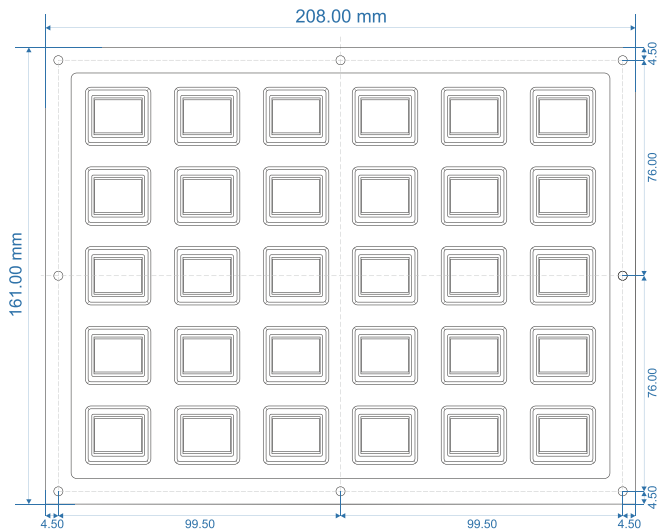
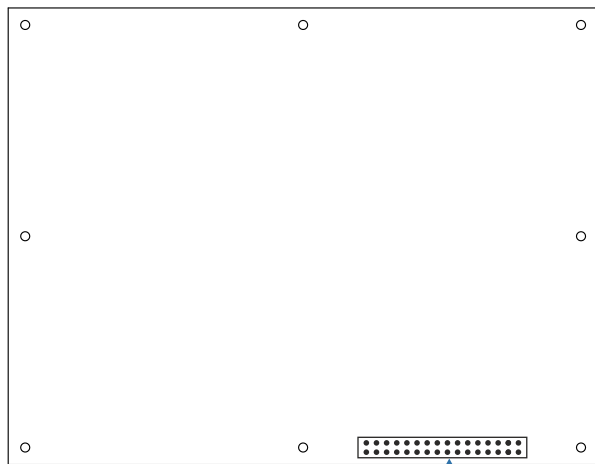




Mechanical Drawing - Front View

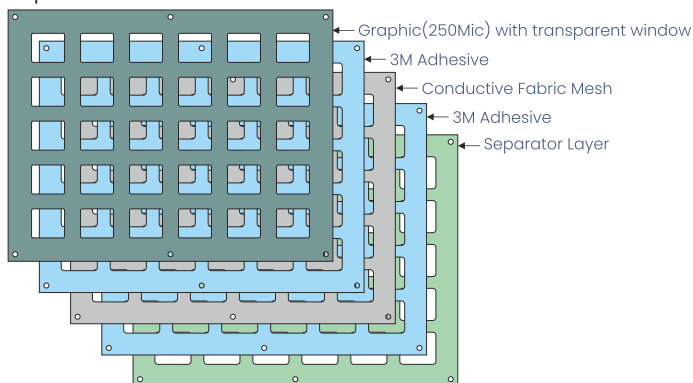


Keypad - Back View

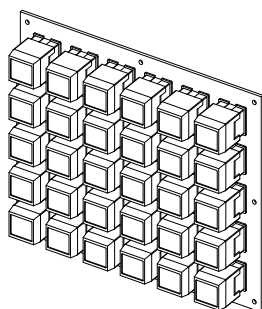


Exploded View

Connector P/N.: EHF-117-01-L-D-SM-LC



PCB with Keys



Smart Display P/N: IS15EBFP4RGB-09YN
RGB LED Backlight Black and White LCD
Standard Travel

Characteristics:

- Programmable display graphics for alphanumeric characters and animated sequences.
- 64 colors of backlighting can be controlled dynamically.
- Pushbutton switches or display with LCD, RGB LED backlighting.
- General brightness of back lit is dynamically controlled in eight steps from dark to bright.
- Operated by commands and data supplied via serial communications (SPI).
- Incorporates bitmap display function.
- Display Viewing Areas:
Switches - 17.0mm x 13.0mm (horizontal x vertical)
Display - 14.4mm x 11.8mm

Connector Pin Details

| Pin No. | Signal Name | Pin No. | Signal Name |
|---------|--------------|---------|---------------|
| 1 | SPI_SCLK | 2 | GPIO_KEY_SEL4 |
| 3 | SPI_DI[MISO] | 4 | GPIO_KEY_SEL3 |
| 5 | SPI_DO[MOSI] | 6 | GPIO_KEY_SEL2 |
| 7 | SPI_CS0 | 8 | GPIO_KEY_SEL1 |
| 9 | SPI_CS1 | 10 | GPIO_KEY_SEL0 |
| 11 | ROW 1 | 12 | GND |
| 13 | ROW 2 | 14 | COL 1 |
| 15 | ROW 3 | 16 | COL 2 |
| 17 | ROW 4 | 18 | COL 3 |
| 19 | ROW 5 | 20 | COL 4 |
| 21 | GND | 22 | COL 5 |
| 23 | GND | 24 | COL 6 |
| 25 | GND | 26 | GND |
| 27 | XXX | 28 | XXX |
| 29 | 5V0 | 30 | 3V3 |
| 31 | 5V0 | 32 | 3V3 |
| 33 | 5V0 | 34 | 3V3 |

Specifications:

1. Environmental Specifications: Keyboard will withstand for IP68 compliance
2. Keyboard will withstand for EMI/EMC as per spec MIL 461 E/F
3. Key will be programmable with RGB Backlit LCD