QEX Files for The Ultimate Keyer

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Figure 1 -- Ultimate Keyer, front view.

Figure 2 -- Ultimate Keyer, rear view.
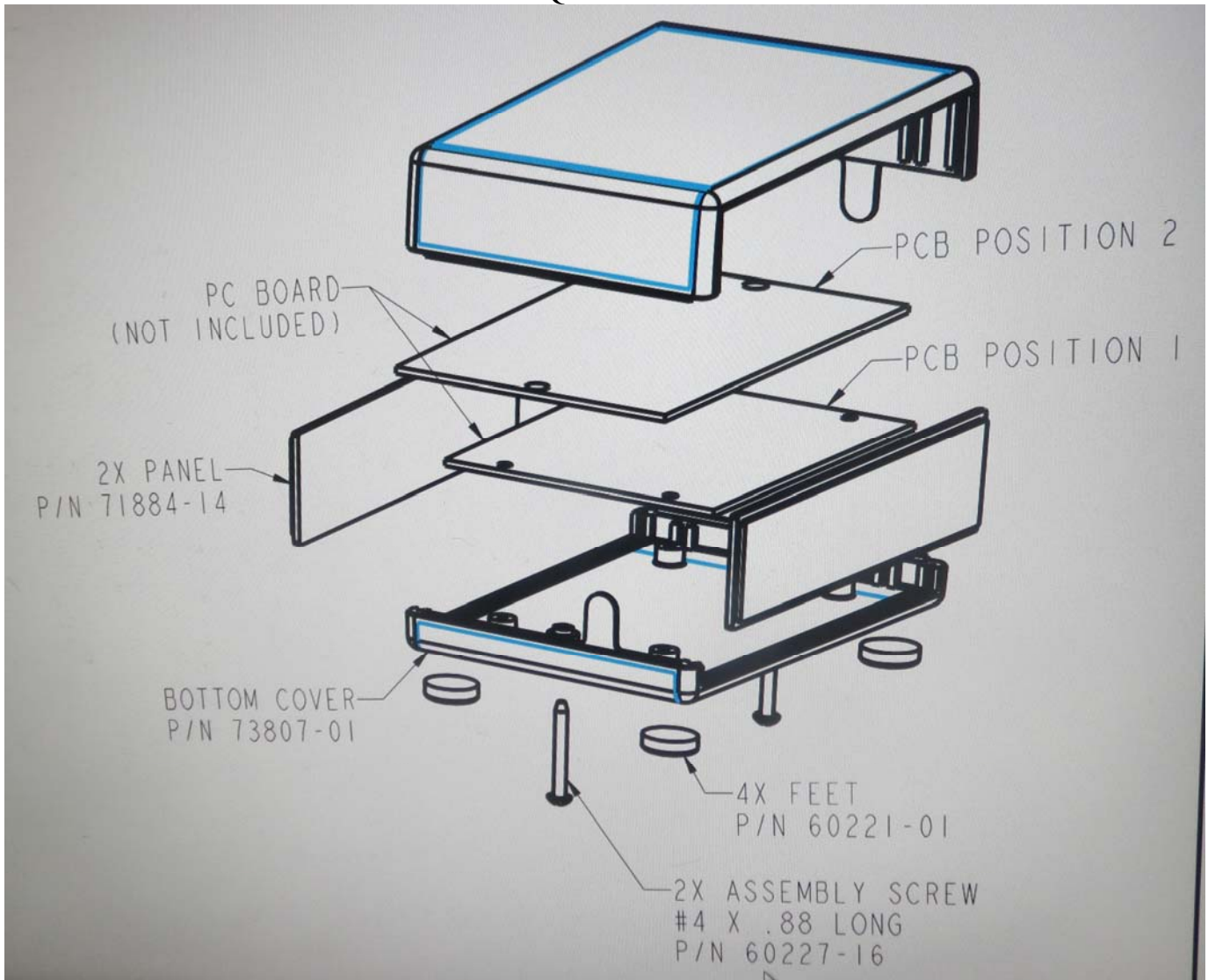
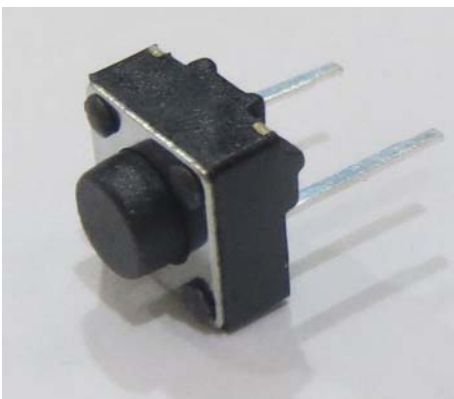Figure 3 -- Keyer enclosure, exploded view.

Figure 4 -- Pushbutton.   Figure 5 -- Mini-speaker.   Figure 6 -- LED display.
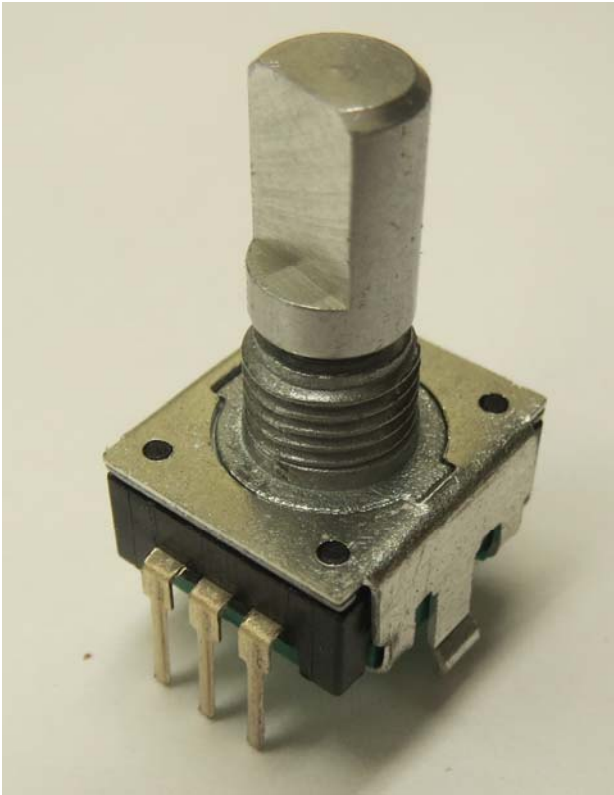
Figure 7 -- Rotary encoder.

Figure 8 -- 20-pin DIP MCU.

Figure 9 -- Converting 20-pin DIP through-hole socket to 20-pin DIP SMD Socket

Figure 10 Pins.

Figure 11 -- Front panel, front view.

Figure 12 -- Front panel, rear views.

Figure 13 -- Rear panel, rear (outside) view.

Figure 14 -- Rear panel, front (inside) view.

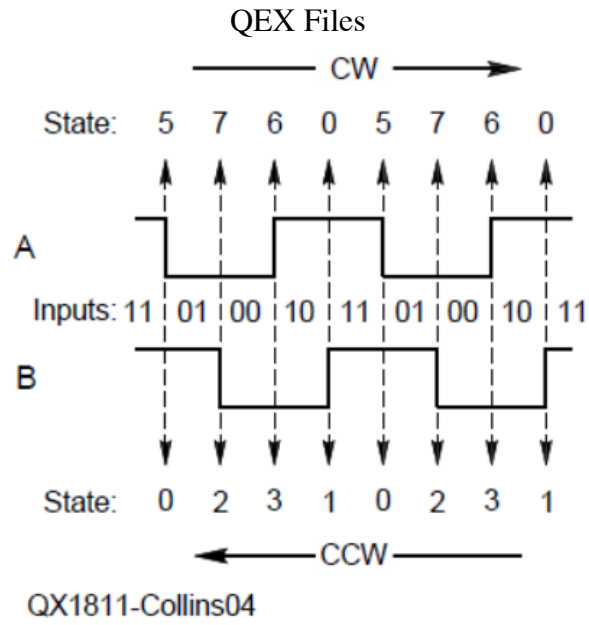Figure 15 -- Ultimate keyer schematic. [Figure 3 in the text.]

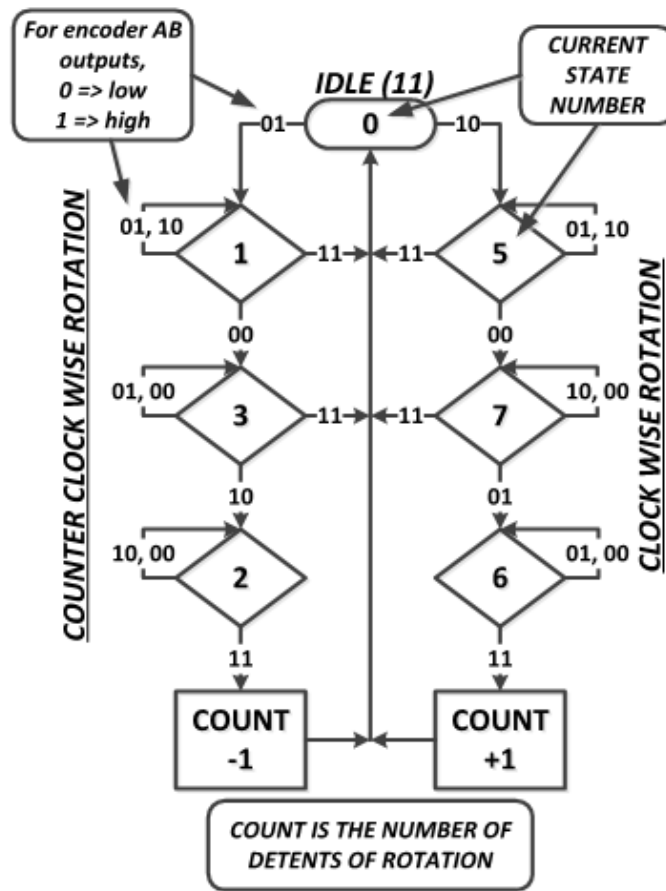Figure 16 -- Rotary encoder output. [Figure 4 in the text.]
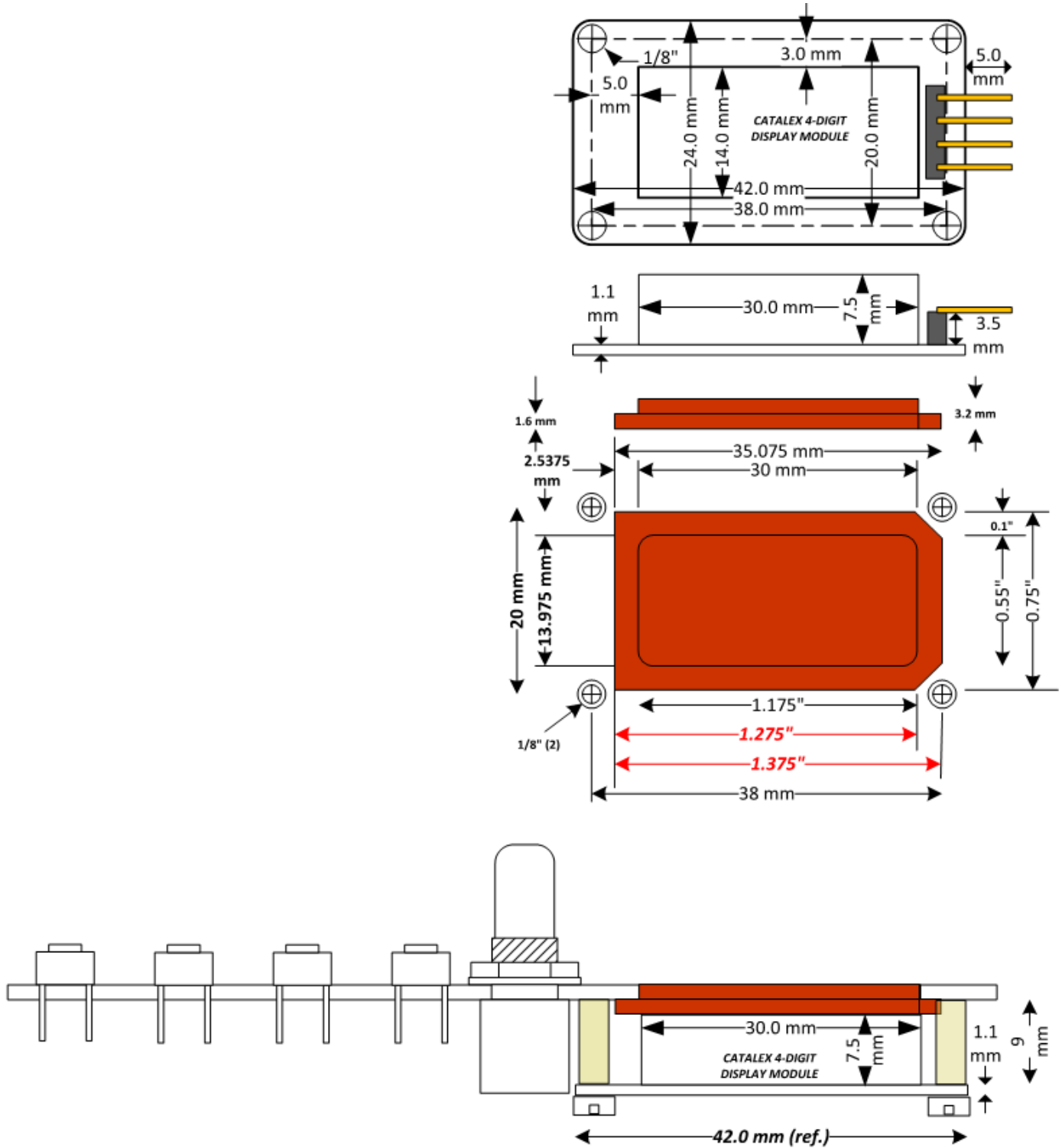

Figure 17 -- Encoder state diagram.

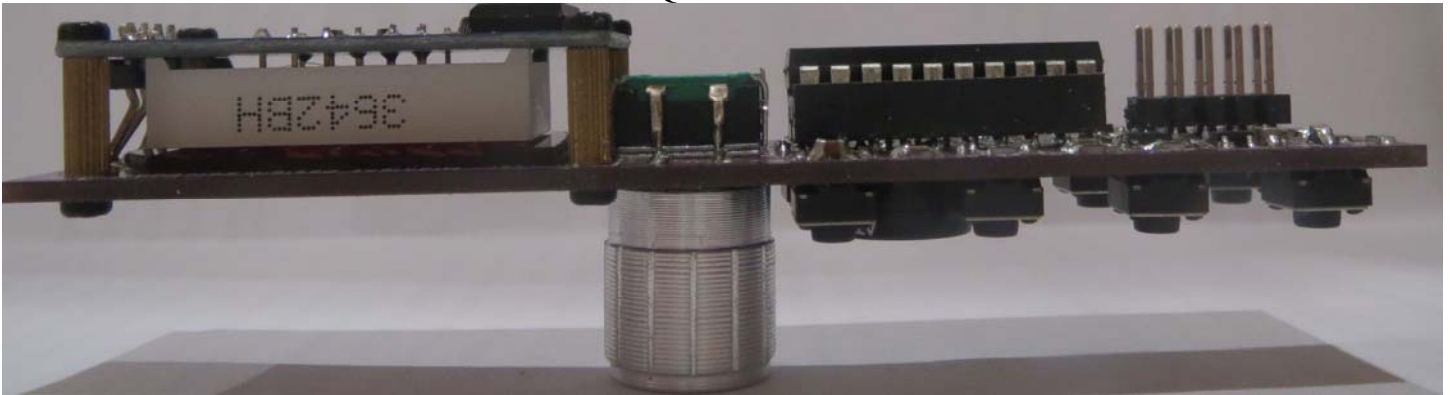Figure 18 -- LED module, lens, and mounting detail.

Figure 19 -- LED module and rotary encoder mountings

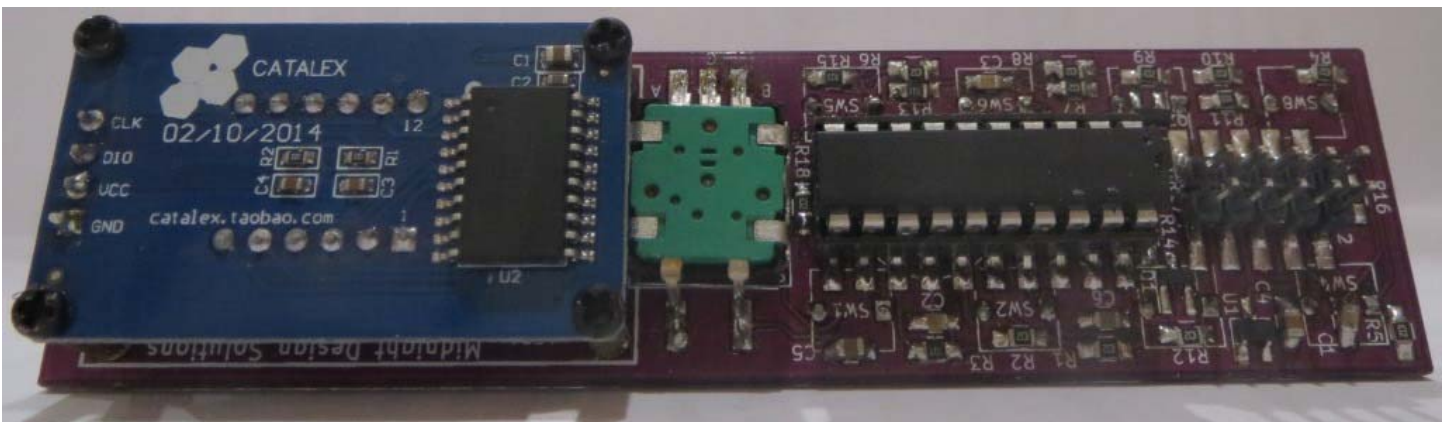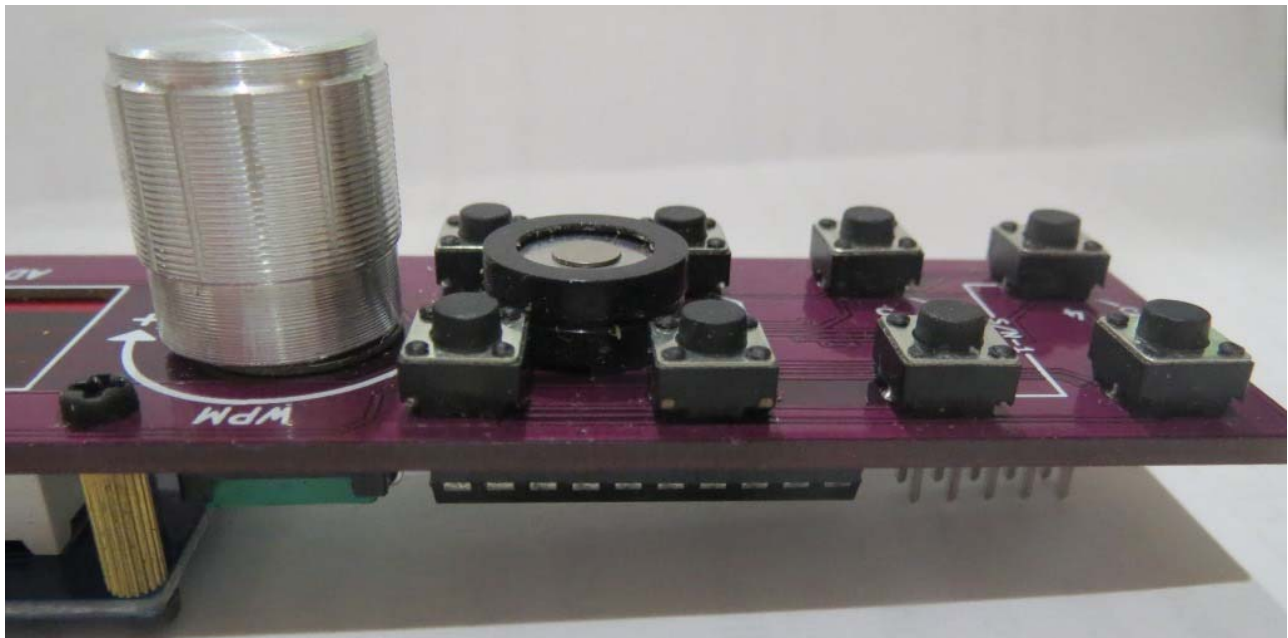
Figure 20 -- Front panel assembly, rear view.

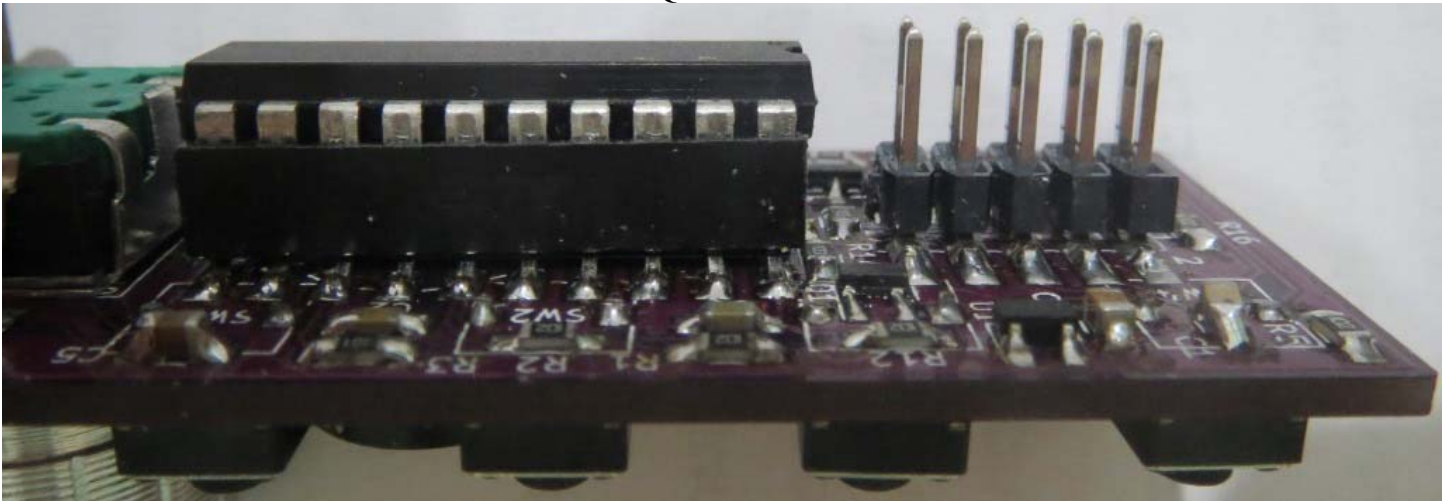Figure 21 -- Front panel, side view showing pushbutton switch and speaker mounting.

Figure 22 -- Font panel, side view showing SMD parts mounting.

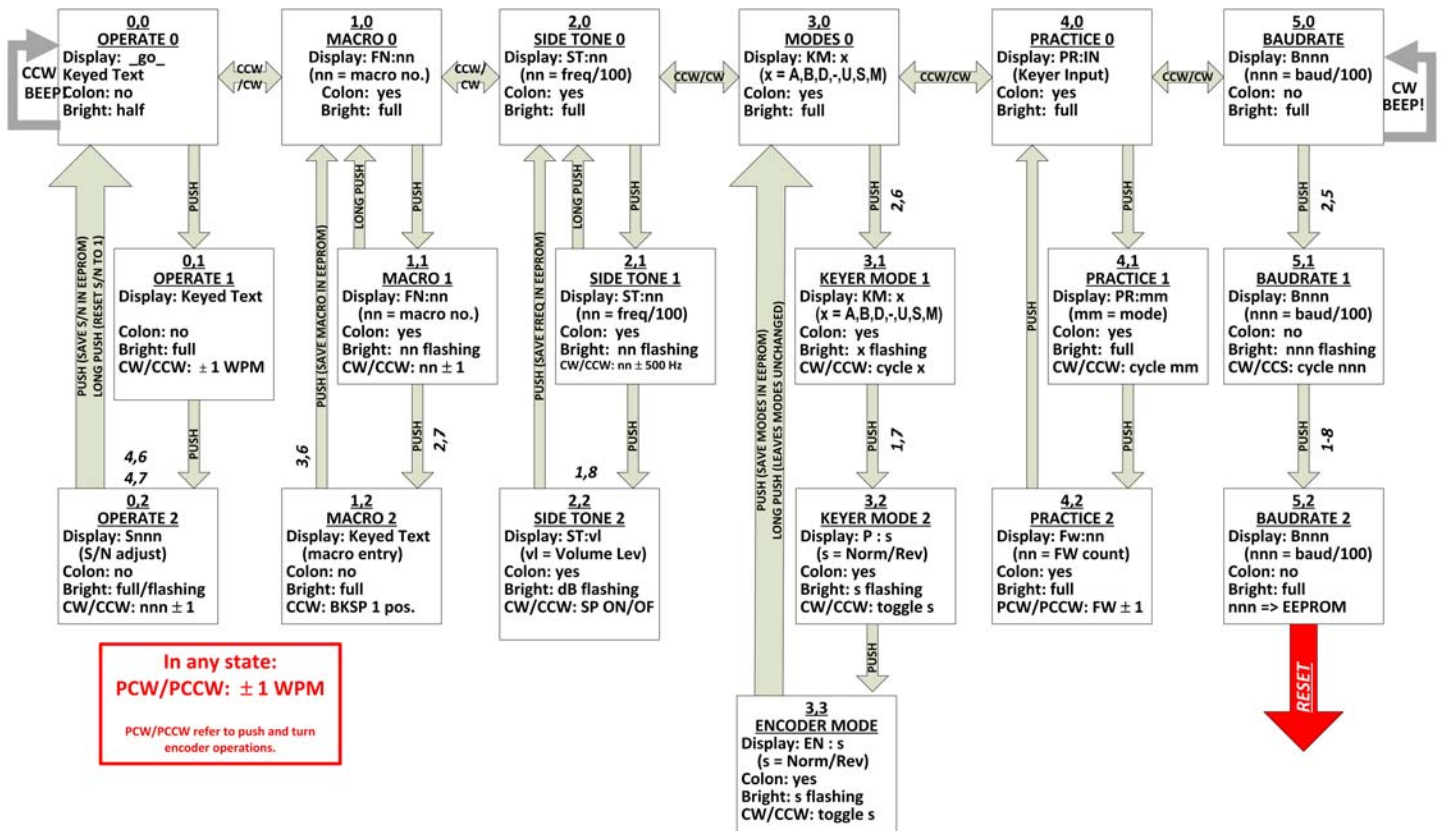Figure 23 -- 7-segment character fonts. [Figure 6 in text.]

Figure 24 -- Ultimate keyer control state diagram. [Figure 7 in text.]