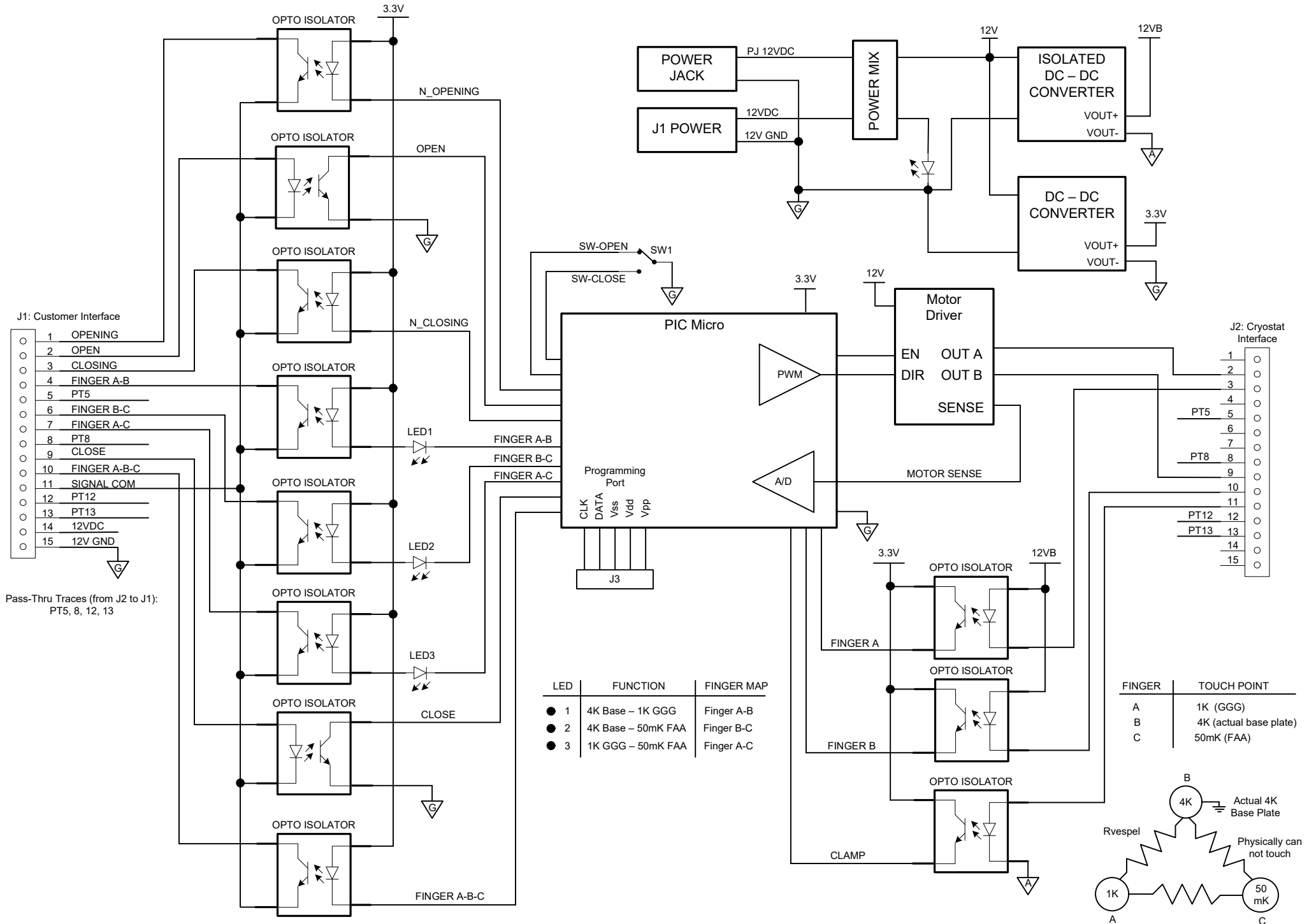


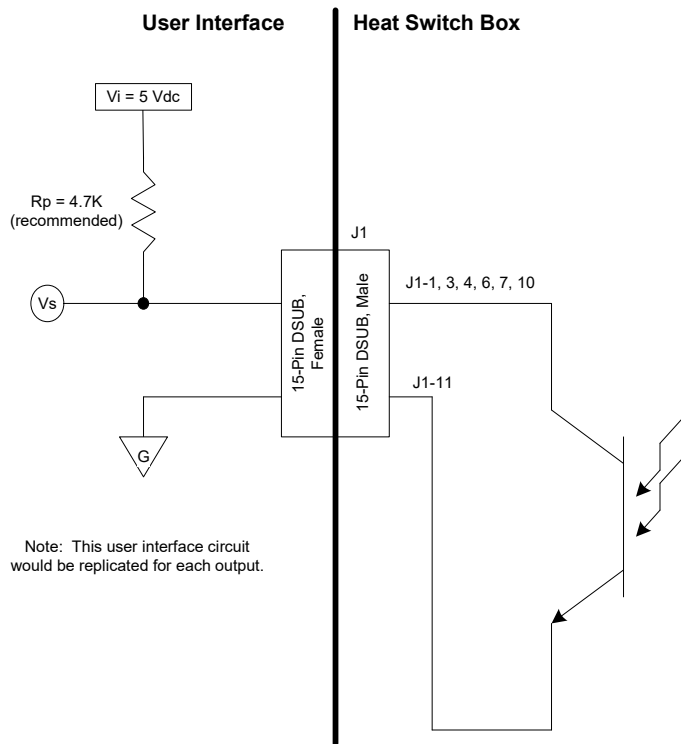
# HPD Heat Switch Gen 3 Rev F: System Block Diagram



# HPD Heat Switch Gen 3 Rev F : User Interface Connectivity

Date: 1-14-16

## Outputs: Touch Sensors and Opening or Closing Status



### Touch Sensor Pin Outputs

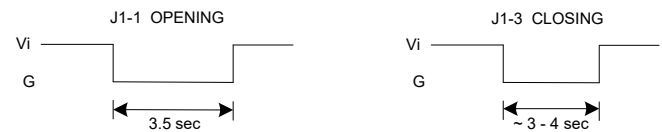
Pin/Description	Vs = 0	Vs = Vi
J1-4 Finger A - B	Touch A to B	No Touch
J1-6 Finger B - C	Touch B to C	No Touch
J1-7 Finger A - C	Touch A to C	No Touch
J1-10 Finger A-B-C	Touch A to B to C	No Touch

(All pins are Low during the touch time, they go High when the touch goes away)

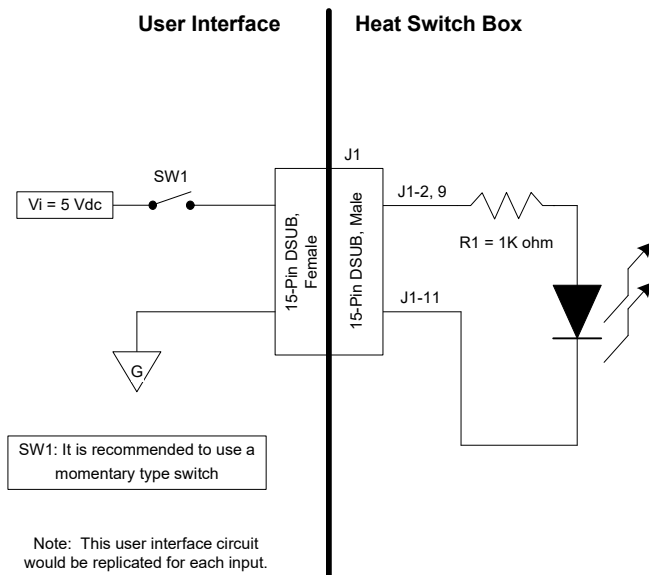
LED	Function	Finger Map
1	4K Base - 1K GGG	Finger A - B
2	4K Base - 50mK FAA	Finger B - C
3	1K GGG - 50mK FAA	Finger A - C

### Opening and Closing Status Pin Outputs

Pin/Description	Vs
J1-1 OPENING	Active Low During Opening Sequence
J1-3 CLOSING	Active Low During Closing Sequence



## Inputs: Open and Close Command

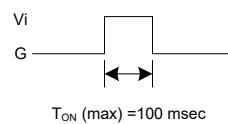


### Pin/Description:

J1-2 Open Command: Close SW1 to initiate the opening sequence, max ON time = 100 msec  
**Warning:** If the Open Command signal is left High the Heat Switch will continue to OPEN and not stop.

J1-9 Close Command: Close SW1 to initiate the closing sequence, max ON time = 100 msec  
 If the Close Command signal is left High the Heat Switch will stop closing based on torque.

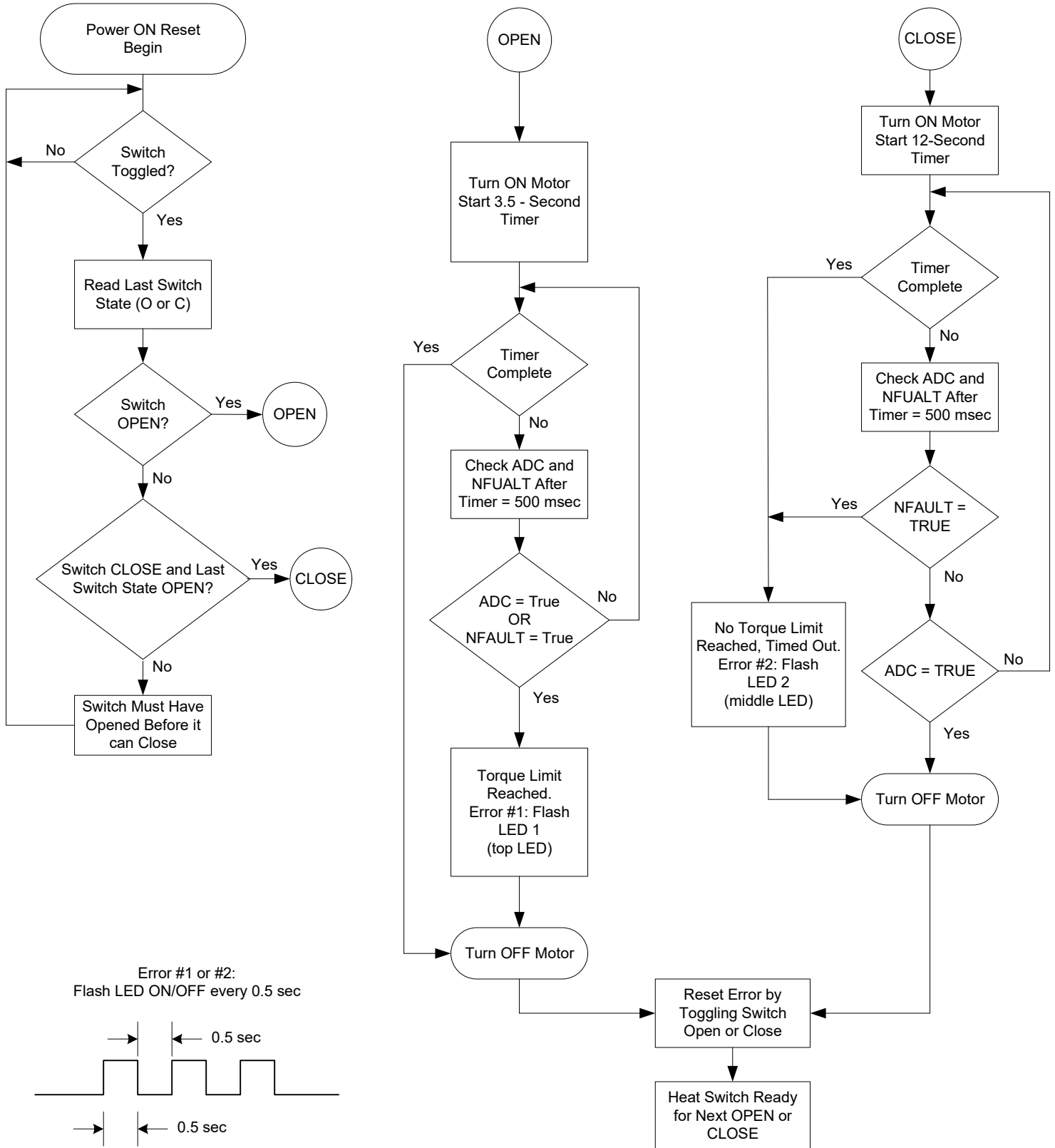
### Input Timing Diagram



Rev. F Firmware

# HPD Heat Switch Gen 3 Rev F: Firmware Flowchart

Date: 1-14-16



Rev. F Firmware