

Requirements for
timer interrupt.

=> New project

processor Expert \rightarrow MKL23

=> Byte or Bits or Bit

=> Ports PTA / PTB / PTc / PTd

=> Pin Direction o/p / I/O

=> Timer port TPI, TP2

=> Keypad \rightarrow Rows & Columns
SW1, S, Q1:13

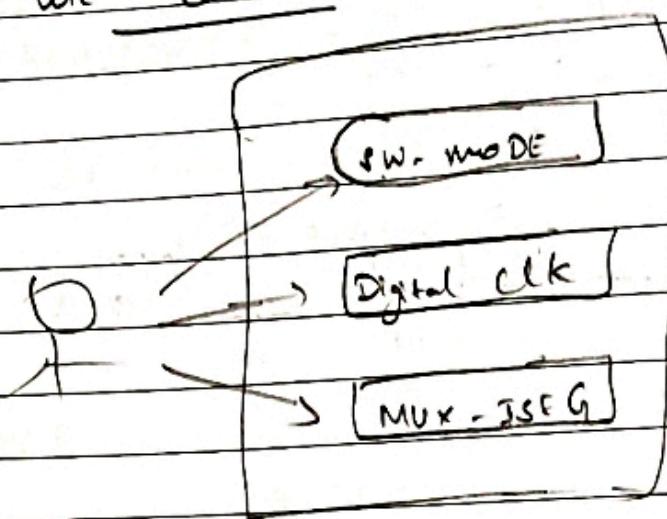
=> Increment

=> Decrement

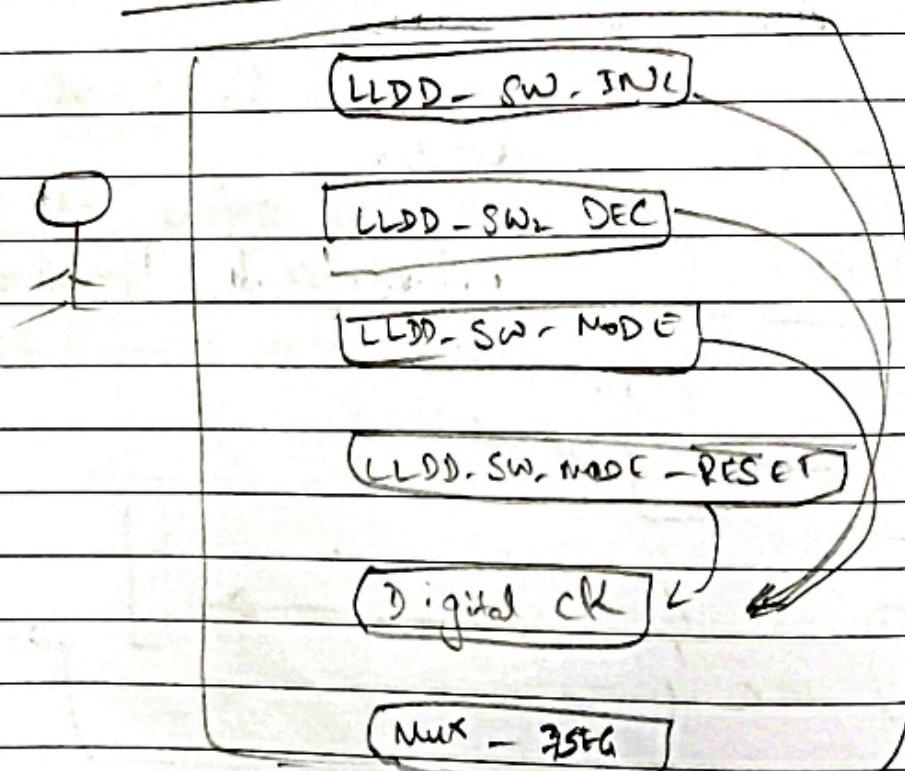
=> Run / Set mode using
Switches

Set dir = 0 Get Val
 Set dir = 1 Put Val
 Set dir = 0 Get Val
 Set dir = 1 Put Val
 direction Change & set
 for only Pow

We-care 1 Run mode



We-care 2 SET mode



Mux - Sequential Diagram

Monitor for set (run mode) :-

if (SW-mode) Get Val = 0

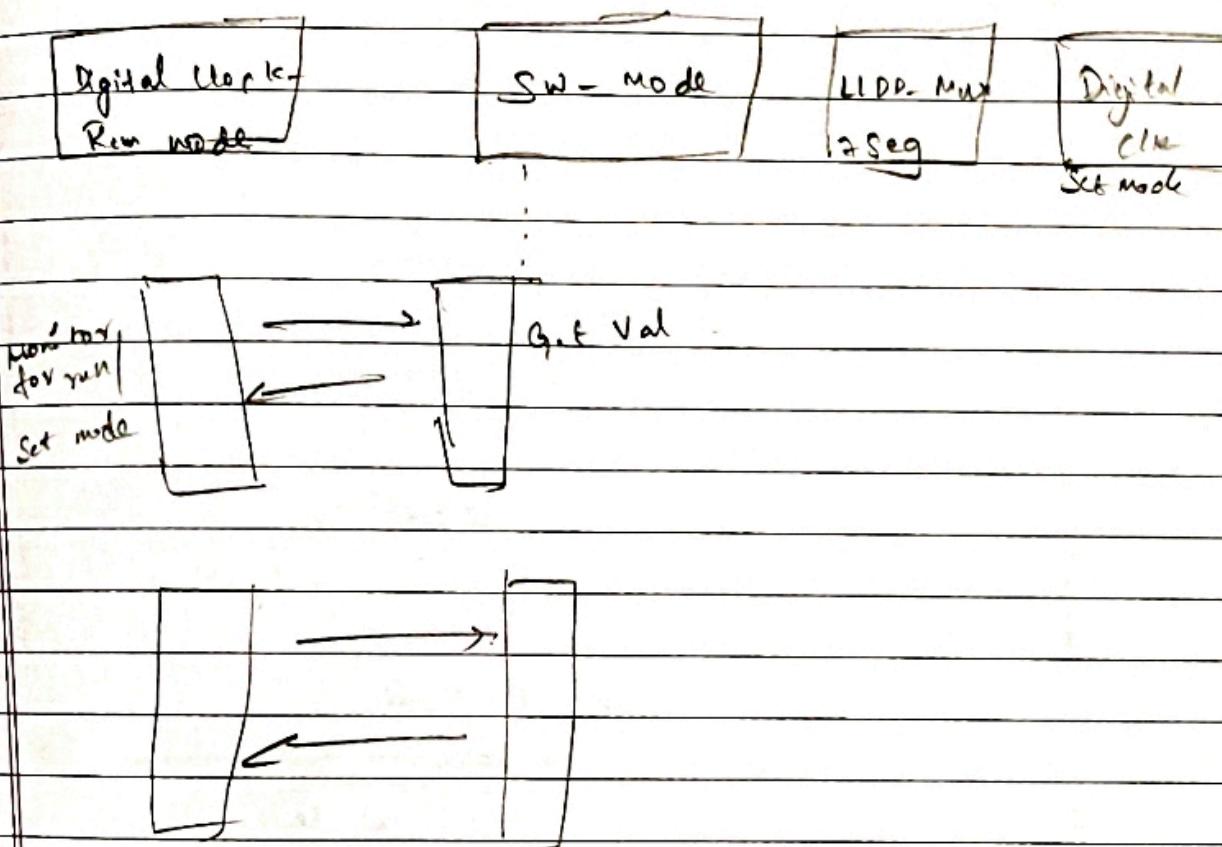
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Trigger - GetVal (0x03)

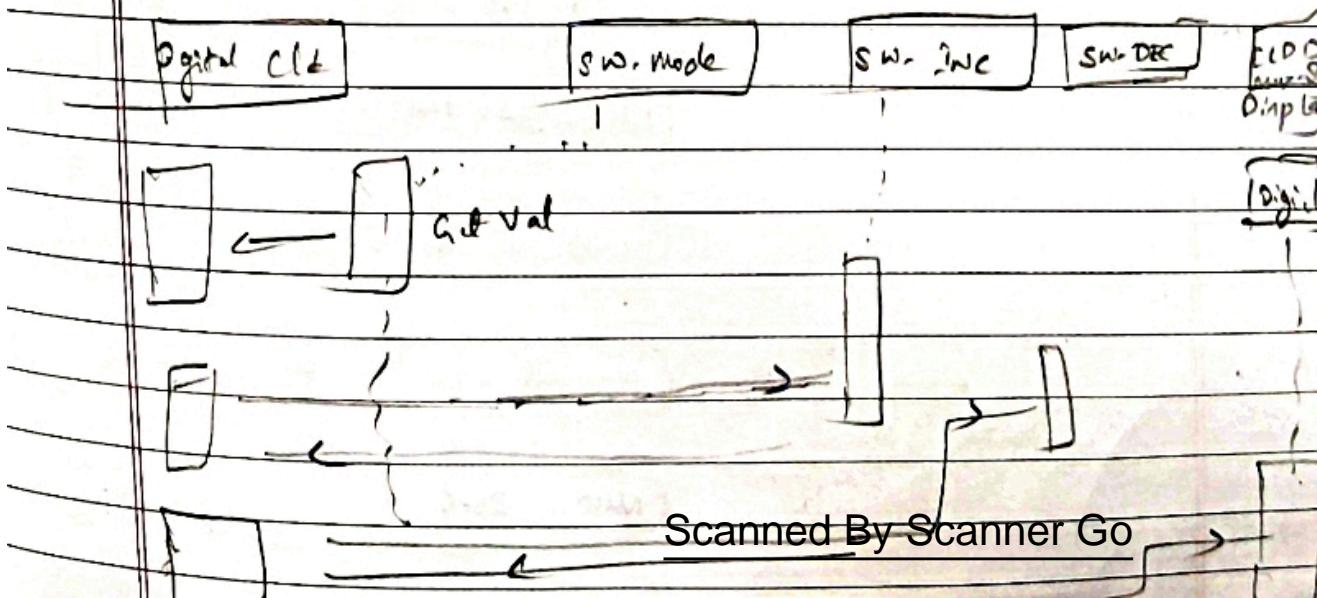
DataPin

Sequence diagram

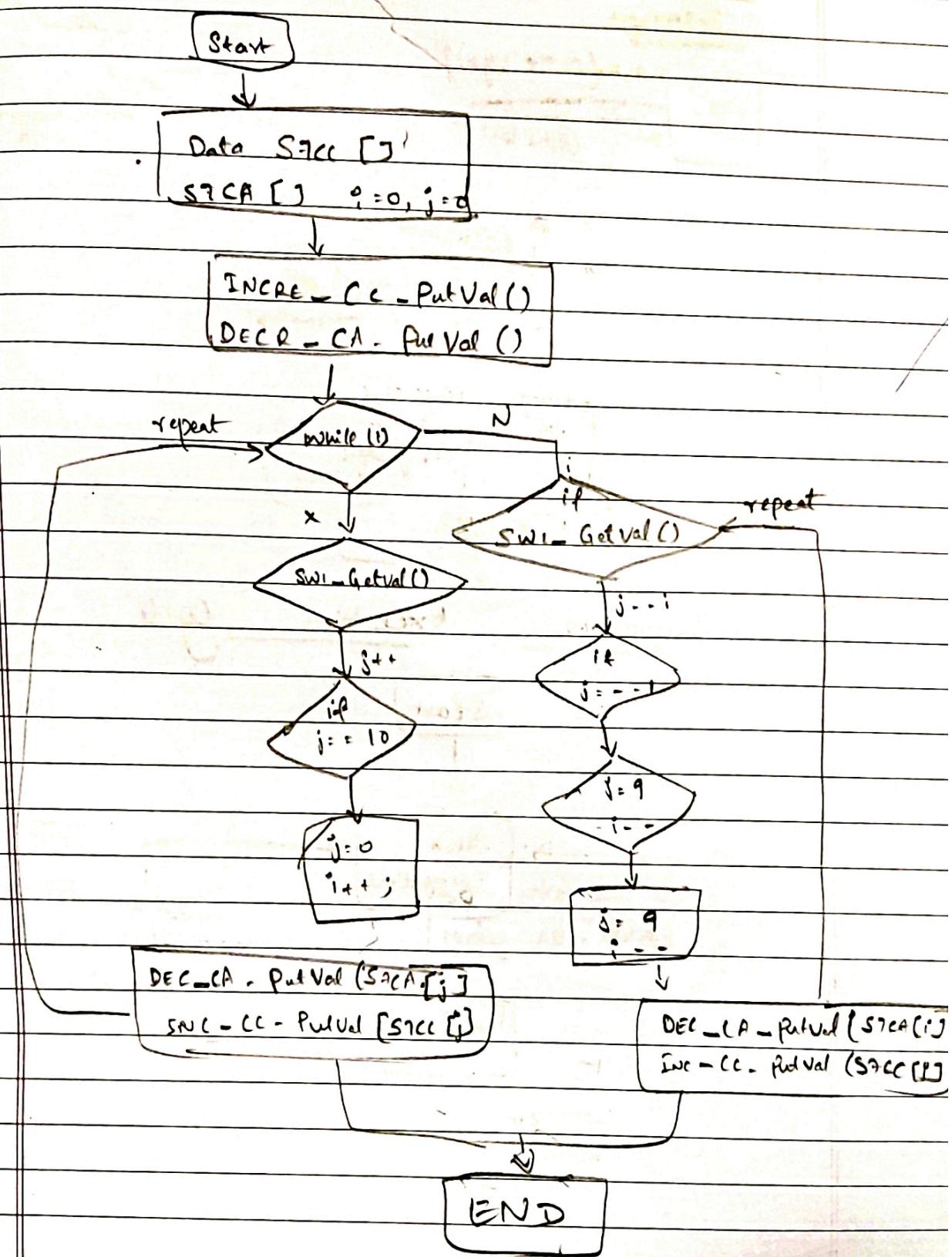
Sequence 1 Run mode

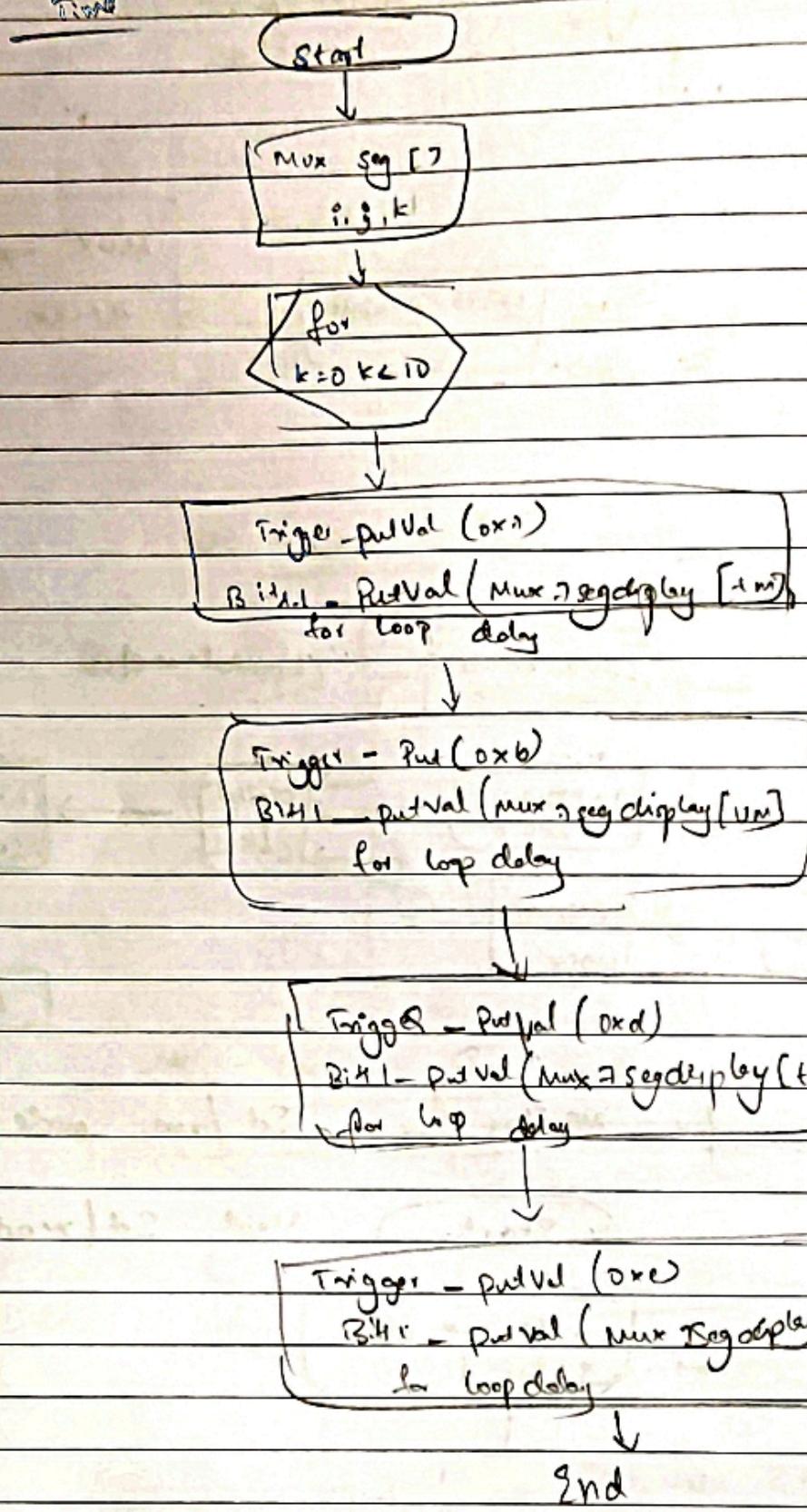


Sequence 2 - Set mode



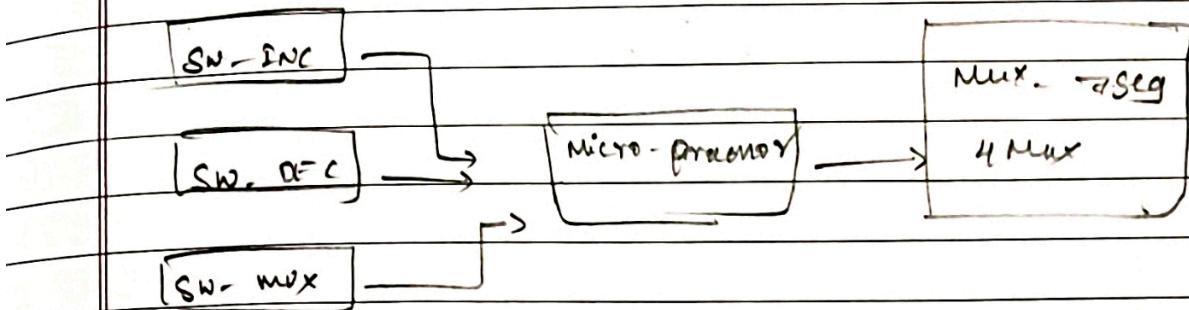
Flowchart for Increment & Decrement



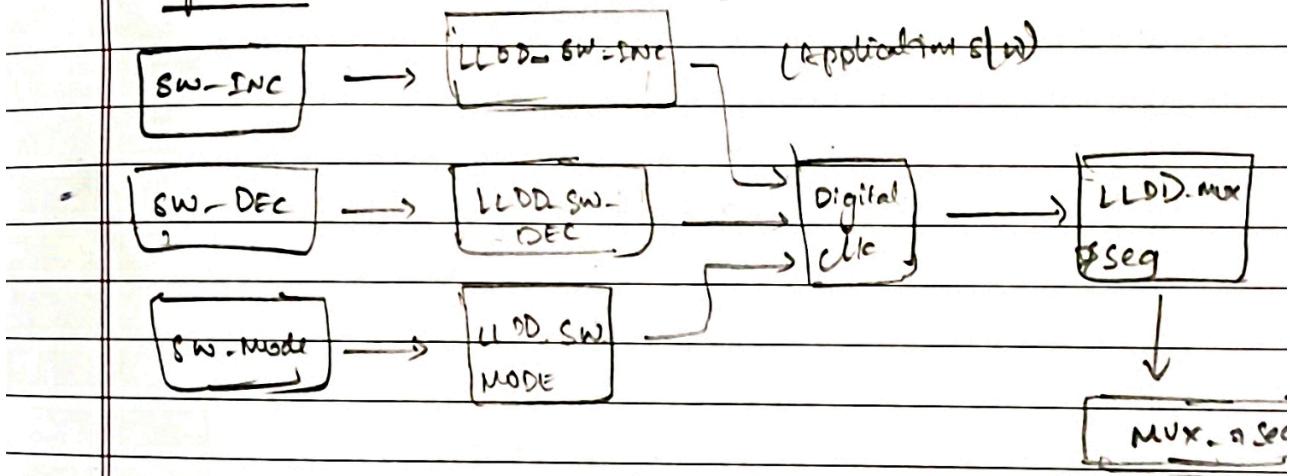
Time

Block diagram : Digital Clock

Hardware



Software



Flow chart for monitor for Set / run mode

