

HT48F06E Hopping Encoder

D/N: HA0121E

Introduction

The Hopping Encoder will encode Address Data, Key Data and Rolling Data (hdata) into a DES24 encoding format, thus realising a remote control encoding function. Each time the Key is pressed, the rolling data will increment by 1. This project uses the HT48F50E as the controlling device.

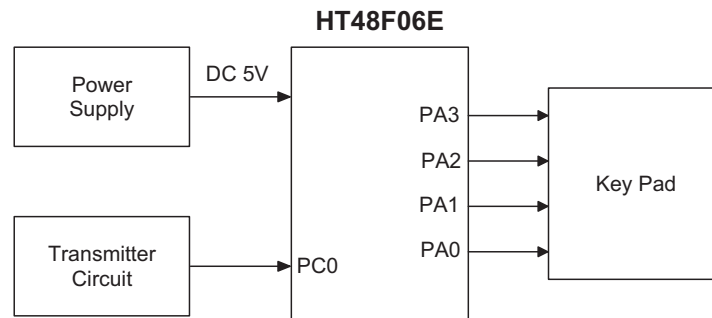
Functional Description

Code Format

- All Code
 - Lead Code + idata(24-bit) + hdata(24-bit)
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 - low part (8.96ms) + high part(4.48ms)
- idata(24-bit)
 - address data(20-bit) + key status data(4-bit)
- hdata
 - hdata is rolling data, each time the key is pressed, hdata is incremented by 1 °
- idata(24-bit) & hdata(24-bit)
 - logic 0
 - low part (560us) +high part(560us)
 - logic 1
 - low part (560us) +high part (1.68ms)
- Repeat Code
 - low part (8.96ms) + high part (2.24ms) + low part (560us)

H/W Block Diagram

Block Diagram

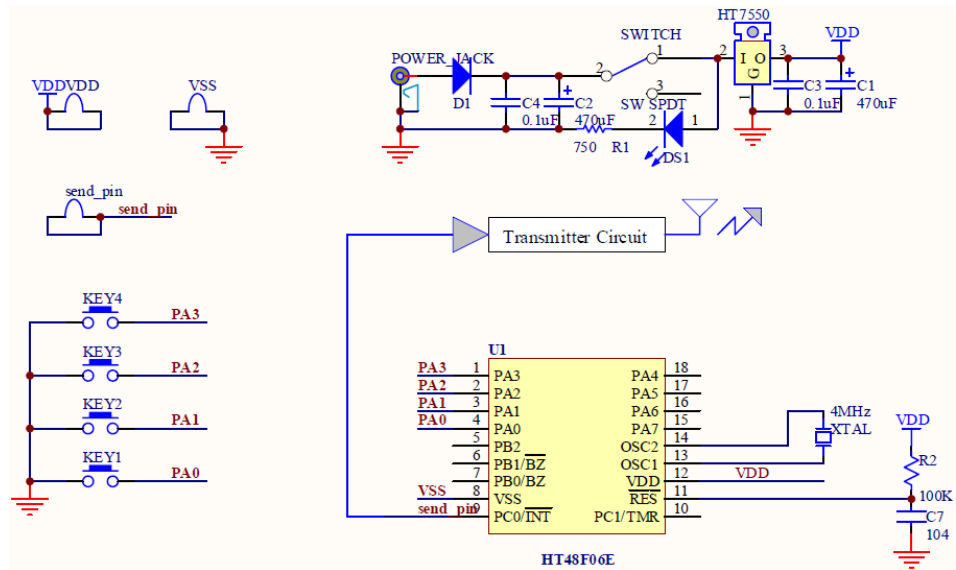


Hardware Block Diagram Description

- Transmitter circuit
This example uses pin PC0 to transmit data, the actual transmitter circuit is designed according to the user's needs. (wired transmitter or wireless transmitter)
- Key pad
This example uses PA0~PA3 as the key input pins.

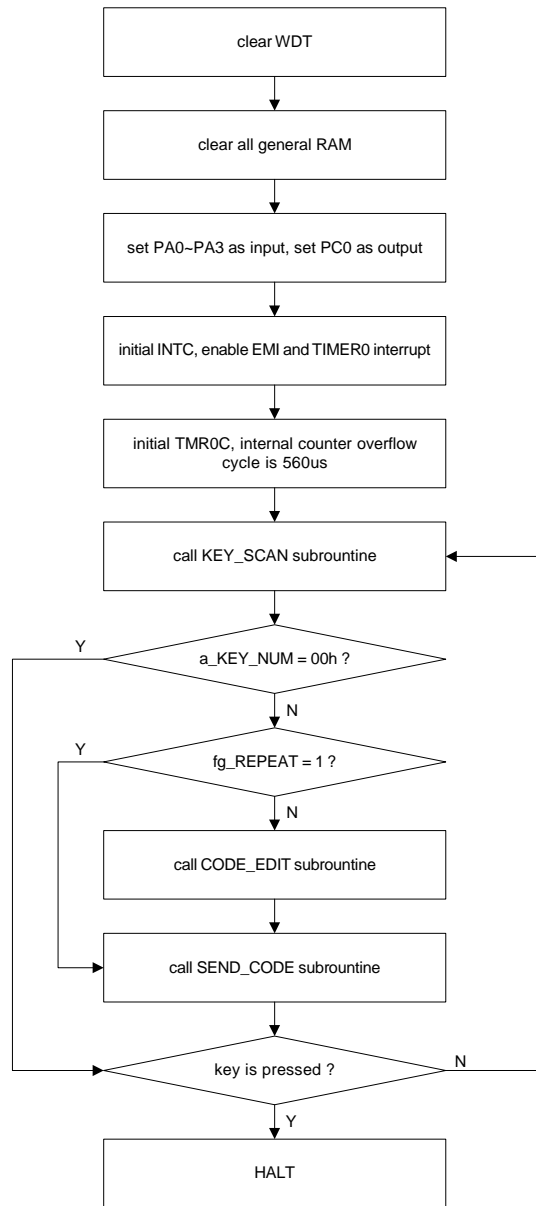
Application Circuit

Overall Circuit

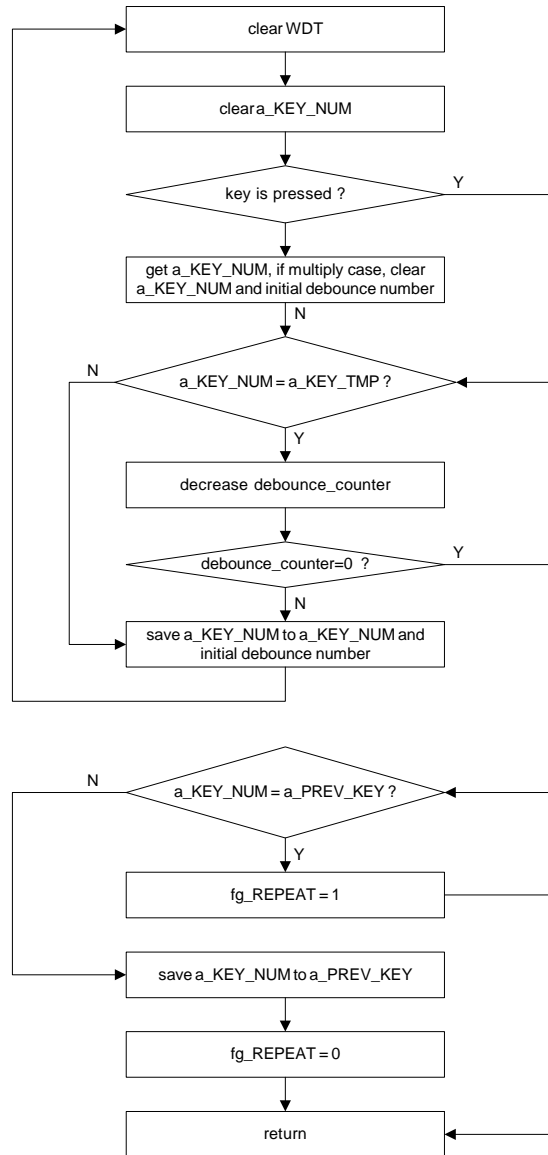


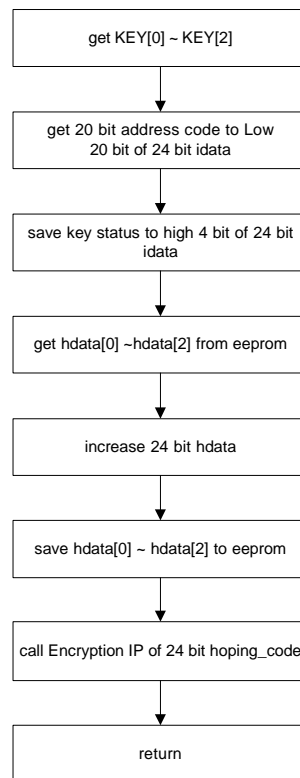
S/W Flowchart

Main Flowchart

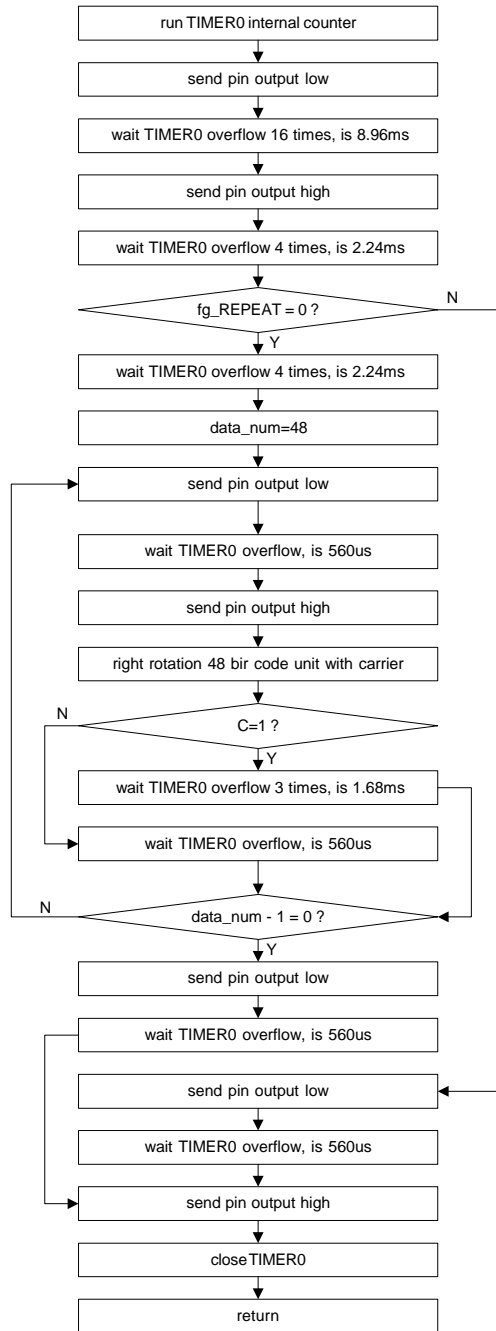


KEY_SCAN Subroutine



CODE_EDIT Subroutine

SEND_CODE Subroutine



Revision History

Revision: V1.10

Updated Date: 2009/02/06

Modified Contents:

Revision History:

- The Overall Circuit diagram has been modified.