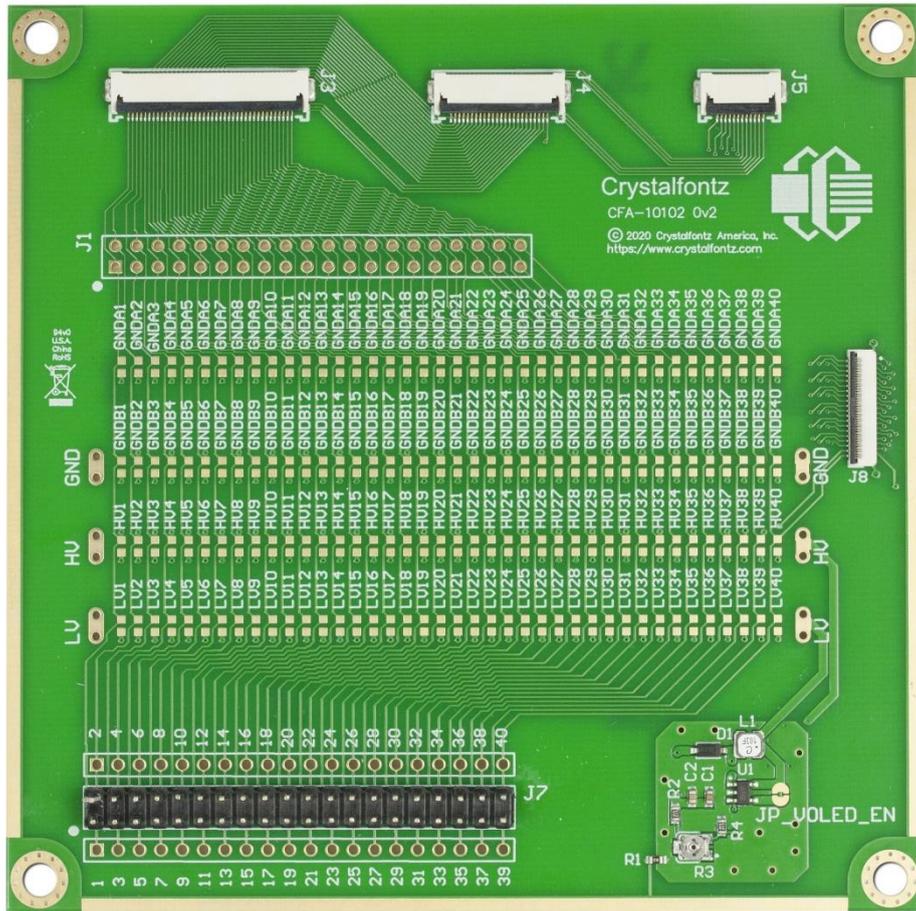




GENERIC BREAKOUT BOARD DATASHEET



CFA10102

Revision A1
Datasheet Release: 2021-06-11

Crystalfontz America, Inc.

12412 East Saltese Avenue
Spokane Valley, WA 99216-0357
Phone: 888-206-9720
Fax: 509-892-1203
Email: support@crystalfontz.com
URL: www.crystalfontz.com



Table of Contents

1. GENERAL INFORMATION.....	3
2. INTRODUCTION.....	4
3. KEY FEATURES.....	4
4. HEADER AND JUMPER LOCATIONS AND FUNCTIONS.....	4
4.1. ZIF CONNECTORS	4
4.2. JP_VOLED_EN.....	4
5. DRAWING	5
6. SCHEMATIC	6



1. General Information

Datasheet Revision History

Datasheet Release: 2021-06-11
Datasheet for the CFA10102 breakout board

Product Change Notifications

You can check for or subscribe to [Part Change Notices](#) for this display module on our website.

Variations

Slight variations between lots are normal.

Volatility

This module has volatile memory.

Disclaimer

Certain applications using Crystalfontz America, Inc. products may involve potential risks of death, personal injury, or severe property or environmental damage ("Critical Applications"). CRYSTALFONTZ AMERICA, INC. PRODUCTS ARE NOT DESIGNED, INTENDED, AUTHORIZED, OR WARRANTED TO BE SUITABLE FOR USE IN LIFE-SUPPORT APPLICATIONS, DEVICES OR SYSTEMS OR OTHER CRITICAL APPLICATIONS. Inclusion of Crystalfontz America, Inc. products in such applications is understood to be fully at the risk of the customer. In order to minimize risks associated with customer applications, adequate design and operating safeguards should be provided by the customer to minimize inherent or procedural hazard. Please contact us if you have any questions concerning potential risk applications.

Crystalfontz America, Inc. assumes no liability for applications assistance, customer product design, software performance, or infringements of patents or services described herein. Nor does Crystalfontz America, Inc. warrant or represent that any license, either express or implied, is granted under any patent right, copyright, or other intellectual property right of Crystalfontz America, Inc. covering or relating to any combination, machine, or process in which our products or services might be or are used.

All specifications in datasheets on our website are, to the best of our knowledge, accurate but not guaranteed. Corrections to specifications are made as any inaccuracies are discovered.

Company and product names mentioned in this publication are trademarks or registered trademarks of their respective owners.

Copyright © 2021 by Crystalfontz America, Inc., 12412 East Saltese Avenue, Spokane Valley, WA 99216 U.S.A.



2. Introduction

This generic adapter board includes multiple sizes and pitches of ZIF connectors so most Crystalfontz displays can be wired up using this breakout board. Plus, the board includes a voltage booster, removing the need for a power supply to provide the panel or backlight voltage.

This board also features four jumpers for each pin to connect to the low voltage net, high voltage net, or one of two ground nets. These jumpers simplify adding any necessary 0603 components to bring up the display. That means no more messy soldering on a little breakout board or complicated breadboards. Plus, the high voltage is generated by the voltage booster, so only the low voltage needs to be supplied externally.

This adapter board also includes multiple headers for easy signal debugging or for attaching peripheral devices.

3. Key Features

- Four choices of ZIF connector (3 sizes of .5 mm pitch, 1 size of .3 mm pitch)
- Any breakout board with 40 pins or fewer can be attached to this board for a custom fit
- Headers for signal debugging
- On board variable voltage booster
- Each line can connect to two ground locations, high voltage, and low voltage
- Dual row header that an adapter board can be solder into so any ZIF connector can work with the board

4. Header and Jumper Locations and Functions

4.1. ZIF Connectors

J3 is [CS050Z40G-B0](#), a 40-pin 0.5 mm pitch top/bottom ZIF connector

J4 is [CS050Z24G-A0](#), a 24-pin 0.5 mm pitch top/bottom ZIF connector

J5 is [CS050Z12G-A0](#), a 12-pin 0.5 mm pitch top/bottom ZIF connector

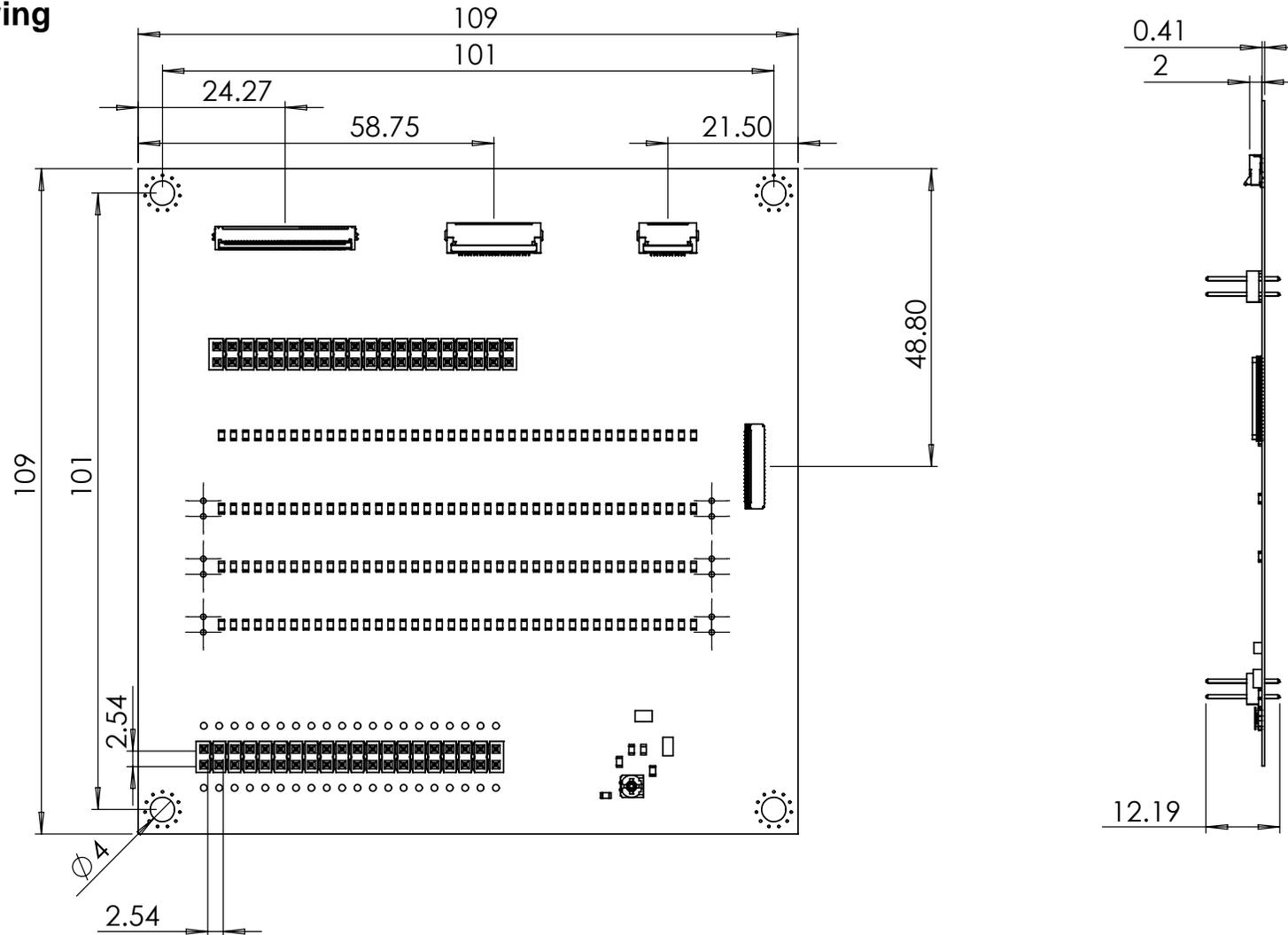
J8 is [CS030Z41G-A0](#), a 41-pin 0.3 mm pitch top/bottom ZIF connector. Note that pin 41 is not connected to pins. Careful alignment of the display tail is needed.

4.2. JP_VOLED_EN

This jumper enables the voltage booster that can provide up to 20v. The output voltage of the boosting circuit is controlled by the potentiometer R3.



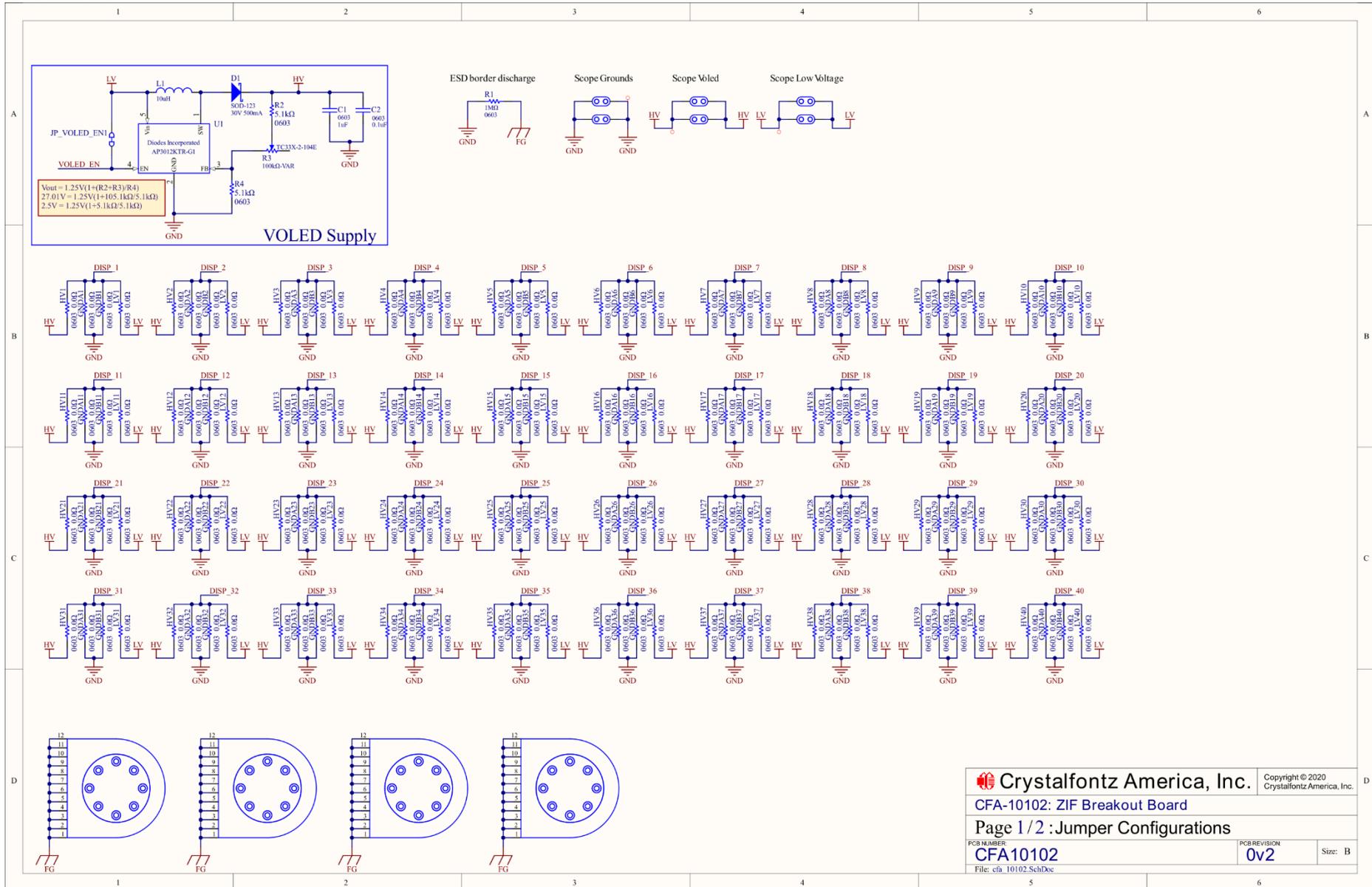
5. Drawing



Units: millimeters
Tolerance: ± 0.3



6. Schematic



Crystalfontz America, Inc.		Copyright © 2020 Crystalfontz America, Inc.	
CFA-10102: ZIF Breakout Board			
Page 1 / 2 : Jumper Configurations			
PCB NUMBER	PCB REVISION	Size: B	
CFA10102	0v2		
File: cfa_10102_SchDoc			

