

telePilot Operational Description

The E10647-0 Radio Control Transmitter Unit is a hand-held unit with built-in antenna. The transmitter is powered by two AA batteries.

The transmitter operates in 433 – 439.8 Mhz UHF frequency band on one of twenty-nine channels. The signal is direct frequency modulated and keyed-on in short bursts. The unit transmits when one of the controls is operated. The controls are manually operated and must be held in place to transmit a signal.

The transmission ceases when the control is released.

The antenna is a component on the printed circuit board.

The unit is microprocessor controlled to provide logic for the synthesizer IC, keypad, LEDs, switches, and timing for Uarts for Data transmission and IR (infra-red) serial programming.

The serial data output is fed to an analog switch that is switched between low and high deviation points set by a dual DAC(digital-to-analog converter). The DAC is fed to a VCTCXO running at 10.00MHz. The VCTCXO is fed into the synthesizer IC that produces the 433 – 439.8 Mhz UHF frequency band.

Tune-up procedure: None, auto-tuned.

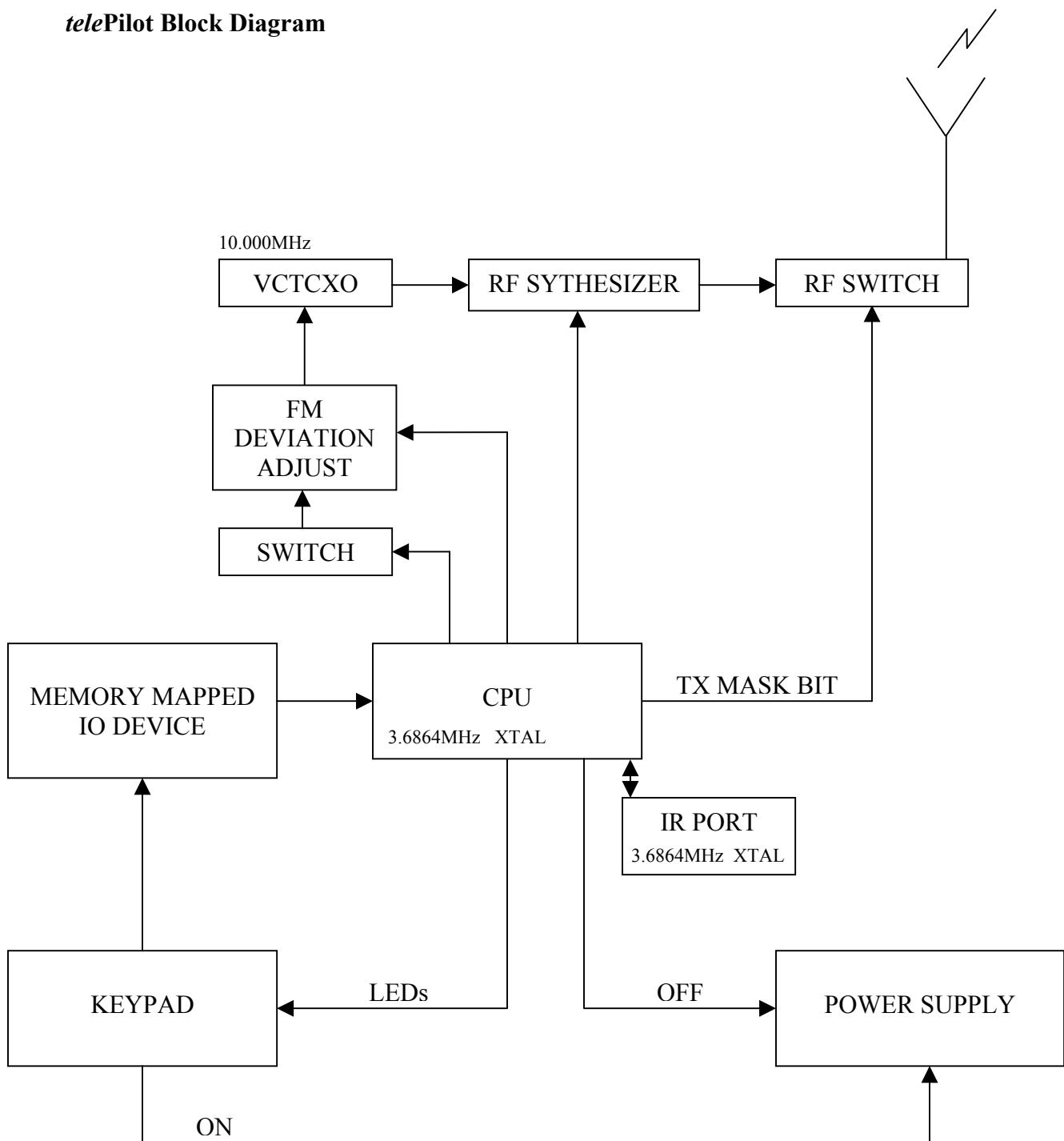
telePilot Block Diagram

Exhibit B