Socket Adapter GreenPAK TQFN-16 #1

This document describes the Socket Adapter GreenPAK TQFN-16 #1 functionality and provides a quick start guide.

Contents

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1. Terms and Definitions

GPIO	General Purpose Input/Output
IC	Integrated Circuit
SA	Socket Adapter
TP	Test point

2. References

[1] SLG47011, Datasheet, Renesas Electronics.

3. Introduction and Board Overview

SA GreenPAK TQFN-16 #1 is a compact, easy-to-use hardware tool that provides SLG47011V IC hardware support for design emulation, programming, and real-time testing. SA is controlled by Go Configure Hub software with emulation and IC programming.

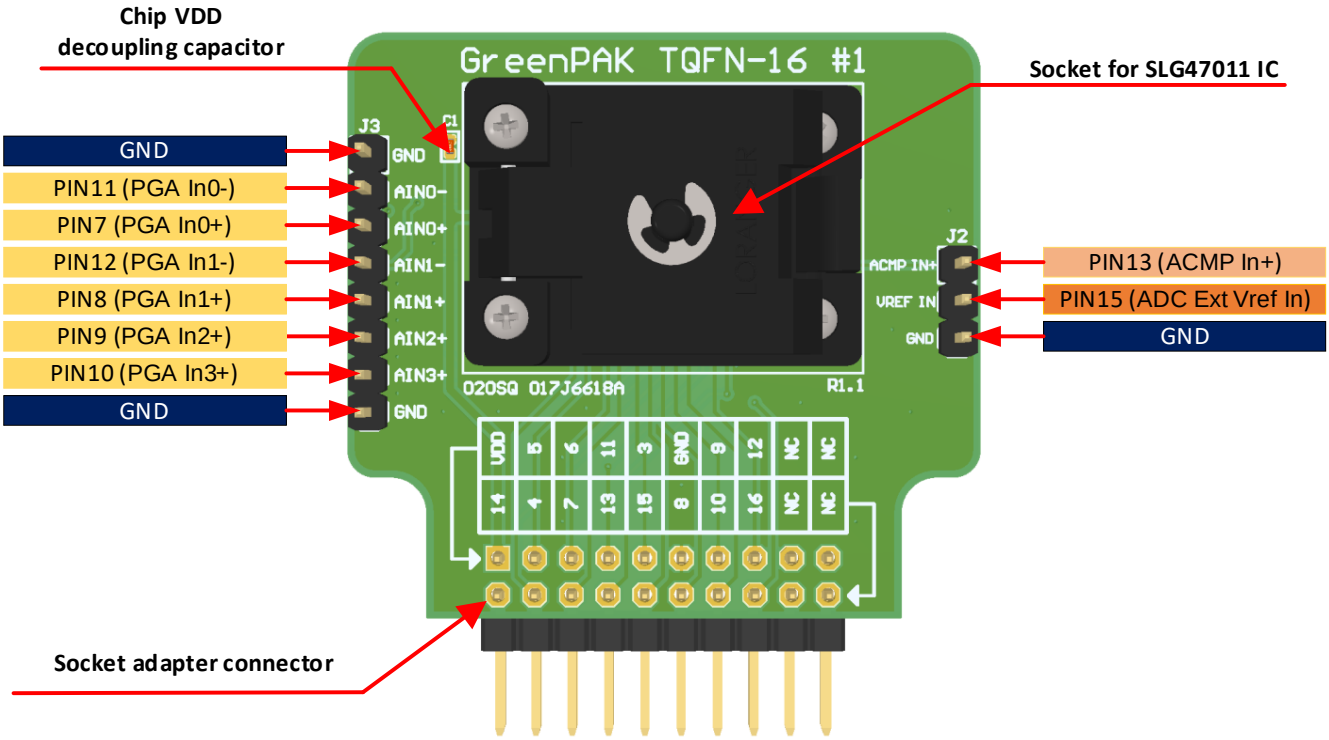


Figure 1. SA Pinout Description

Table 1 SA Pinout Description

Chip pin #	SA connector J1 pin #	Expansion connector J2 pin #	Expansion connector J3 pin #	Pin Functions
1	TP1	-	-	Power Supply, V_{DD}
2	TP11	3	1, 8	Power Supply, GND
3	TP9	-	-	GPI, SPI nCS, Force_LDO_bypass
4	TP4	-	-	GPIO, I^2C SDA, SPI MOSI
5	TP3	-	-	GPIO, I^2C SCL, SPI CLK
6	TP5	-		GPIO, SPI MISO, SLA 0
7	TP6	-	3	GPIO, PGA In0+, EXT OSC1
8	TP12	-	5	GPIO, PGA In1+
9	TP13	-	6	GPIO, PGA In2+
10	TP14	-	7	GPIO, PGA In3+, SLA 1
11	TP7	-	2	GPIO, PGA In0-, CS out, ACMP In+, SLA 2, ADC_single_inp

12	TP15	-	4	GPIO, PGA In1-, DAC out, SLA 3, ADC_single_inn
13	TP8	1	-	GPIO, ACMP In+, PGA Out+, ADC_diff_inp
14	TP2	-	-	GPIO, ACMP In-, EXT OSC0, PGA Out-, VPP, ADC_diff_inn
15	TP10	2	-	GPIO, ADC Ext Vref In, DAC Ext Vref in, DAC Vref Buf out
16	TP16	-	-	GPIO, SLA 3, Scan test core power source

4. Design Emulation, Programming and Real-Time Testing

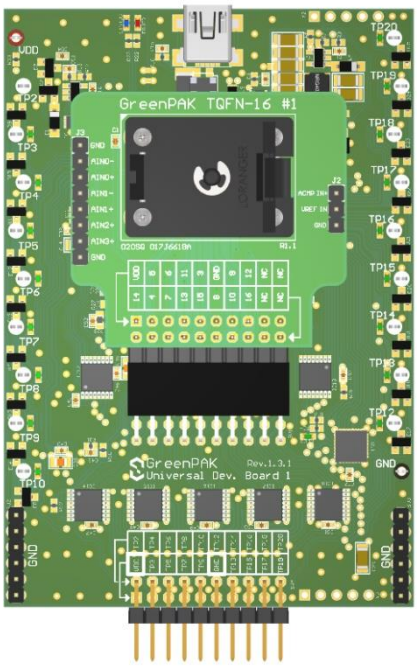


Figure 2. Using Advanced Development Board

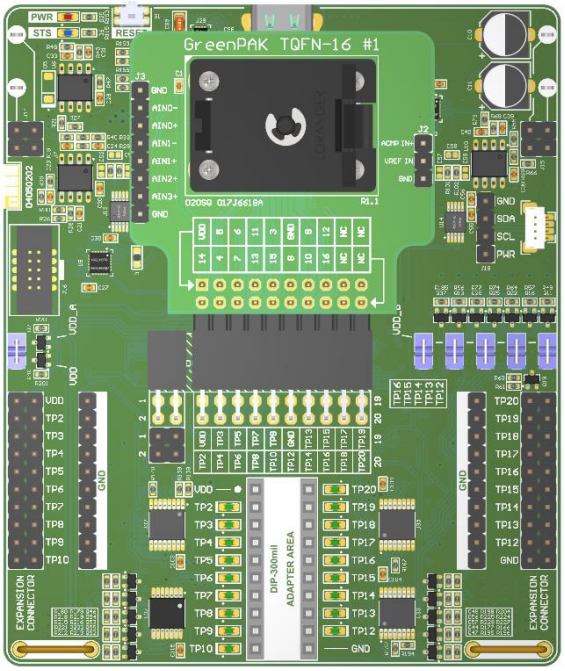


Figure 3. Using Light Development Board

Attention! During SLG47011V IC programming 7.5 V will be present on VPP (J1-TP2, SLG47011 IC - PIN14).

5. Board Dimensions

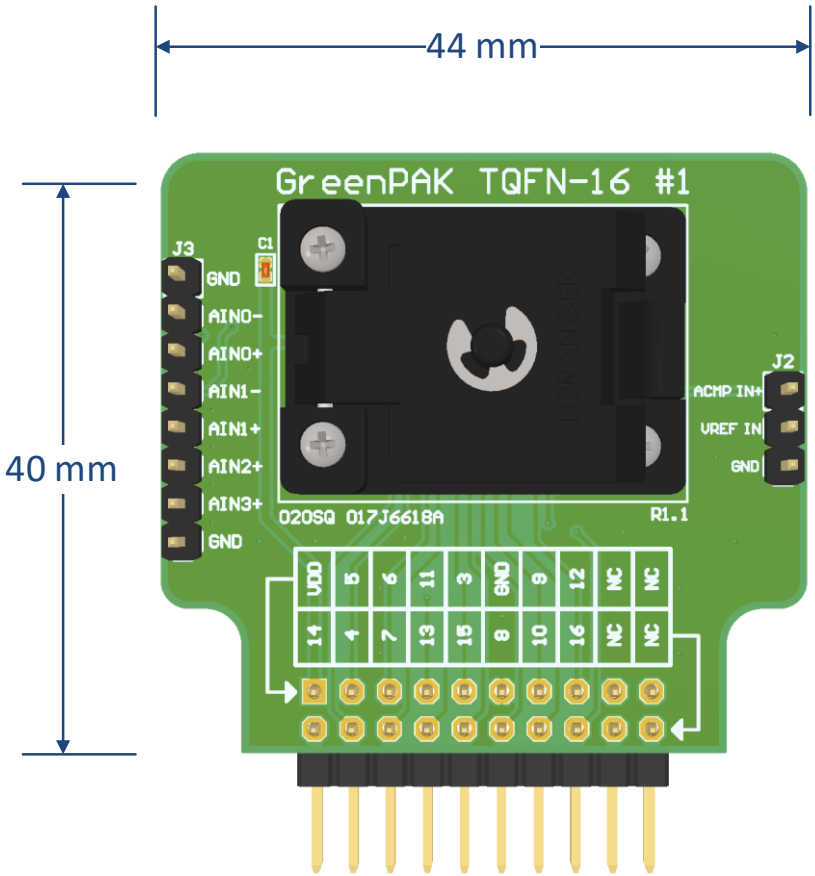


Figure 4. Board Assembly Top View Dimensions

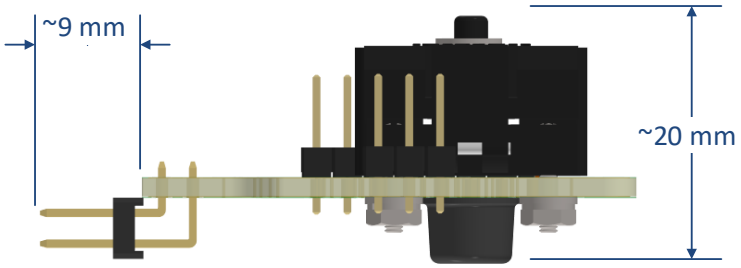
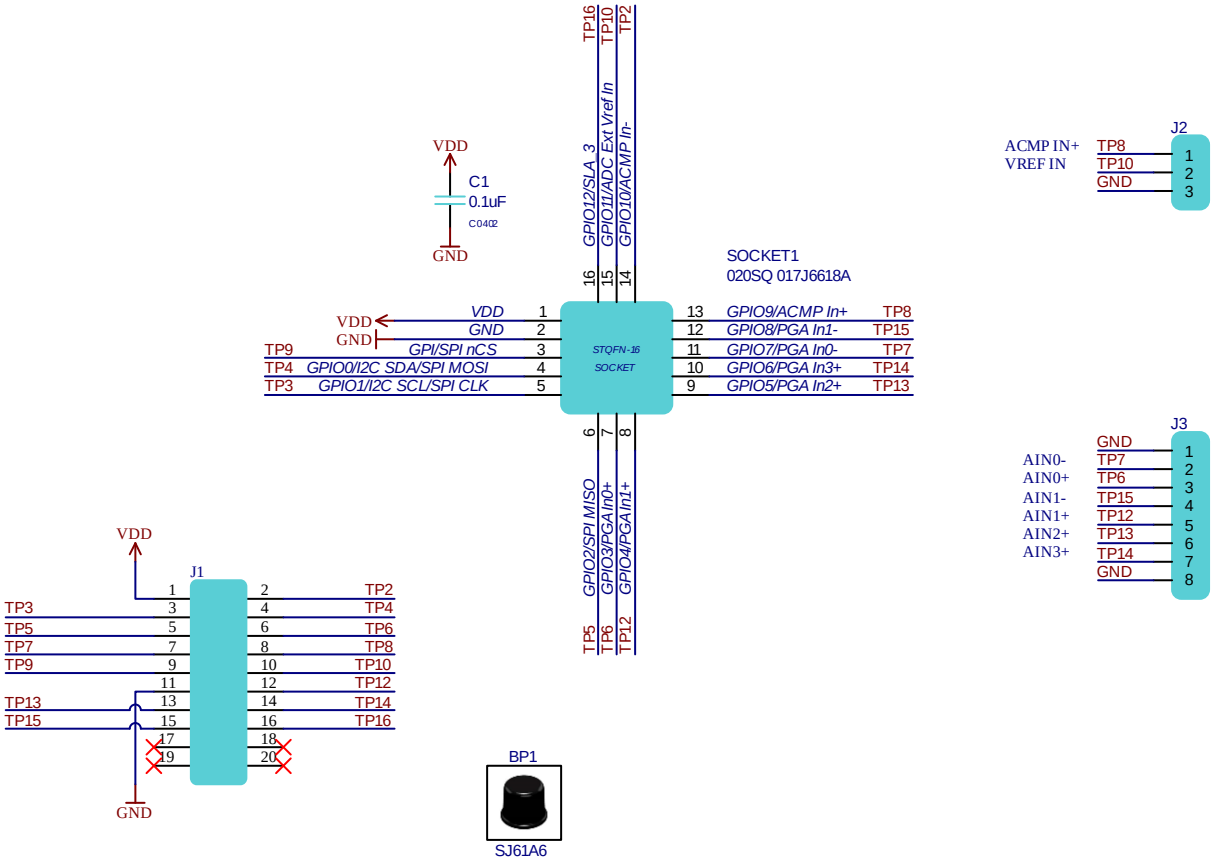


Figure 5. Board Assembly Side View Dimensions

6. Schematic Diagrams



7. Bill of Materials

#	Designator	Manufacturer Part Number	Manufacturer 1	Quantity
1	BP1	7010334512	3M	1
2	C1	GRM155R71C104KA88D	Murata	1
3	J1	68021-220HLF	Amphenol Communications Solutions	1
4	J2	68001-203HLF	Amphenol Communications Solutions	1
5	J3	68001-208HLF	Amphenol Communications Solutions	1
6	SOCKET1	020SQ 017J6618A	Loranger	1

8. Revision History

Revision	Date	Description
1.0	Sep 22, 2023	Initial release.