# PLASTIC LOGIC

# QUICK START GUIDE

# Display Power Board

# Raven 1.1

# Part-No. 301002

# Revision 1

# February 15th 2018

## 1 Safety Points

### Warning:

- **To avoid risk of electric shock or damage to the display, disconnect the display module from its power source before handling it.**
- **Do not touch the connections or circuits whilst the display is in operation.**

### Caution:

- **Follow ESD handling procedures to avoid circuit damage. Use a grounded wrist strap.**
- **Do not press on the display panel or its edges as damage can result.**

Important Notice

The Plastic Logic Display Evaluation Kit ("the Kit") is intended for use for ENGINEERING DEVELOPMENT, DEMONSTRATION OR EVALUATION PURPOSES ONLY and is not considered by Plastic Logic to be a finished end-product fit for general consumer use. Persons handling the Kit must have electronics training and observe good engineering practice standards. As such, the kit being provided is not intended to be complete in terms of required design-, marketing-, and/or manufacturing-related protective considerations, including product safety and environmental measures typically found in end products that incorporate such semiconductor components or circuit boards. The kit does not fall within the scope of the European directives regarding electromagnetic compatibility, restricted substances (RoHS), recycling (WEEE), FCC, CE or UL, and therefore may not meet the technical requirements of these directives or other related directives.

## 2 About this document

This document is a quick start guide for the small display evaluation kit. It is only to be used for kits containing a Raven 1.1 EPD controller board.

## 3 Getting Started

Prior to unpacking the kit, the user is strongly urged to take appropriate ESD and safety precautions.
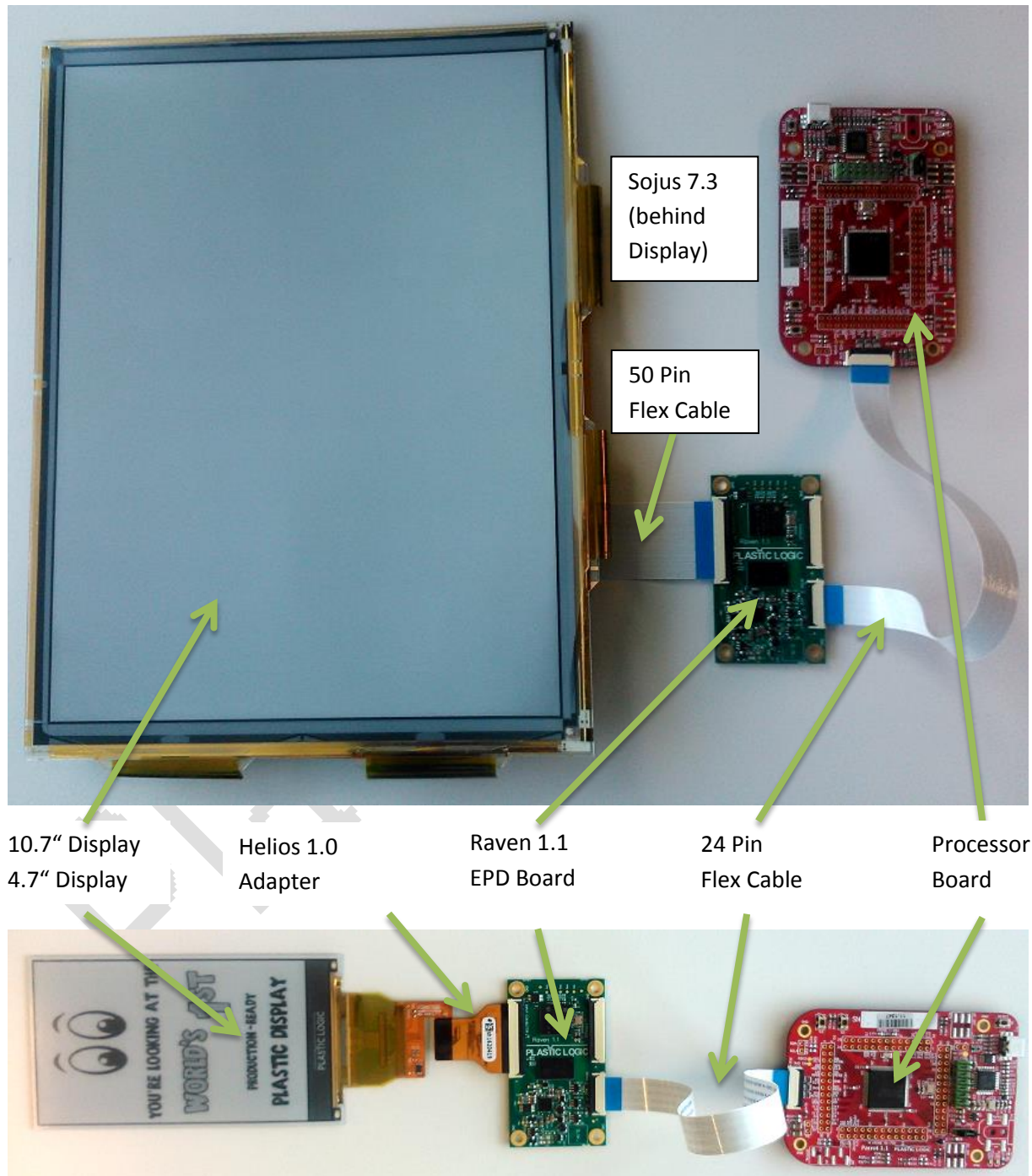
### 3.1 Unpacking the Kit

The kit is shipped with the items listed in the table below. Please ensure that the items listed have been included in your kit. Remove the kit from the anti-static bags and perform a visual inspection.

Note: Only one of the display adapter board types will be included for the specific display type. Those optional components are described with letters

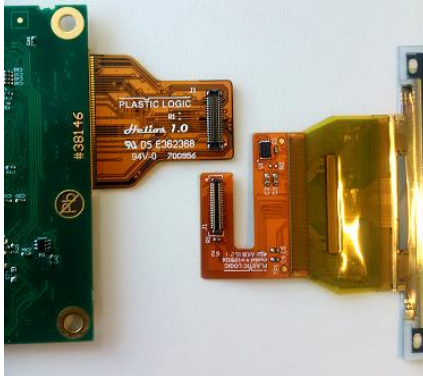| No. | Item | Description |
|-----|------|-------------|
| 1 | Raven 1.1 Board | Plastic Logic Raven EPD controller board |
| 2 | Flat Cable | Cable to connect MCU and Raven |
| 3 | Micro - SD Card | Contains slide-show images, display specific waveforms and vcoms, documentation, source code. |

| No. | Item | Description |
|-----|------|-------------|
| 4a | Display Adapter Board S7.3 | For D107_T3.1: Sojus 7.3 (tails folded) with 50 Pin Flex Cable |
| 4b | Dsiplay Adapter Board H1 | For S047_T2.1: Helios 1.0 |



Sojus 7.3 (behind Display)

50 Pin Flex Cable

10.7" Display
4.7" Display

Helios 1.0 Adapter

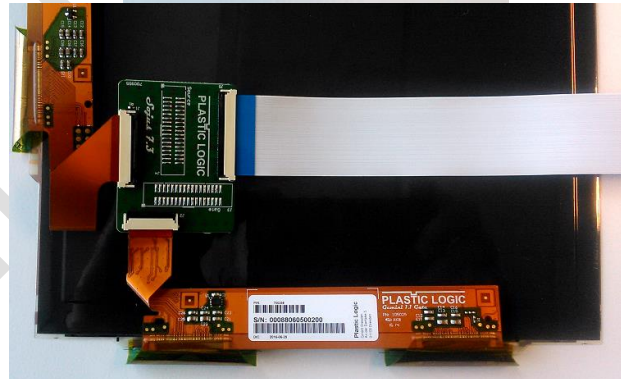Raven 1.1 EPD Board

24 Pin Flex Cable

Processor Board

## 3.2  Connecting up the Kit

- **For 10.7"display:**
  Plug in the display (shipped separately) into the display connector of the Sojus 7.3 board first. Then connect the 50 pin flat cable to the Raven board and the 24 pin flat cable to the Raven board and the processor board.
- **For 4.7"display:**
  Plug in the display (shipped separately) into the display connector of the Helios 1.0 board first. Then connect the Helios board to the Raven board and the 24 pin flat cable to the Raven board and the processor board.

**Attention:** Do not change or remove the display during the kit is powered up!



Connection details for S047_T2.1



Connection details for D107_T3.1

## 3.3  Further Information

Please remove the Micro-SD card from the switched off kit and insert it into a PC. Please check the folders "Source" and "Documentation" for further information.

## 3.4  Setting the Display Type

The Plastic Logic Display Evaluation Kits support a number of displays for each processor platform. The SD-Card with the binary and image data is preset to be used with the 10.7" Plastic Logic Display so it is necessary to change this setting to use it with the 4.7"display. Edit the config.txt file on the root folder of the SD-Card to change the display type.

Change **display_type D107_T3.1** to

**display_type S047_T2.1** and add if not present two lines to the file:

## 4  Troubleshooting

In case of any problems please email techsupport@plasticlogic.com