



Part Number(s): IRX-1, IRX-2, IRXP-1, IRXP-2
Output: 26 Bit Wiegand or 37 Bit Wiegand Open Format
Voltage(s): 5 VDC, +/- 0.1V 20mA 12 VDC, +/- 3.0V 20mA
Temperature: -40° C to +70° C (-40° F to +160° F)
 DATA 1 and DATA 0 signals are open collector outputs with 2.2K pull-ups to the internal +5V. The data is sent at 1 msec per bit with a pulse duration of 50 usec. An annunciator beeps with each card read. When the LED control input is pulled low, the GREEN LED will be on and the BLUE LED will be off. When the input goes high the BLUE LED is on and the GREEN LED is off. The LED that is illuminated will blink off with every card read. The LED control input is pulled to the internal +5V with a 2.2K resistor.

The following WIEGAND output is sent each time a card is read:

P S S S S S S S S N N N N N N N N N N N N N N P
 BIT 1 2 9 10 25 26

BIT 1 is an even parity for the following 12 bits. The sum of bits 1-13 is even.

BITS 2-9 are the SITE CODE, part of the card data.

BITS 10-25 This is the card number read.

Leading 0's are added as required. Bit 10 is most significant.

BIT 26 is an odd parity over the previous 12 bits. The sum of bits 14-26 is odd.

Example: Site Code of 004 and a card number of 123 read 1 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 1 1 1 1 0 1 1 1

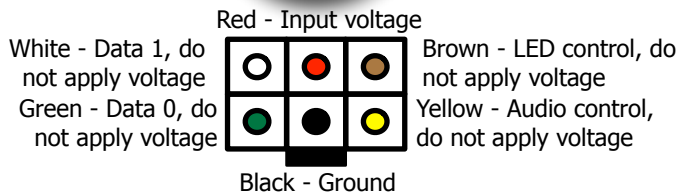
The following card formats are supported;

- iClass
- iClass SE/SR
- iClass Seos
- Mifare Classic 1K/4K & SE
- Mifare Mini
- Mifare Ultra Light
- Mifare Desfire
- FeliCa
- CEPAS

For IRXP models, the following Prox technologies are supported;

- HID Prox
- Indala Prox
- EM4100
- EM4102
- EM4200
- EM4305
- EM4450
- FDX-B
- T5557
- T5567
- AWID Prox

Plus a number of other formats, contact Essex Electronics for details

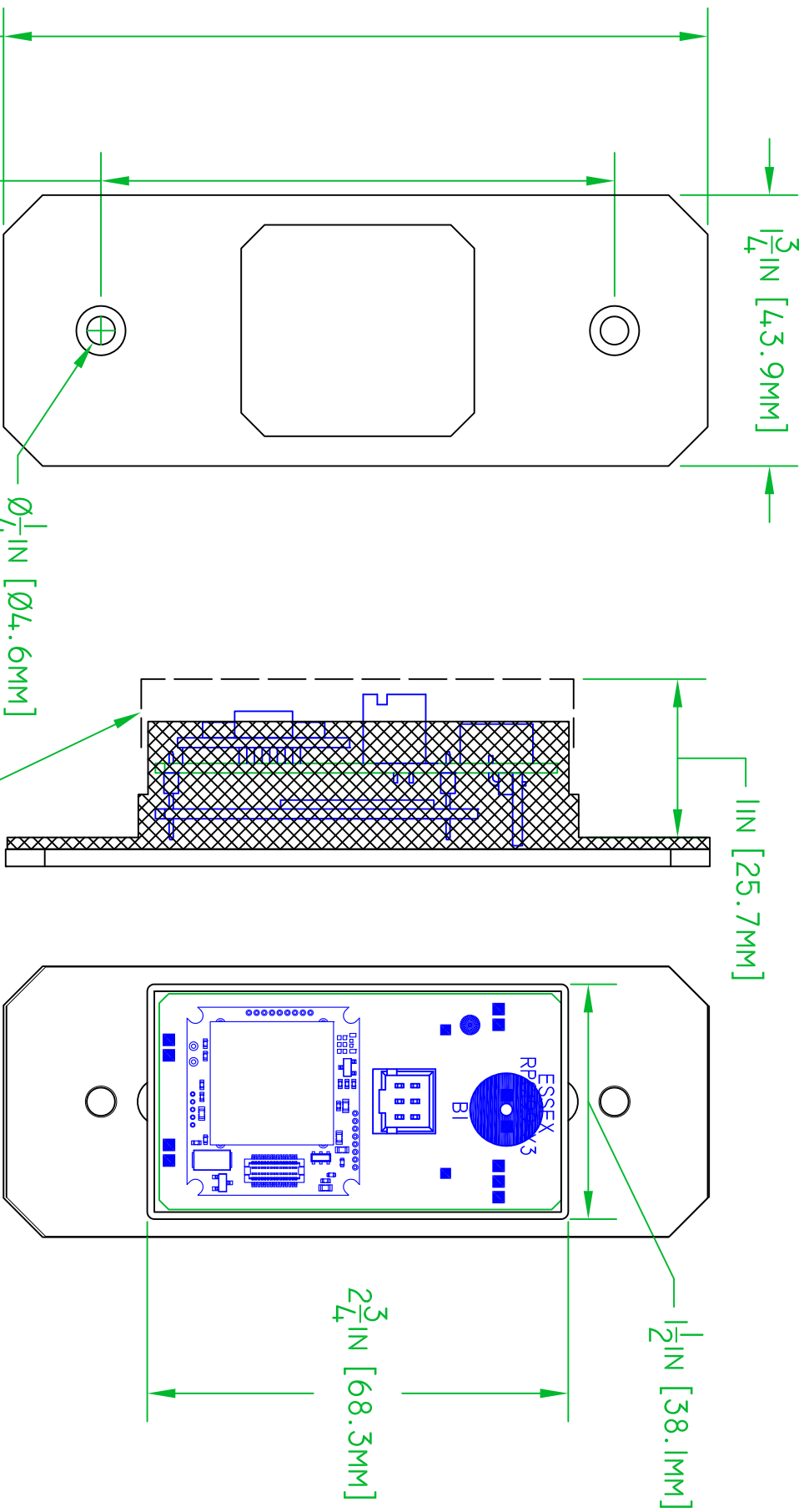


iRox Wiring:

- Red +5V or 12V DC
- Black DC Ground
- White Data 1
- Green Data 0
- Brown LED Control, floating = BLUE, grounded = GREEN
- Yellow Audio Control, floating = off, grounded = beep

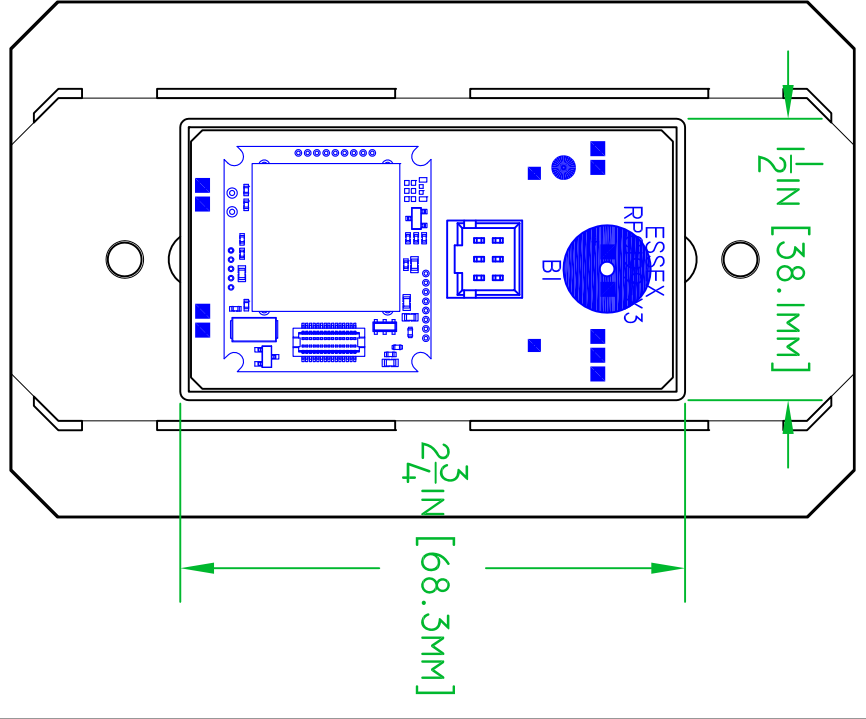
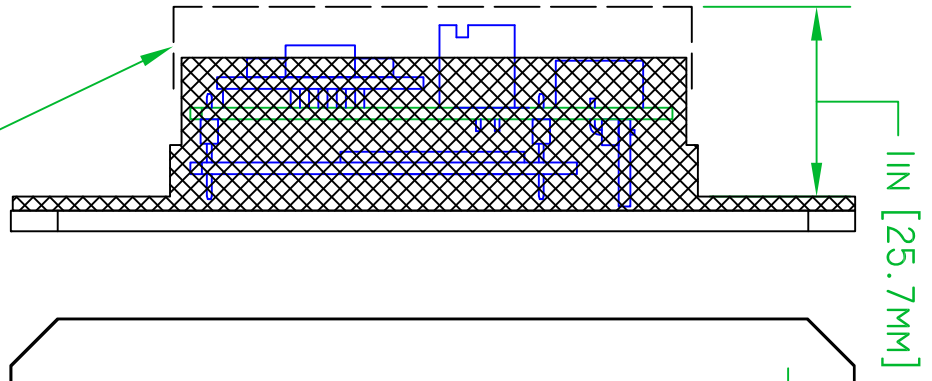
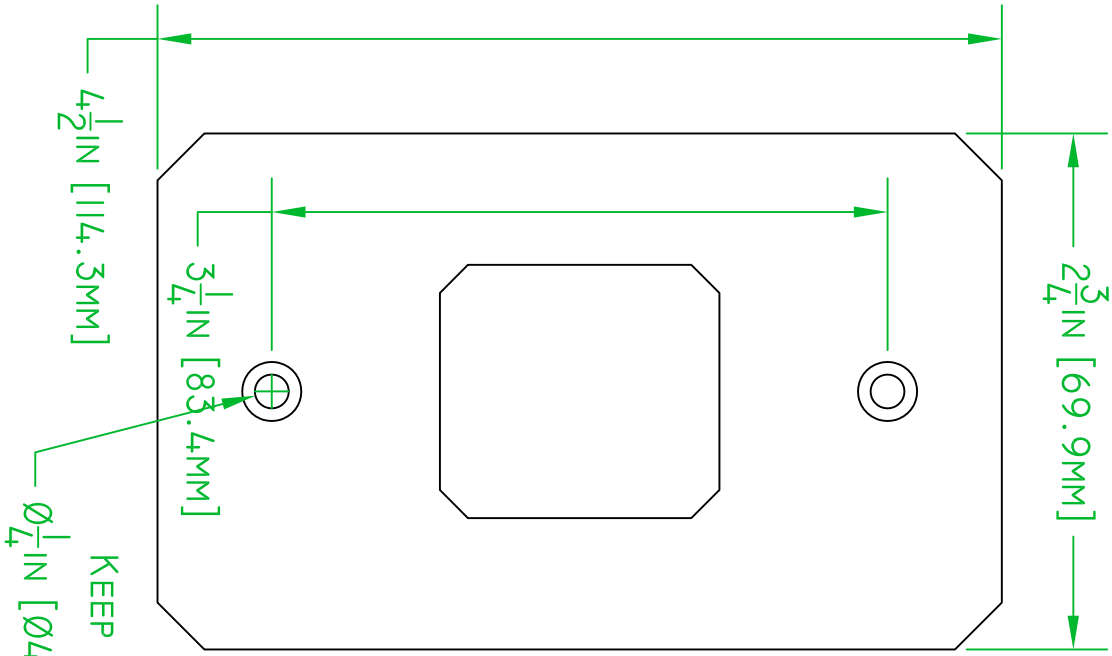
This device complies with Part 15 of the FCC rules and regulations. Operation is subject to the following two conditions (1) This device may not cause harmful interference; (2) This device must accept any interference including interference that may cause undesired operation

| REVISIONS | | | | |
|-----------|-----------------|-------------|-------------|----------|
| ZONE | REV | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | | 09-MAY-2018 | SMP |



| | | | |
|--------------------------|----------|-------------------|--------------|
| Drawn by: S. PETREE | | Date: 05-JAN-2015 | |
| Essex Electronics | | | |
| TEMPLATE, IRX MK2 SERIES | | | |
| SIZE | FSCM NO. | DWG NO. | REV |
| A | | RTL26 | A |
| SCALE | 1:1 | RTL26-A.DWG | SHEET 1 OF 2 |
| IRX2, IRXP2 | | | |

PRINTED ON: 9-MAY-2018



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|-------|----------|-------------|--------------|
| SIZE | FSCM NO. | DWG NO. | REV |
| A | | RTL26 | A |
| SCALE | 1:1 | RTL26-A.DWG | SHEET 2 OF 2 |

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