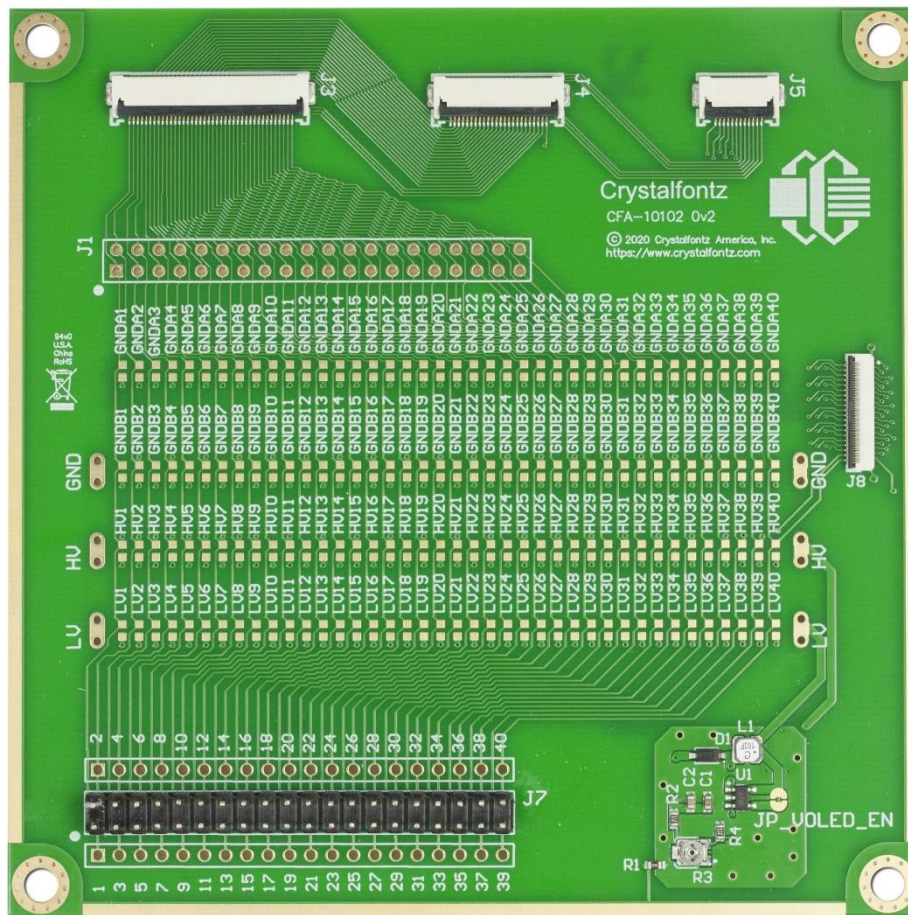




# GENERIC BREAKOUT BOARD DATASHEET



**CFA10102**

Revision A1  
Datasheet Release: 2021-06-03

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## 1. General Information

Datasheet Revision History
Datasheet Release: 2021-06-03 Datasheet for the CFA10102 breakout board

Product Change Notifications
You can check for or subscribe to <a href="#">Part Change Notices</a> for this display module on our website.

Variations
Slight variations between lots are normal.

Volatility
This module has volatile memory.

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## 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

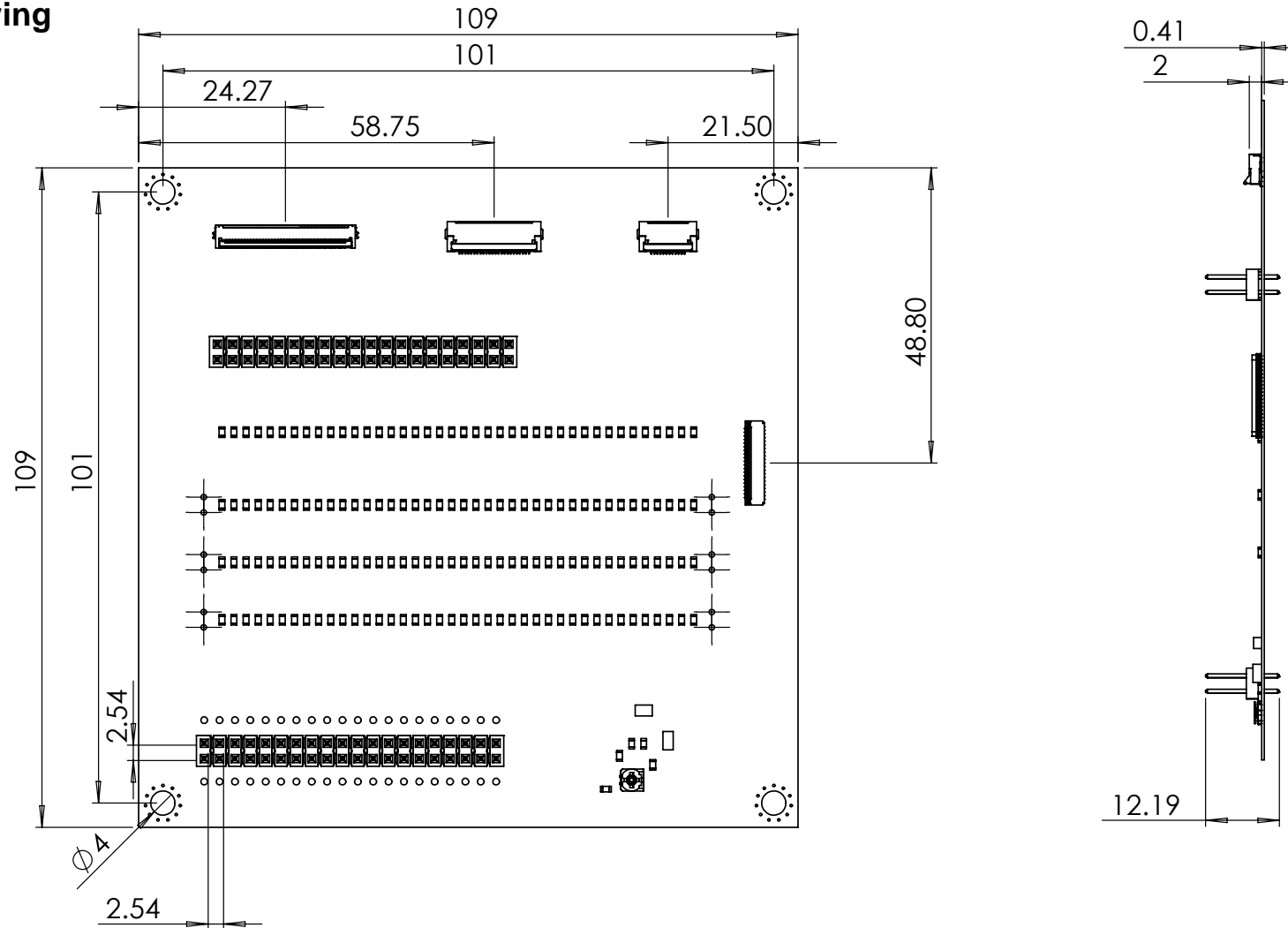
J8 is [CS030Z41G-A0](#), a 41-pin 0.3 mm pitch top/bottom ZIF connector. Note that pin 41 is not connected to pins. Careful alignment of the display tail is needed.

### 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.



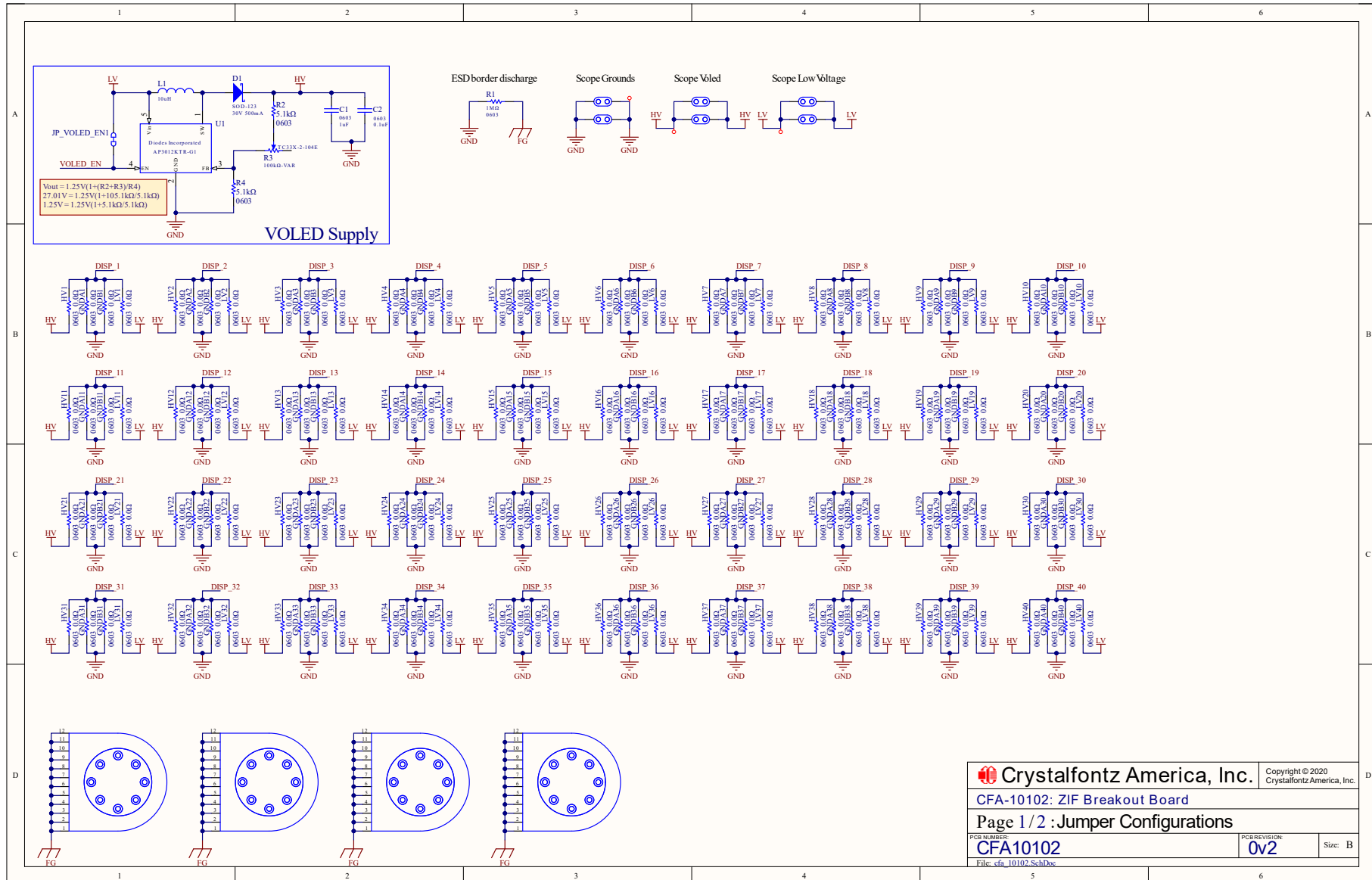
5. Drawing



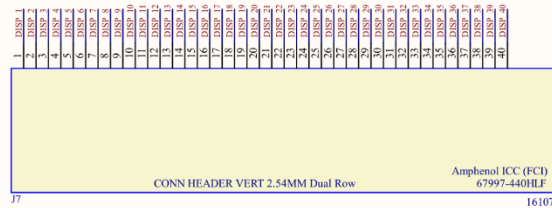
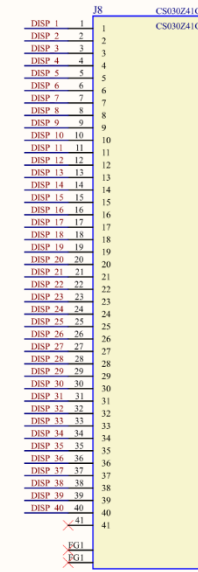
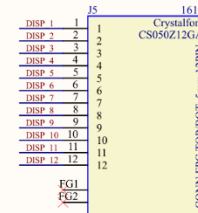
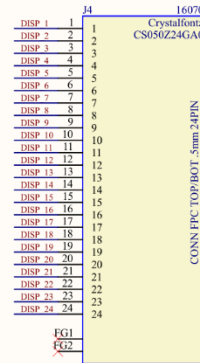
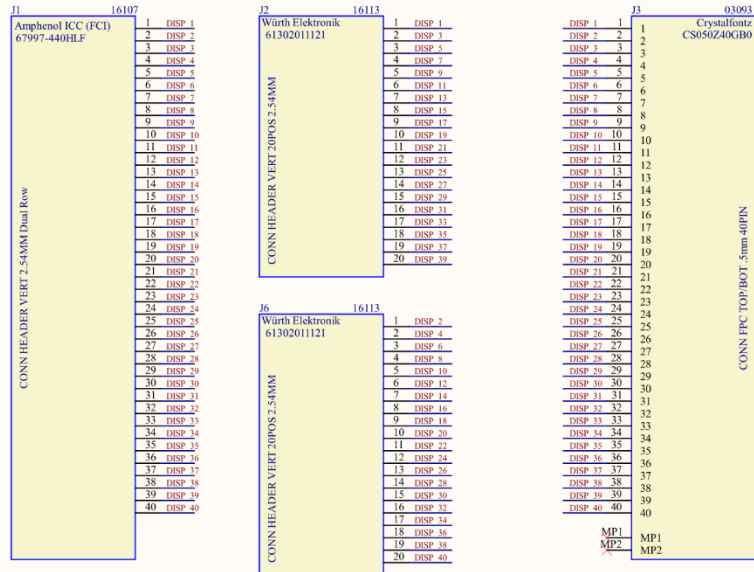
Units: millimeters  
Tolerance:  $\pm 0.3$



## 6. Schematic



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CFA-10102: ZIF Breakout Board			
Page 1 / 2 : Jumper Configurations			
PCB NUMBER: <b>CFA10102</b>	PCB REVISION: <b>0v2</b>	Size: B	
File: cfa_10102.SchDoc			



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CFA-10102: ZIF Breakout Board			
Page 2 / 2 : Connectors			
PCB NUMBER: <b>CFA10102</b>	PCB REVISION: <b>0v2</b>	Size: B	
File: 10102_Connectors.SchDoc			