IS-ENG-KIT Features

Revision C
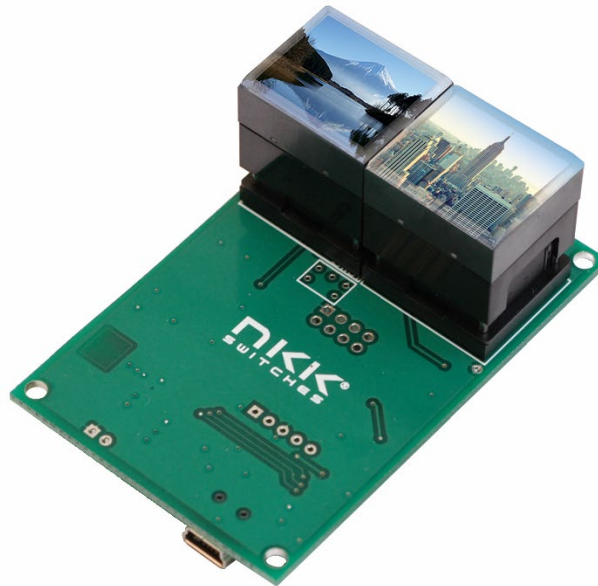
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1.   General Features

The Engineering Kits (IS-ENG-KIT-x) are designed to accelerate the incorporation of the SmartDisplay family of products into real world applications by, not only familiarizing design engineers to the SmartDisplay products, but also as a development platform for experimentation and design viability testing. The schematic and source codes in C language are provided.

Features:

- Controls up to two SmartDisplays or one OLED Rocker (Table 1).
- 1M or 16M on-board NOR flash memory to store images, attributes or any other information.
- Serial communication via USB (115.2K, 1 start bit, 8-bit, 1 stop bit).
    - Additional serial communication via UART connector available for Arduino/Raspberry Pi/Microcontroller interface (on OLED Engineering Kits only)
- Auxiliary port with 7 I/O pins of microcontroller to control/sense other applications.
- Stand alone or real-time operation.
- Preprogrammed for basic operation.
- Reports via USB the switch closures, releases; timer expirations; and addresses of the images displayed.
- Programmable to change the displayed images based on a switch actuation and user defined timers for stand-alone operation.
- Schematics and firmware are provided for user firmware customization.
- User can program the engineering kits using The PickKit3 and an adaptor.
- The kits come with a 6-foot USB 2.0 A to Mini-B cable (IS-USB1).
- Power Specs: Maximum 150mA@5VDC.
- Can be powered either by USB or by optional 5V power connection (.100" spacing).
- Windows based software is provided for communication.
    - Accepts bitmap files, extracts the images and download them to the controller.
    - Allows typing of commands and downloading to the controller.
    - Extracts HEX or ASCII data from Excel files and downloads to the controller.
    - Messages to and from the controller are displayed in different colors.

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There are ten development boards covering the four different SmartDisplay input and display architectures.

Part Number	Switch 1 / Display		Switch 2	
IS-ENG-KIT-7-DS	ISC01P	OLED 52x36 Display	ISC15ANP4	OLED 64x48 Standard
IS-ENG-KIT-7-FS	ISF15ACP4	OLED 96x64 Frameless	ISC15ANP4	OLED 64x48 Standard
IS-ENG-KIT-7-FF	ISF15ACP4	OLED 96x64 Frameless	ISF15ACP4	OLED 96x64 Frameless
IS-ENG-KIT-6-DH	IS01EBFRGB	LCD 64x32 Display	IS15EBFP4RGB-09YN	LCD 64x32 Hybrid
IS-ENG-KIT-6-SH	IS15EBFP4RGB	LCD 64x32 Standard	IS15EBFP4RGB-09YN	LCD 64x32 Hybrid
IS-ENG-KIT-6-CH	IS15ESBFP4RGB	LCD 64x32 Compact	IS15EBFP4RGB-09YN	LCD 64x32 Hybrid
IS-ENG-KIT-5-DC	IS01BBFRGB	LCD 36x24 Display	IS15BSBFP4RGB	LCD 36x24 Compact
IS-ENG-KIT-5-SC	IS15BBFP4RGB	LCD 36x24 Standard	IS15BSBFP4RGB	LCD 36x24 Compact
IS-ENG-KIT-5-BC	IS15BAFP4CF	LCD 36x24 Bicolor Standard	IS15BSAFP4CF	LCD 36x24 Bicolor Compact
IS-ENG-KIT-8-R	IS18WWC1W	OLED 96x64 Rocker		

2.   Kit Sets

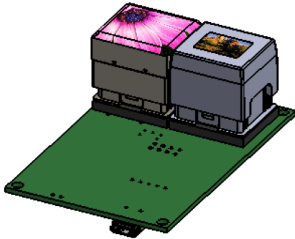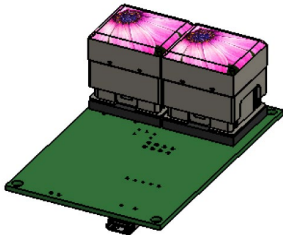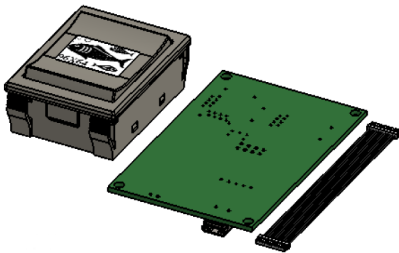**A) The controller S02L1 is used for all the OLED engineering kits. S02L1 has 16M NOR flash memory.**
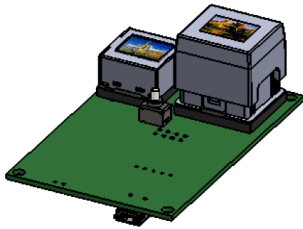
IS-ENG-KIT-7-DS

ISC01P	OLED 52x36 Display
ISC15ANP4	OLED 64x48 Standard

IS-ENG-KIT-7-FS

ISF15ACP4	OLED 96x64 Frameless
ISC15ANP4	OLED 64x48 Standard

IS-ENG-KIT-7-FF

ISF15ACP4	OLED 96x64 Frameless
ISF15ACP4	OLED 96x64 Frameless

IS-ENG-KIT-8-R
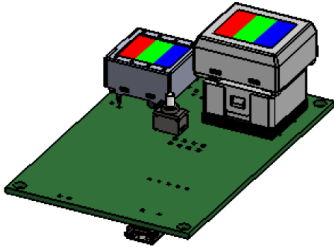|	
IS18WWC1W	OLED 96x64 Rocker

B) The controller S02G1 is used for all the LCD64x32 engineering kits. S02G1 has 1M NOR flash memory.

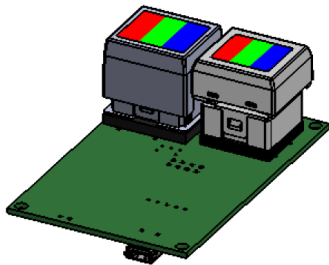
IS-ENG-KIT-6-DH

IS01EBFRGB   LCD 64x32 Display

IS15EBFP4RGB-09YN   LCD 64x32 Hybrid
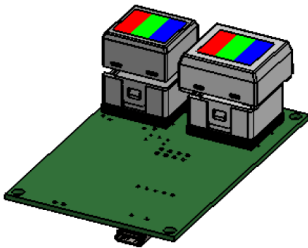

IS-ENG-KIT-6-SH

IS15EBFP4RGB   LCD 64x32 Standard

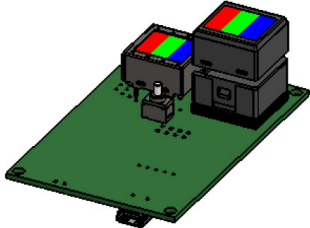IS15EBFP4RGB-09YN   LCD 64x32 Hybrid

IS-ENG-KIT-6-CH

IS15ESBFP4RGB   LCD 64x32 Compact

IS15EBFP4RGB-09YN   LCD 64x32 Hybrid

C) The controller S0205 is used for all the LCD 36x24 engineering kits. S02G1 has 1M NOR flash memory.
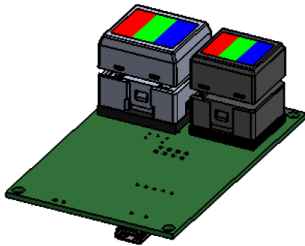

IS-ENG-KIT-5-DC

IS01BBFRGB   LCD 36x24 Display

IS15BSBFP4RGB   LCD 36x24 Compact
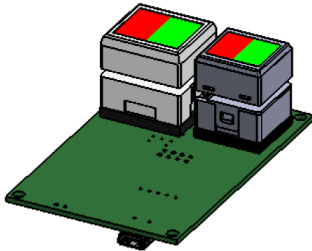

IS-ENG-KIT-5-SC

IS15BBFP4RGB   LCD 36x24 Standard

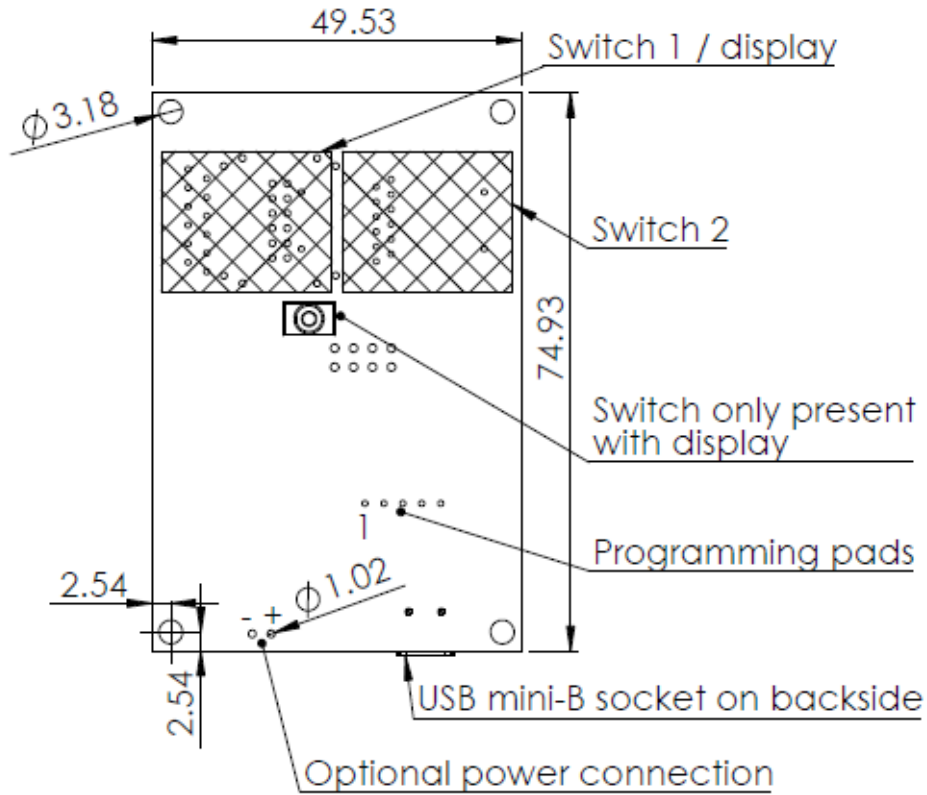IS15BSBFP4RGB   LCD 36x24 Compact

IS-ENG-KIT-5-BC

IS15BAFP4CF   LCD 36x24 Bicolor Standard

IS15BSAFP4CF   LCD 36x24 Bicolor Compact

3.   Dimensions

All the controllers have the same dimensions.

Dimensions in mm.

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