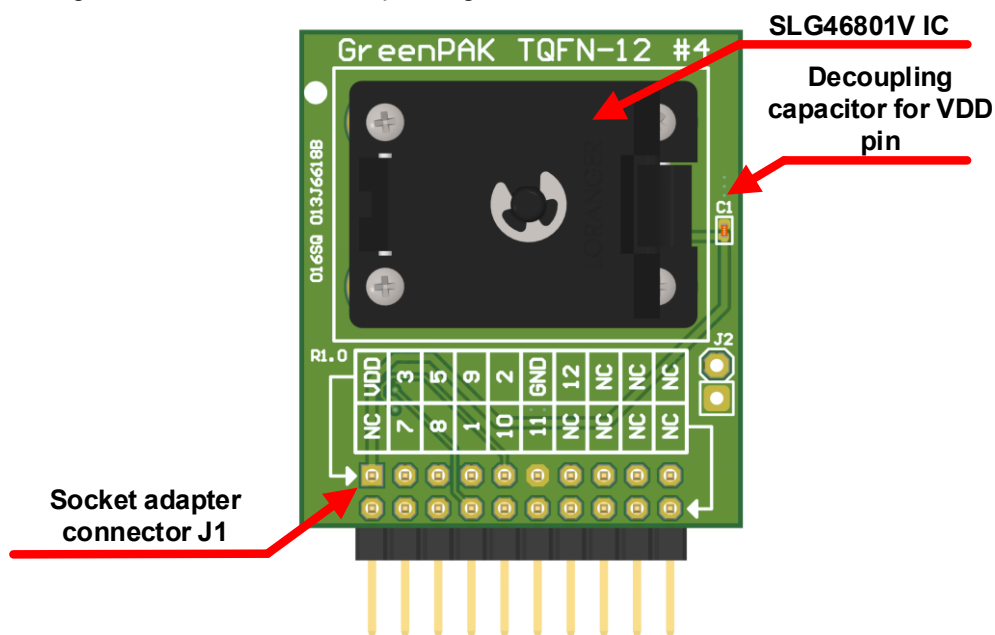


Figure 2. Socket Adapter Top View

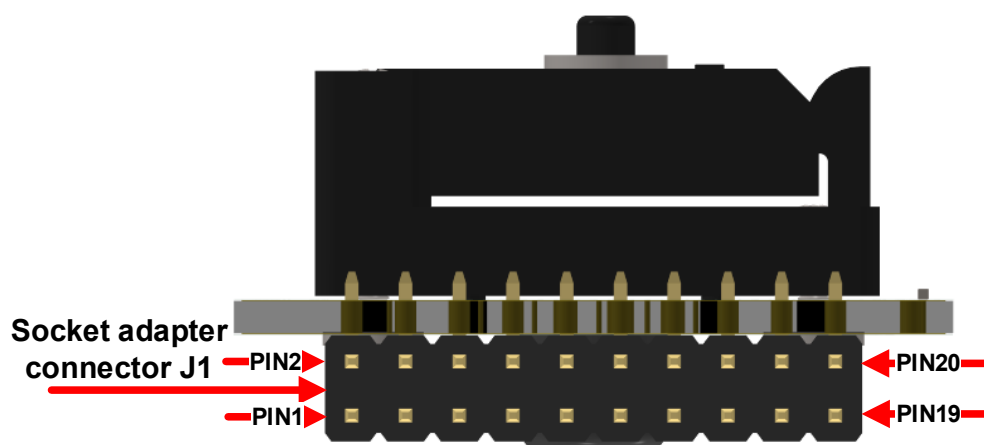


Figure 3. Socket Adapter Connector Pinout

Table 1. Socket Adapter Pinout Description

Chip PIN #	SA PIN #	TP Name	PIN Functions
1	8	TP8	GP18. I ² C SCL
2	9	TP9	GP19. I ² C SDA
3	3	TP3	GPIO0. I ² C addressing using ext. resistor, OSC1 ext. CLK
4	11	GND	GND
5	5	TP5	GPIO1
6	1	VDD	Power Supply, VDD
7	4	TP4	GPIO2. ACMP1 IN+
8	6	TP6	GPIO3. ACMP0 IN+
9	7	TP7	GPO4
10	10	TP10	GPIO5. OSC0 ext. CLK
11	12	TP12	GPIO6
12	13	TP13	GPIO7. ACMP0,1 IN-

Note: TP Name in Table 1. Socket Adapter Pinout Description reflects a 20-pin connector test point name of the selected development platform (see [Figure 6](#)).

By default, the I²C address is defined by the register value in I²C properties section of the Go Configure Software Hub project. Optionally, the I²C address identification can be set via PIN3. Bottom side of the SA includes a footprint for I²C addressing resistor installation (see [Figure 4](#)). For more information about R1 resistor values and corresponding I²C addresses, please read section 15.2 in the SLG46801 datasheet. This option should then be enabled in I²C properties of the Go Configure Software Hub project.

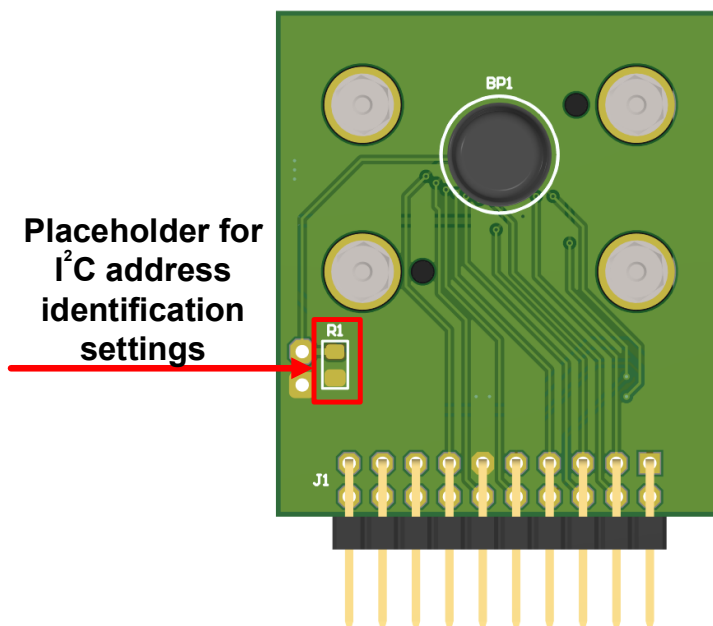


Figure 4. Socket Adapter Bottom View

4. Design Emulation, Programming, and Real-Time Testing

Open SA and place an IC. The internal side of SA has a dot mark which should coincide with a dot mark on the top side of the IC package for proper IC positioning inside SA (see [Figure 5](#)). After that, SA can be connected to a development board (see section [4.1 Development Board Connection](#)).

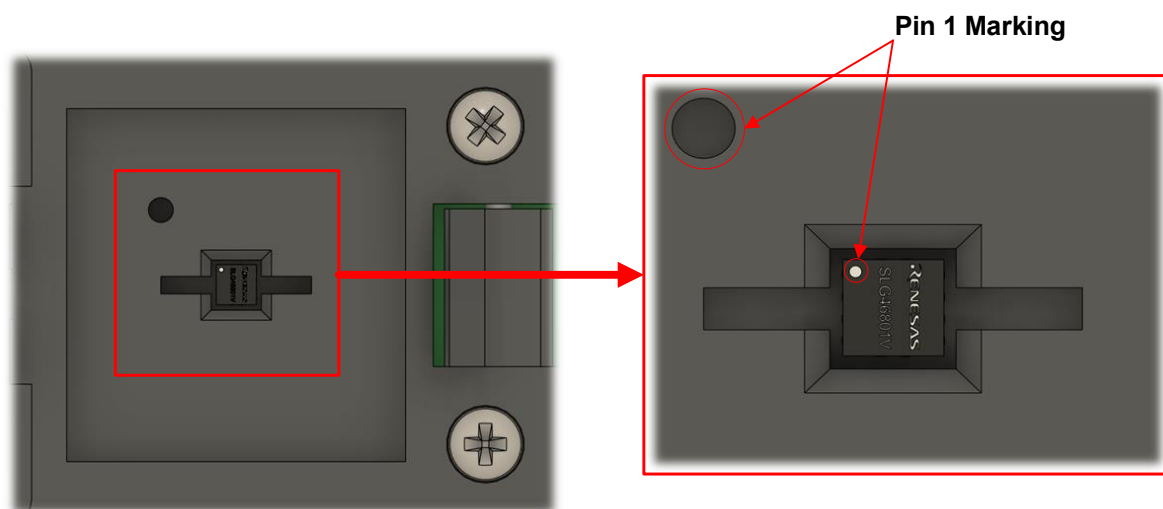


Figure 5. IC Positioning in Socket Adapter

4.1 Development Board Connection

This socket adapter is designed to be used with the following development platforms:

[GreenPAK Advanced Development Board](#)

[GreenPAK Lite Development Board](#)

[Go Configure Development Board](#) via GreenPAK Extension Card #1.

To get started, it is necessary to connect the socket adapter to the appropriate 20-pin connector of the selected development platform, as shown in [Figure 6](#). More information about the development boards can be found in the relevant documentation by visiting the Renesas website.

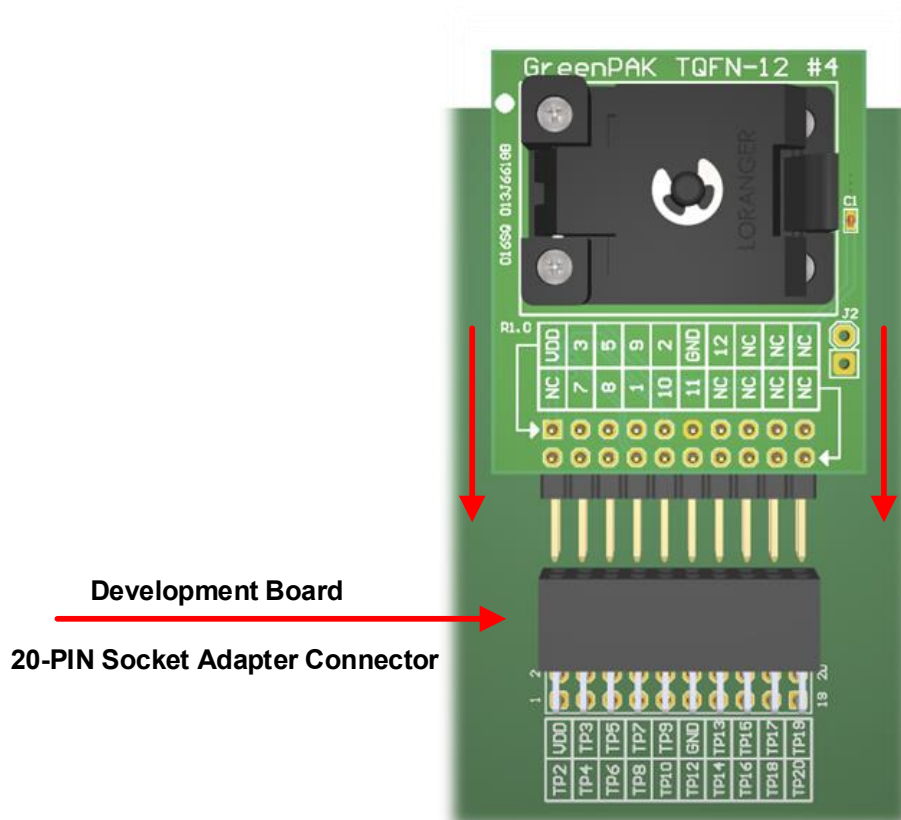


Figure 6. Socket Adapter Connection to Development Board 20-pin Adapter Connector

After selecting a development board and starting Go Configure Software Hub, ensure that the development board and GreenPAK IC were recognized correctly. For that, follow the guidance mentioned in section 2.2.6 of the [Go Configure Software Hub User Guide](#).

5. Board Dimensions

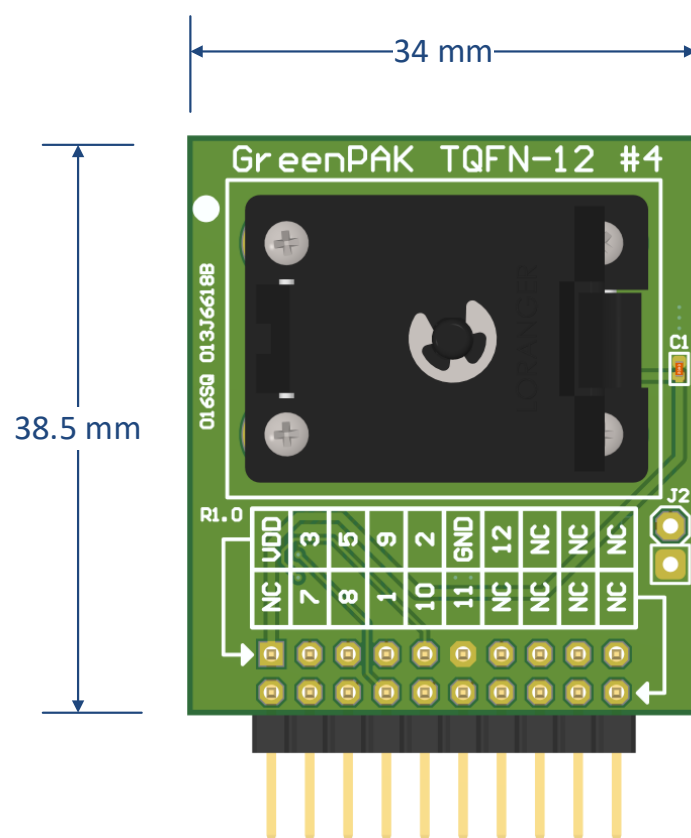


Figure 7. Board Assembly Top View Dimensions



Figure 8. Board Assembly Side View Dimensions

6. Board Schematic

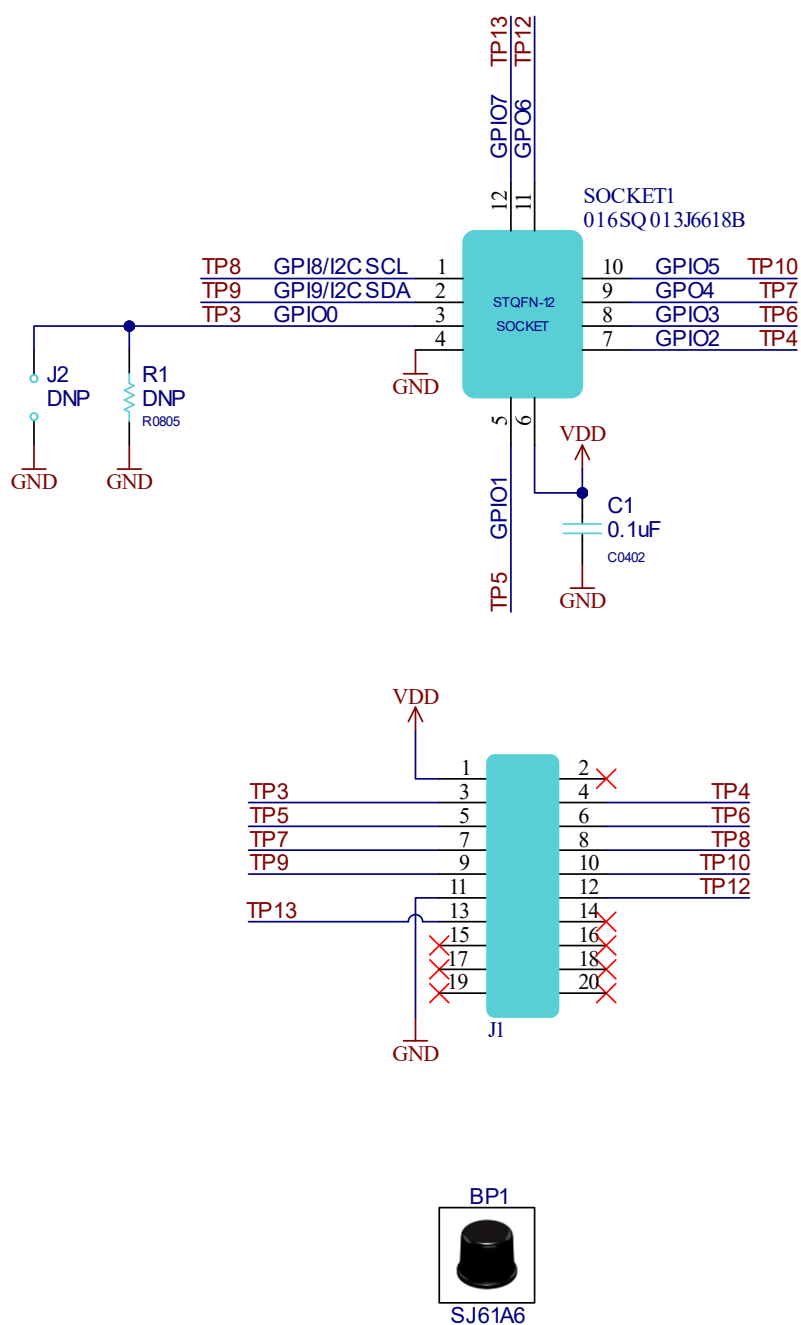


Figure 9. Board Schematic

7. Bill of Materials

#	Designator	Manufacturer Part Number	Manufacturer	Quantity
1	BP1	SJ61A6	3M	1
2	C1	CL05B104KA5NNNC	Samsung	1
3	J1	68021-220HLF	Amphenol	1
4	SOCKET1	016SQ 013J6618B	Loranger	1
5	J2	Header 2x1 pitch 2.54	-	DNP
6	R1	SMD RES 0402	-	DNP

8. Ordering information

Part Number	Description
SLG4SA12MP-16x16	GreenPAK SLG46801V Socket Adapter
SLG46801V-SKT	GreenPAK SLG46801V Socket Adapter (SLG4SA12MP-16x16) and 20 Samples of SLG46801V

9. Revision History

Revision	Date	Description
1.00	April 2, 2026	Initial release.