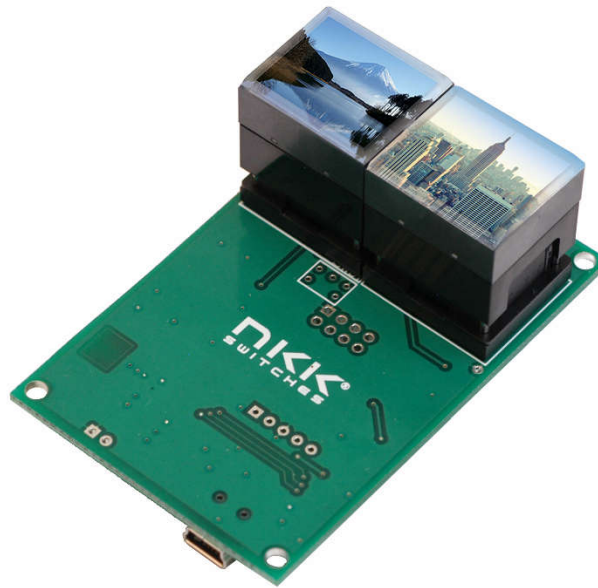


IS-ENG-KIT Features

Revision B



NKK SWITCHES
7850 E. Gelding Drive
Scottsdale, AZ 85260

Toll Free 1-877-2BUYNKK (877-228-9655)
Phone 480-991-0942
Fax 480-998-1435
e-mail <engineering@nkkswitches.com>

All Rights Reserved Worldwide

NKK Switches makes no warranty for the use of these products and assumes no responsibility for any errors, which may appear in this document, nor does it make a commitment to update the information contained herein. Smart Switch is trademark of NKK Switches.

Table of Contents

Table of Contents.....	2
1. General Features	3
2. Kits Sets	5
3. PCB Dimensions.....	8

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:

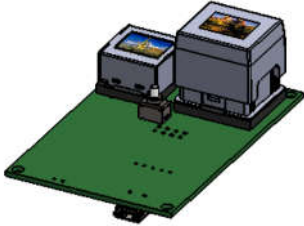
- Controls up to two SmartDisplays/SmartSwitches or one OLED Rocker (Table 1).
- 1M or 16M on-board NOR flash memory to store images, attributes or any other information.
- Serial communication via USB (115.2K, 1 start bit, 8-bit, 1 stop bit).
 - Additional serial communication via UART connector available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



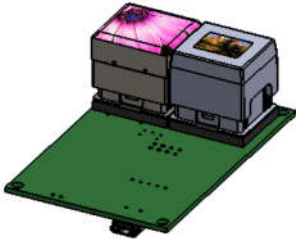
IS-ENG-KIT-7-DS

ISC01P

OLED 52x36 Display

ISC15ANP4

OLED 64x48 Standard



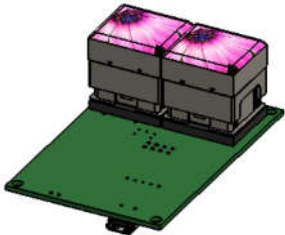
IS-ENG-KIT-7-FS

ISF15ACP4

OLED 96x64 Frameless

ISC15ANP4

OLED 64x48 Standard



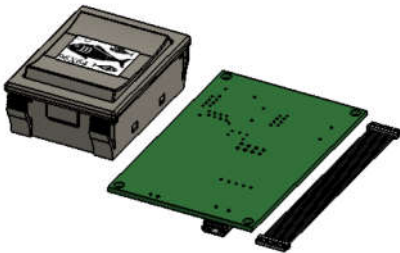
IS-ENG-KIT-7-FF

ISF15ACP4

OLED 96x64 Frameless

ISF15ACP4

OLED 96x64 Frameless

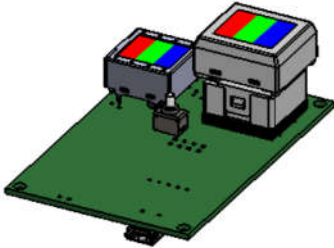


IS-ENG-KIT-8-R

IS18WWC1W

OLED 96x64 Rocker

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



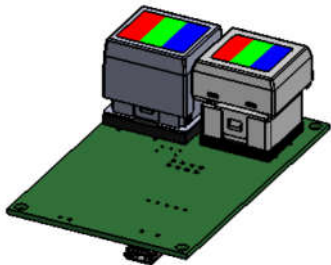
IS-ENG-KIT-6-DH

IS01EBFRGB

LCD 64x32 Display

IS15EBFP4RGB-09YN

LCD 64x32 Hybrid



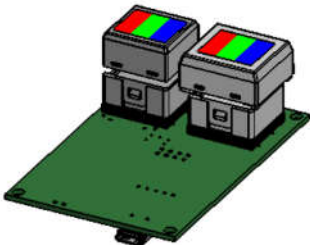
IS-ENG-KIT-6-SH

IS15EBFP4RGB

LCD 64x32 Standard

IS15EBFP4RGB-09YN

LCD 64x32 Hybrid



IS-ENG-KIT-6-CH

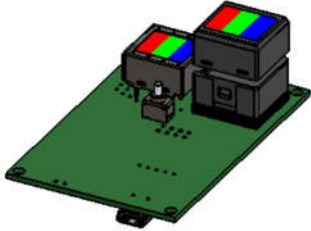
IS15ESBFP4RGB

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.



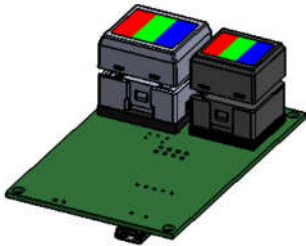
IS-ENG-KIT-5-DC

IS01BBFRGB

LCD 36x24 Display

IS15BSBFP4RGB

LCD 36x24 Compact



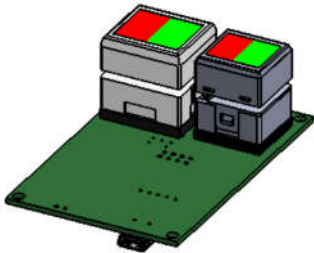
IS-ENG-KIT-5-SC

IS15BBFP4RGB

LCD 36x24 Standard

IS15BSBFP4RGB

LCD 36x24 Compact



IS-ENG-KIT-5-BC

IS15BAFP4CF

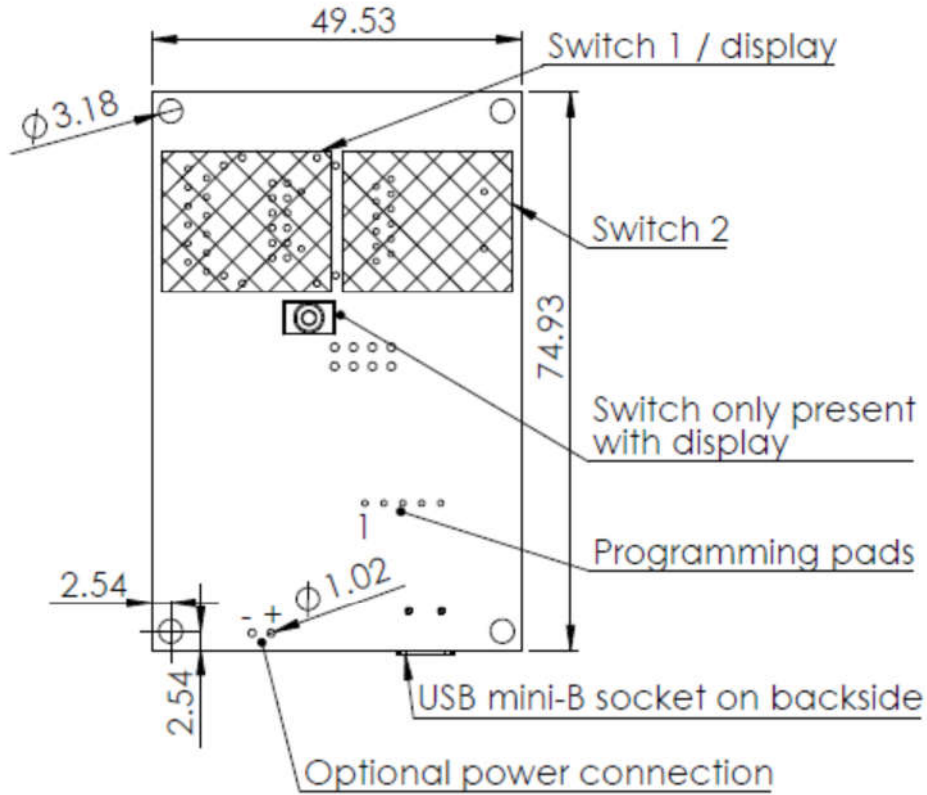
LCD 36x24 Bicolor Standard

IS15BSAFP4CF

LCD 36x24 Bicolor Compact

3. Dimensions

All the controllers have the same dimensions.



Dimensions in mm.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Display Development Tools](#) category:

Click to view products by [NKK Switches](#) manufacturer:

Other Similar products are found below :

[KIT 60121-3](#) [S5U13U11P00C100](#) [MAX14521EEVKIT](#) [121CBL02-RPK](#) [KIT 60145-3](#) [S5U13748P00C100](#) [DFR0413](#) [3248](#)
[DLPLCR90EVM](#) [DLPLCR50XEVM](#) [MAX20069EVKIT#](#) [KIT95000-3](#) [LCD-16396](#) [PIM370](#) [1109](#) [MCIMX-LVDS1](#) [MIKROE-2449](#)
[MIKROE-2453](#) [131](#) [DEV-13628](#) [1590](#) [MIKROE-2269](#) [1601](#) [1770](#) [1947](#) [1983](#) [1987](#) [2050](#) [2218](#) [2219](#) [2260](#) [2345](#) [2418](#) [2423](#) [2454](#) [2455](#)
[2478](#) [2674](#) [SK-220RD-PI](#) [FIT0477](#) [333](#) [334](#) [TE-M321-SDK](#) [DFR0428](#) [cs-epapersk-03](#) [338](#) [DEV-14442](#) [FIT0478](#) [cs-paperino-01](#) [OM-E-OLE](#)