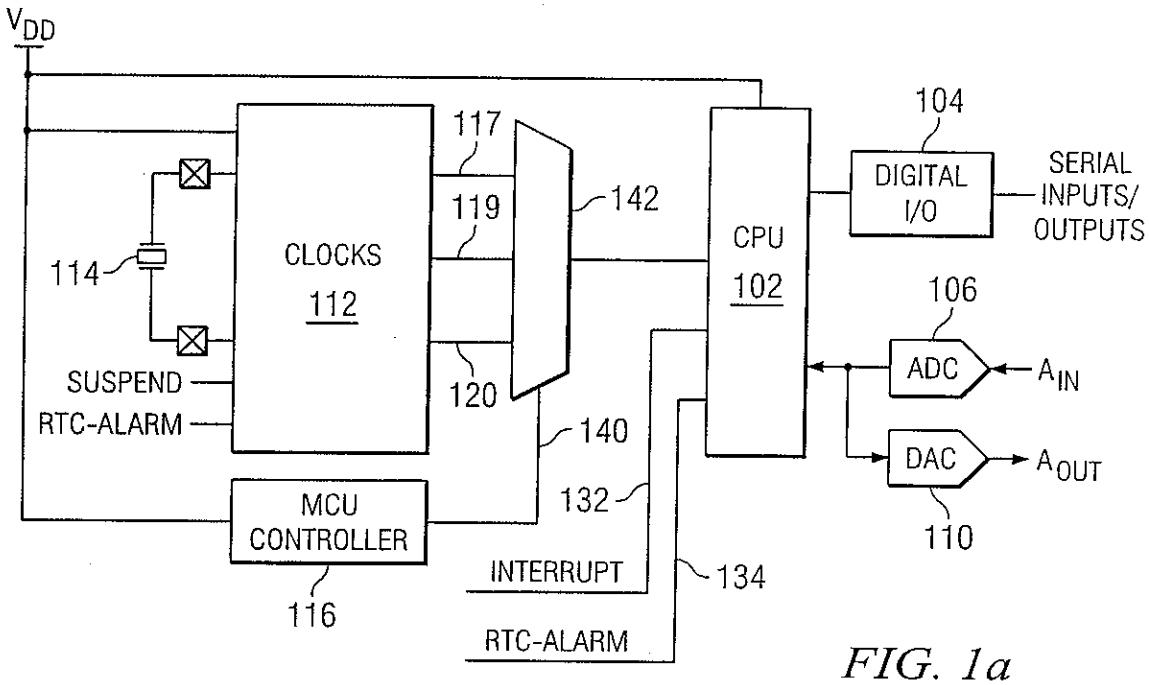

V_{DD}
CLOCKS
112
114
SUSPEND
RTC-ALARM
117
119
120
142
140
132
MCU
CONTROLLER
116
INTERRUPT
RTC-ALARM
134
CPU
102
104
DIGITAL
I/O
SERIAL
INPUTS/
OUTPUTS
106
ADC
A_{IN}
DAC
A_{OUT}
110

FIG. 1a

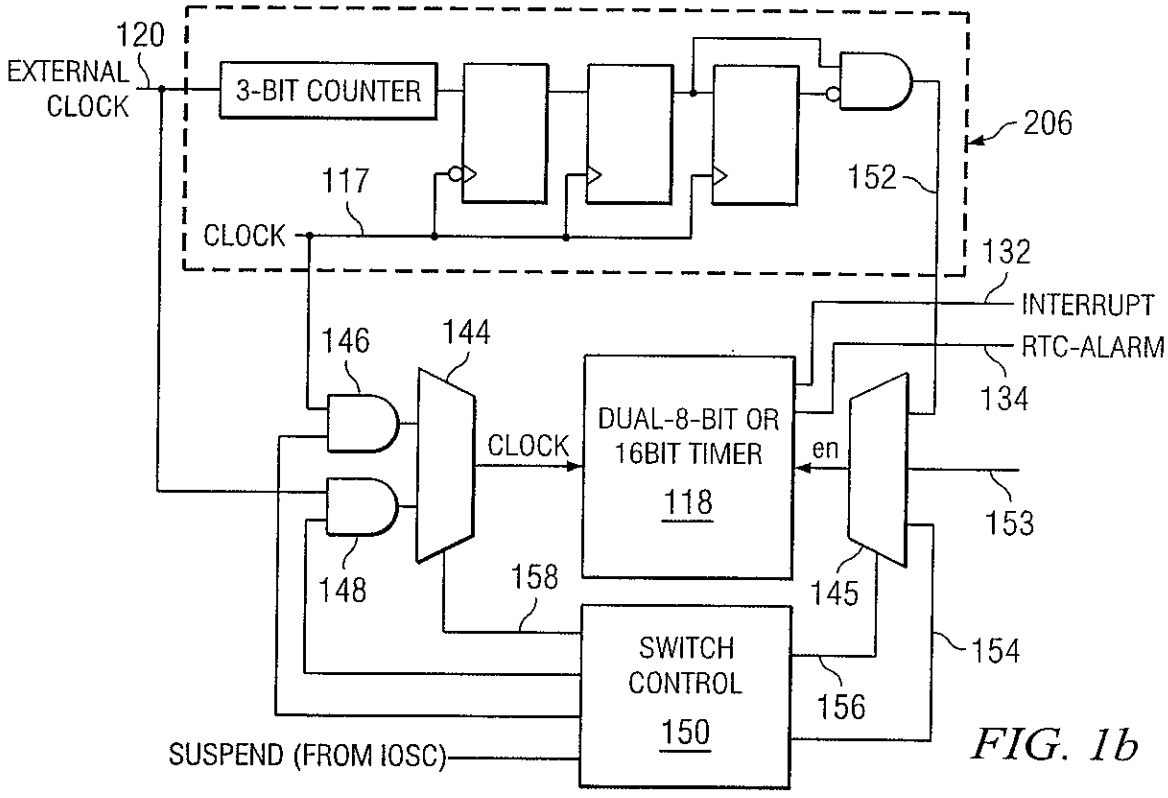

120
EXTERNAL
CLOCK
3-BIT COUNTER
117
CLOCK
206
152
132
INTERRUPT
RTC-ALARM
134
146
144
148
CLOCK
DUAL-8-BIT OR
16BIT TIMER
118
en
153
158
145
154
SWITCH
CONTROL
150
156
SUSPEND (FROM IOSC)

FIG. 1b

FIG. 2

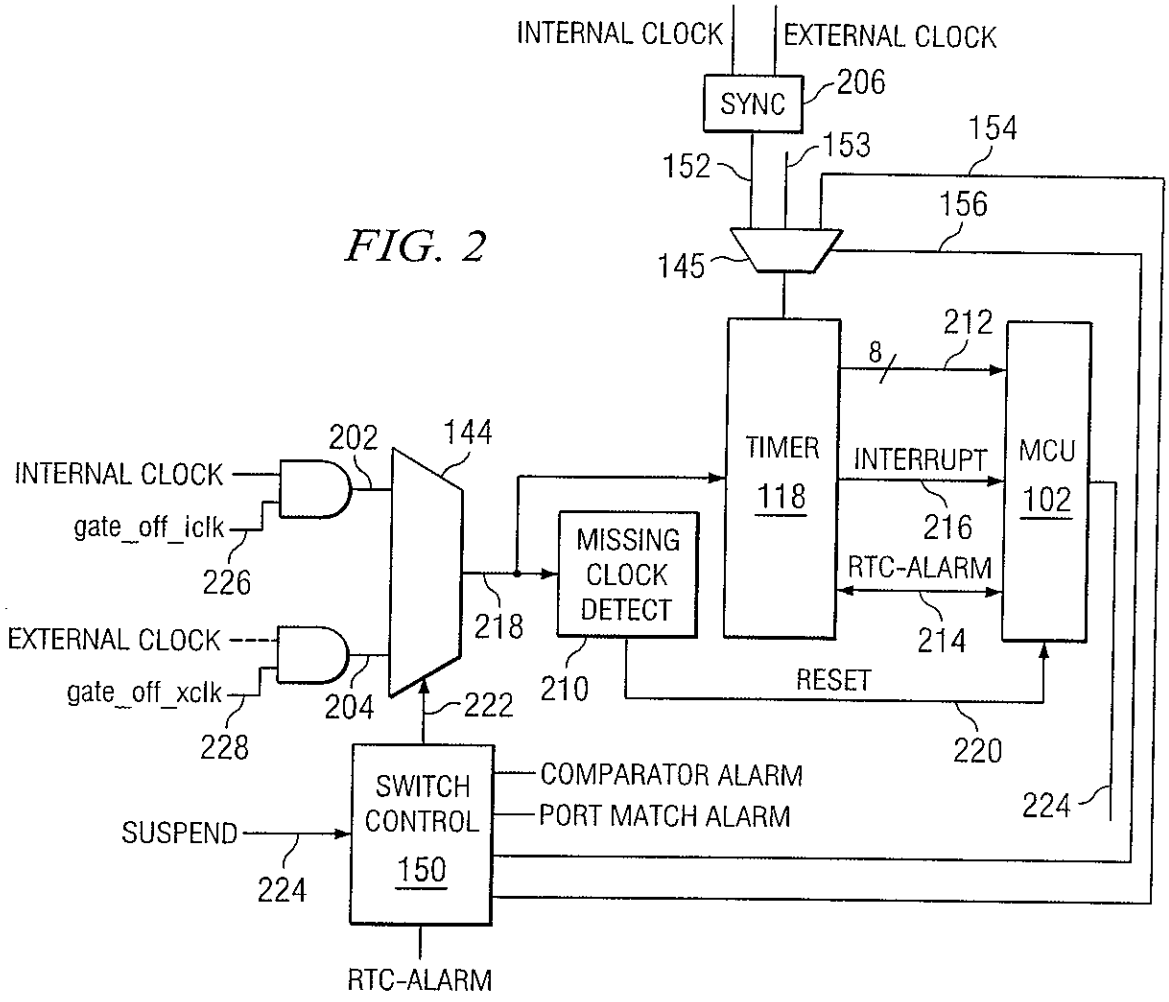

INTERNAL CLOCK
EXTERNAL CLOCK
SYNC
206
154
153
152
156
145
212
8
TIMER
118
INTERRUPT
MCU
102
216
RTC-ALARM
214
202
144
INTERNAL CLOCK
gate_off_iclk
226
MISSING
CLOCK
DETECT
218
EXTERNAL CLOCK
gate_off_xclk
228
204
222
210
RESET
220
SWITCH
CONTROL
150
COMPARATOR ALARM
PORT MATCH ALARM
224
SUSPEND
224
RTC-ALARM

FIG. 3

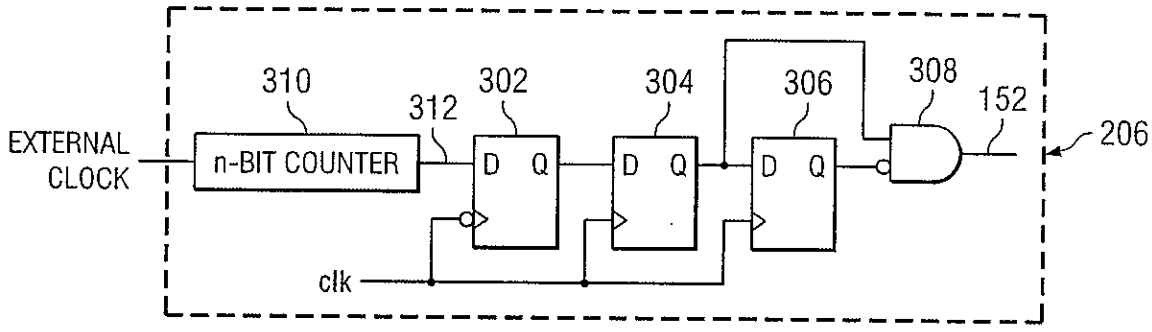

310
312
302
304
306
308
152
206
EXTERNAL
CLOCK
n-BIT COUNTER
D Q
D Q
D Q
clk

FIG. 4

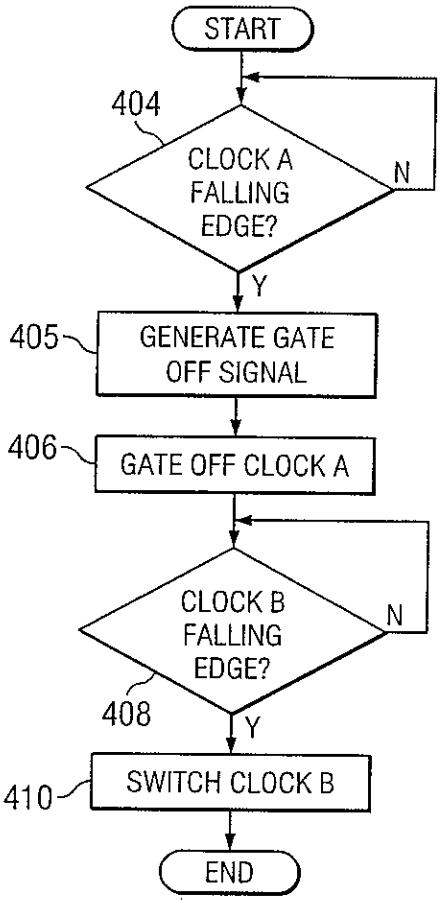


FIG. 5

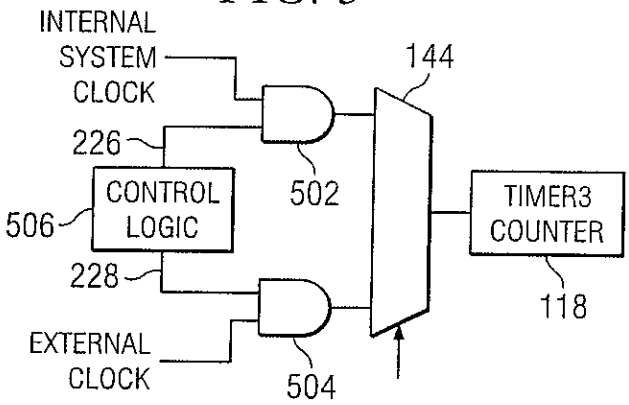
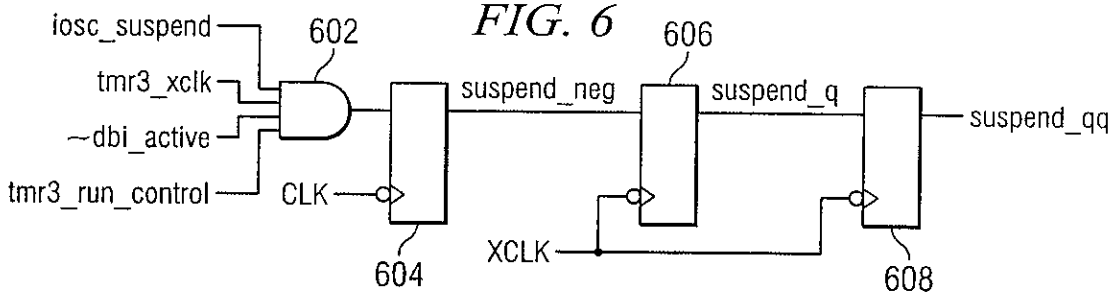


FIG. 6



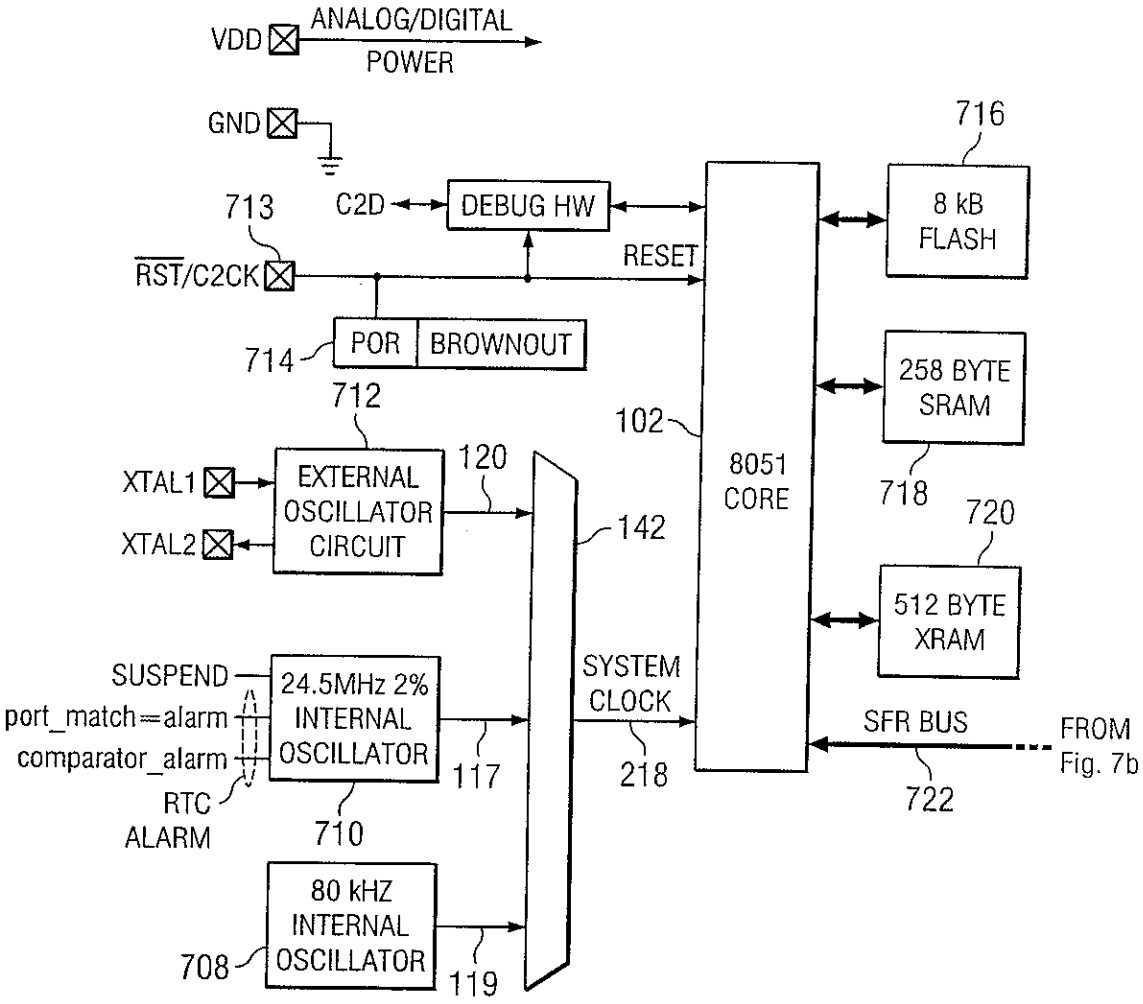

VDD
ANALOG/DIGITAL POWER
GND
716
713
C2D
DEBUG HW
8 kB FLASH
RST/C2CK
RESET
714
POR
BROWNOUT
712
102
258 BYTE SRAM
718
XTAL1
EXTERNAL OSCILLATOR CIRCUIT
120
8051 CORE
XTAL2
142
720
512 BYTE XRAM
SUSPEND
24.5MHz 2% INTERNAL OSCILLATOR
SYSTEM CLOCK
port_match=alarm
comparator_alarm
SFR BUS
FROM Fig. 7b
117
218
RTC ALARM
710
722
80 kHZ INTERNAL OSCILLATOR
708
119

FIG. 7a

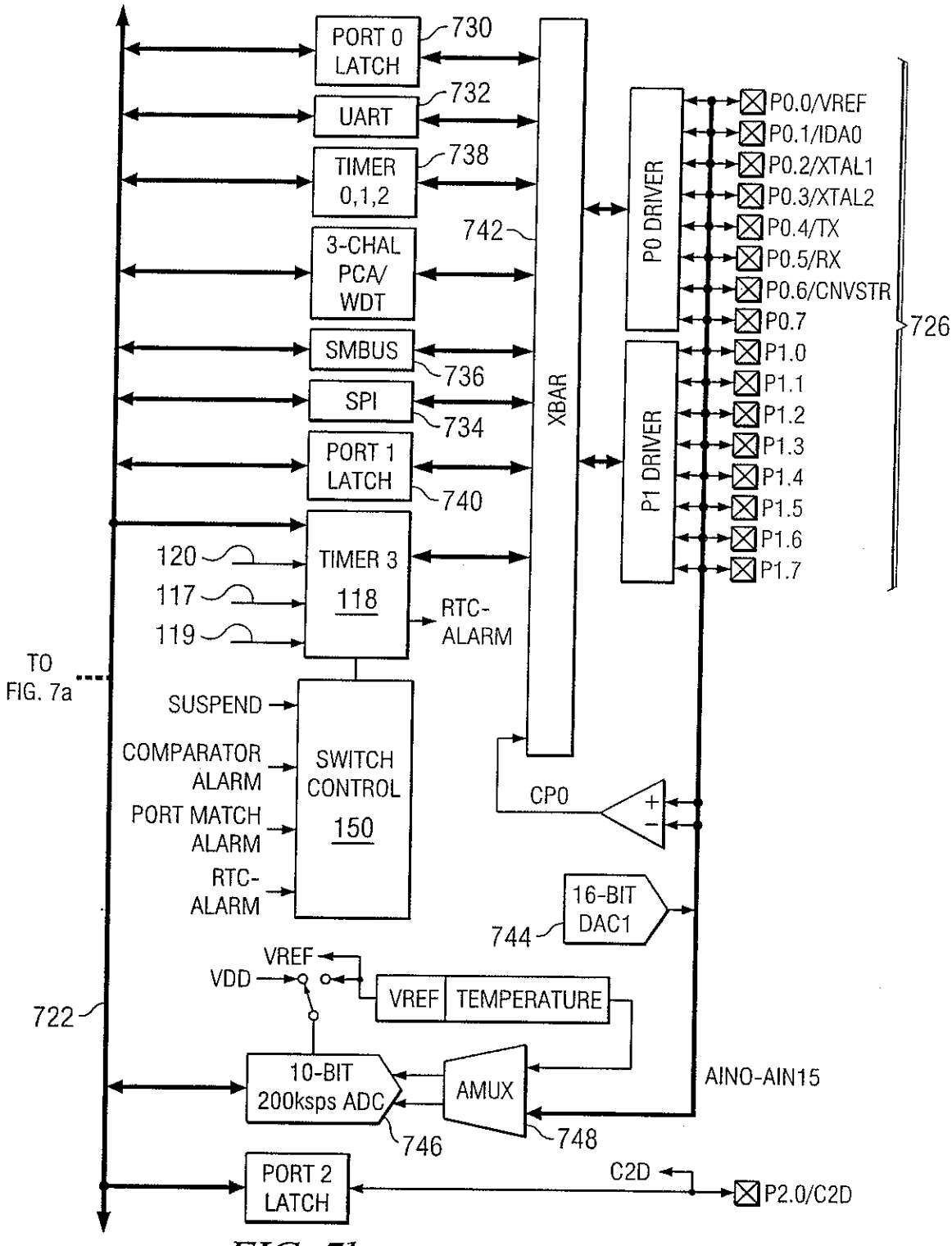

PORT 0 LATCH
730
UART
732
TIMER 0,1,2
738
3-CHAL PCA/ WDT
742
SMBUS
736
SPI
734
PORT 1 LATCH
740
TIMER 3
118
120
117
119
RTC-ALARM
XBAR
P0 DRIVER
P1 DRIVER
P0.0/VREF
P0.1/IDA0
P0.2/XTAL1
P0.3/XTAL2
P0.4/TX
P0.5/RX
P0.6/CNVSTR
P0.7
P1.0
P1.1
P1.2
P1.3
P1.4
P1.5
P1.6
P1.7
726
TO FIG. 7a
SUSPEND
COMPARATOR ALARM
PORT MATCH ALARM
RTC-ALARM
SWITCH CONTROL
150
CP0
16-BIT DAC1
744
VREF
VDD
VREF
TEMPERATURE
722
10-BIT 200ksps ADC
746
AMUX
748
AIN0-AIN15
PORT 2 LATCH
C2D
P2.0/C2D

FIG. 7b

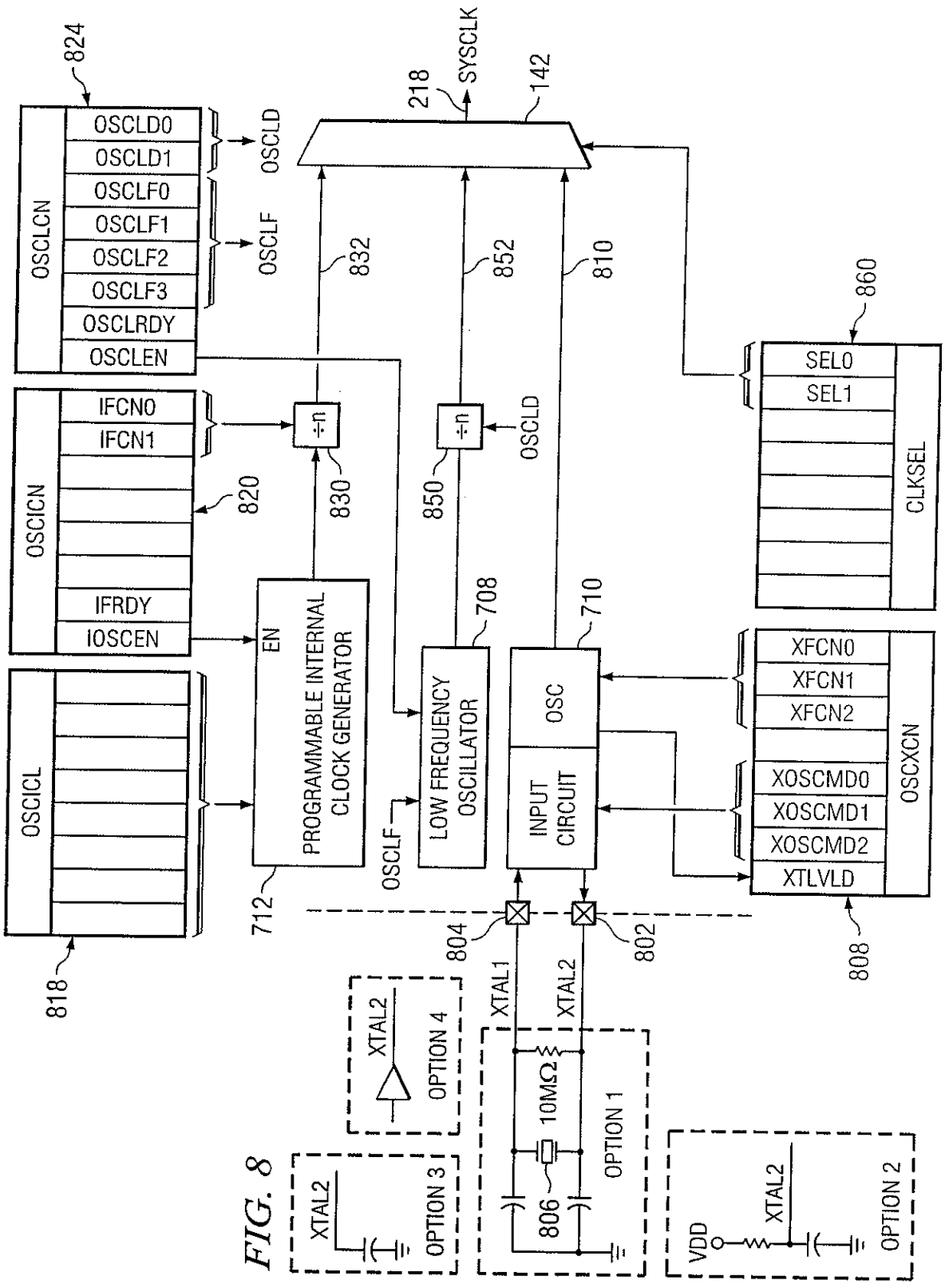

824
OSCLCN
OSCLD0
OSCLD1
OSCLF0
OSCLF1
OSCLF2
OSCLF3
OSCLRDY
OSCLEN
OSCLD
OSCLF
832
218
SYSCLK
142
852
810
860
SEL0
SEL1
CLKSEL
OSCICN
IFCN0
IFCN1
820
IFRDY
IOSCEN
÷n
830
850
OSCLD
708
710
OSCICL
EN
PROGRAMMABLE INTERNAL CLOCK GENERATOR
LOW FREQUENCY OSCILLATOR
OSC
INPUT CIRCUIT
XFCN0
XFCN1
XFCN2
XOSCMD0
XOSCMD1
XOSCMD2
XTLVLD
OSCXCN
818
712
OSCLF
804
802
808
XTAL1
XTAL2
10MΩ
806
OPTION 1
OPTION 2
OPTION 3
OPTION 4
VDD

FIG. 8