

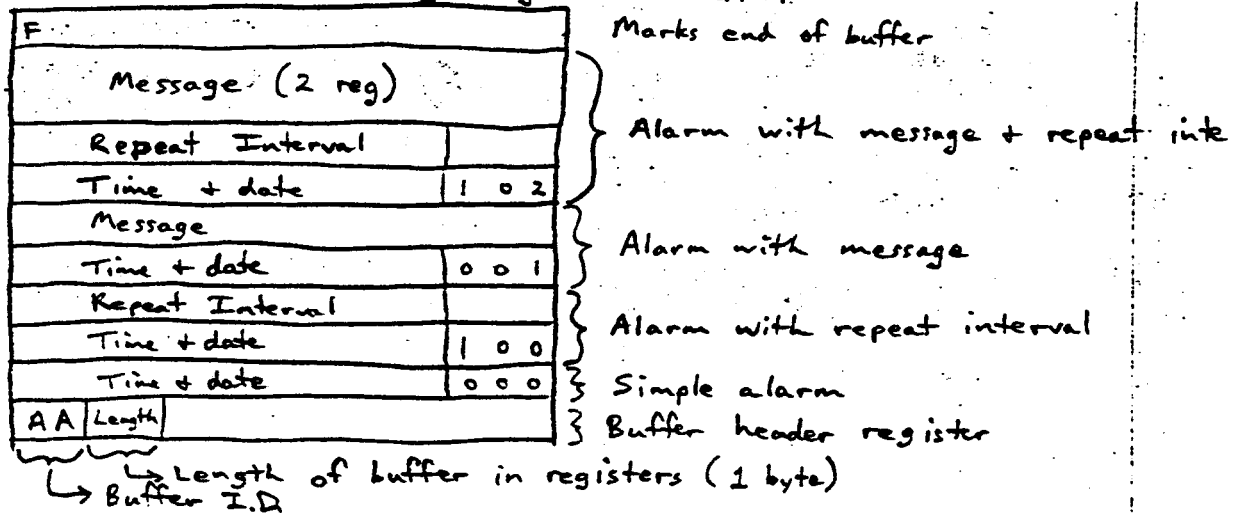
TIME MODULE

Use of ILF6 registers in the Time Module

CLOCK A	-	Real time clock
CLOCK B	-	Stopwatch
ALARM A	-	Alarms
ALARM B	-	Warm start constant = 0999999999 000 (initialize ILF6 if this constant is wrong)
SCRATCH A	-	Last time set (used in CORRECT to calculate AF)
SCRATCH B	-	Bits 0-7 = Software status bits 7 = TD/T, 6 = CLK24/CLK12, 5-0 internal use Digit 11 = internal use during alarm wakeup
INTERVAL TIMER	-	Clock display (update display every second/minute)

Structure of Alarm Buffer

The alarms are arranged chronologically in the buffer, with the earliest alarm at the beginning of the buffer.



Each alarm potentially has 3 components: message, repeat interval, and time + date. When the last alarm is cleared, the alarm buffer is purged.

Time + Date:

This register is not optional. The upper 11 digits contain the time + date expressed as the number of tenths of seconds since midnight of Jan 1, 1900. The least significant digit (digit 0) contains the number of message registers. Digit 1 is zero if the alarm has not activated and is non-zero if it has activated. Digit 2 is non-zero if the alarm has a repeat interval, otherwise it is zero.

(1 digit = 4 bits)

Repeat Interval:

This register is present only if there is a repeat interval. The upper 11 digits contain the repeat interval expressed as the number of tenths of seconds in the repeat interval.

ALARM BUFFER EXAMPLE

0D6															
0D5															
0D4															
0D3															
0D2	B	B	0	5											
0D1	F														
0D0	2	3	-	4	5	6	7								
0CF			C	A	R		I								
0CE	L		A	B	0	U	T								
0CD					C	A	L								
0CC	0	0	0	0	0	0	3	6	0	0	0	0	0	0	
0CB	2	5	9	5	9	2	4	0	0	0	0	1	0	4	
0CA	U	Y			M	I	L	K							
0C9													B		
0C8	2	5	9	5	8	6	2	8	0	0	0	0	0	2	
0C7	0	0	0	0	0	8	6	4	0	0	0	0	0	0	
0C6	2	5	9	5	8	5	1	1	0	0	0	1	0	0	
0C5	2	5	9	5	8	3	0	4	0	0	0	0	0	0	
0C4	A	A	0	E											
0C3	9	9	0	1	ARBITRARY DATA										
0C2	F														
0C1	F														
0C0	F														

13 12 11 10 9 8 7 6 5 4 3 2 1 0

5 REGISTER BUFFER (OTHER DEVI

"CALL ABOUT CAR 123-4567"
10 AM APR 6, 1982

"BUY MILK" _____
5:00 PM APR. 5, 1982

1:45 PM, APR 5, 1982

8 AM, APR 5, 1982

1 REGISTER BUFFER (OTHER DEVICE)

KEY ASSIGNMENTS

Message :

The alarm message is stored with 7 characters/register. The first message register is padded with enough leading blanks to make the total message length a multiple of seven bytes. See the alarm buffer example.