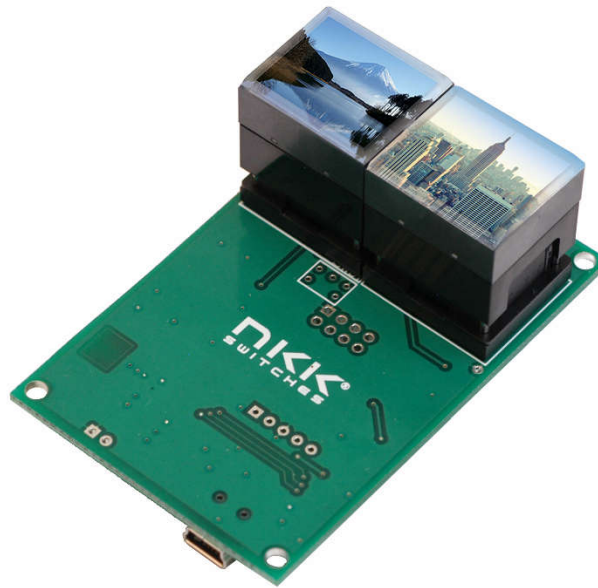


IS-ENG-KIT Features

Revision B



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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:

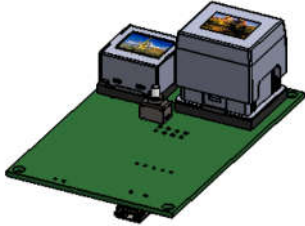
- Controls up to two SmartDisplays/SmartSwitches or one OLED Rocker (Table 1).
- 1M or 16M on-board NOR flash memory to store images, attributes or any other information.
- Serial communication via USB (115.2K, 1 start bit, 8-bit, 1 stop bit).
 - Additional serial communication via UART connector available 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.

There are ten development boards covering the four different SmartSwitch 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.



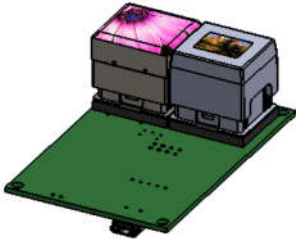
IS-ENG-KIT-7-DS

ISC01P

OLED 52x36 Display

ISC15ANP4

OLED 64x48 Standard



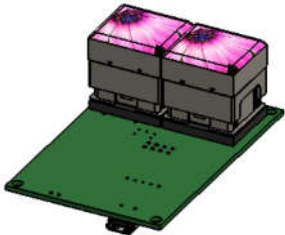
IS-ENG-KIT-7-FS

ISF15ACP4

OLED 96x64 Frameless

ISC15ANP4

OLED 64x48 Standard



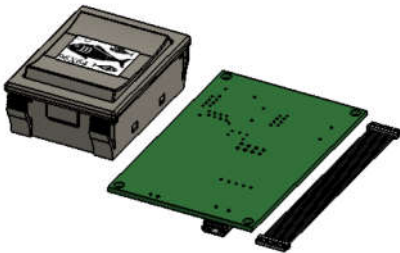
IS-ENG-KIT-7-FF

ISF15ACP4

OLED 96x64 Frameless

ISF15ACP4

OLED 96x64 Frameless

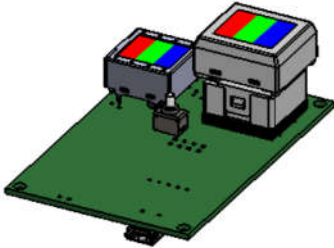


IS-ENG-KIT-8-R

IS18WWC1W

OLED 96x64 Rocker

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



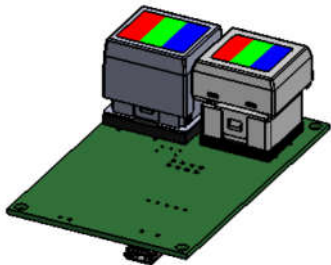
IS-ENG-KIT-6-DH

IS01EBFRGB

LCD 64x32 Display

IS15EBFP4RGB-09YN

LCD 64x32 Hybrid



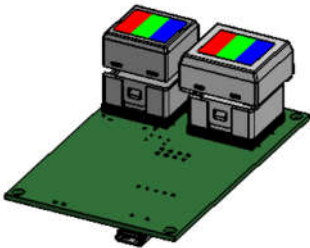
IS-ENG-KIT-6-SH

IS15EBFP4RGB

LCD 64x32 Standard

IS15EBFP4RGB-09YN

LCD 64x32 Hybrid



IS-ENG-KIT-6-CH

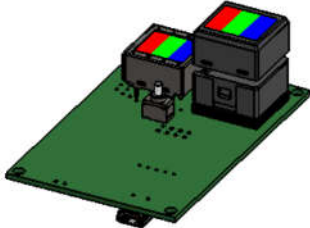
IS15ESBFP4RGB

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.



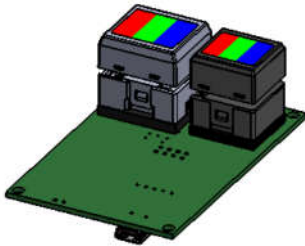
IS-ENG-KIT-5-DC

IS01BBFRGB

LCD 36x24 Display

IS15BSBFP4RGB

LCD 36x24 Compact



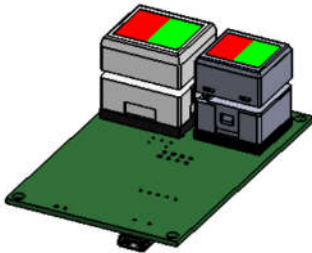
IS-ENG-KIT-5-SC

IS15BBFP4RGB

LCD 36x24 Standard

IS15BSBFP4RGB

LCD 36x24 Compact



IS-ENG-KIT-5-BC

IS15BAFP4CF

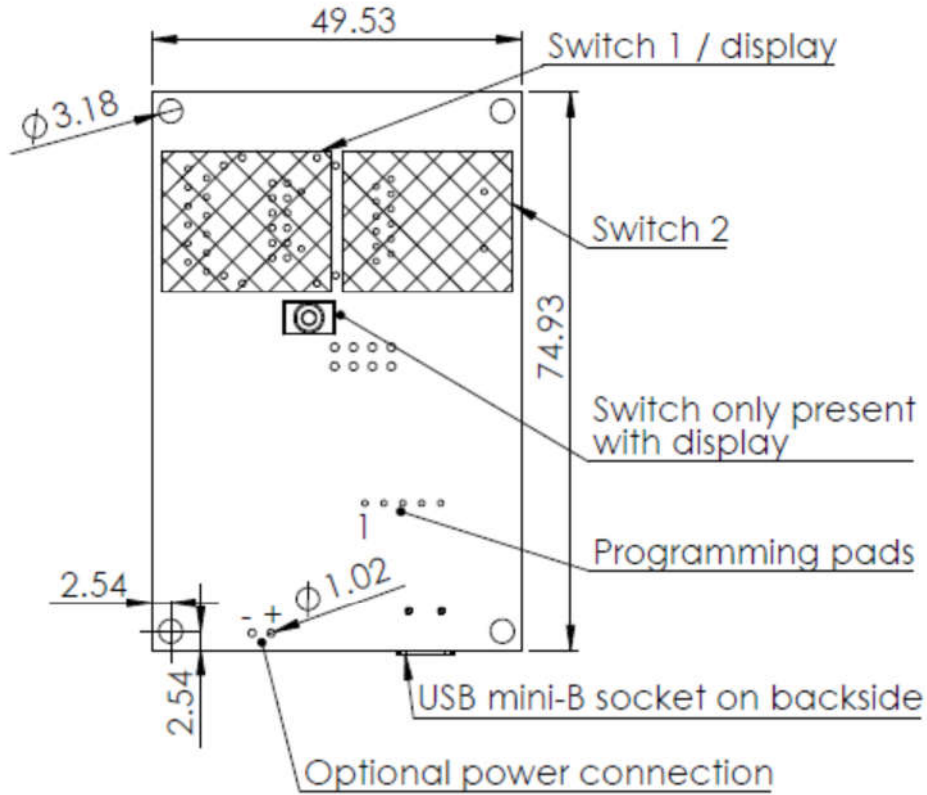
LCD 36x24 Bicolor Standard

IS15BSAFP4CF

LCD 36x24 Bicolor Compact

3. Dimensions

All the controllers have the same dimensions.



Dimensions in mm.

Mouser Electronics

Authorized Distributor

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