Clock/calendar with 240 × 8-bit RAM

PCF8583

MSB   LSB

| 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |

memory location 04 (hours counter)
reset state: 0000 0000

unit hours BCD

ten hours (0 to 2 binary)

AM/PM flag:
   0 AM
   1 PM

format:
   0 24 h format, AM/PM flag
       remains unchanged
   1 12 h format, AM/PM flag
       will be updated

MRB002
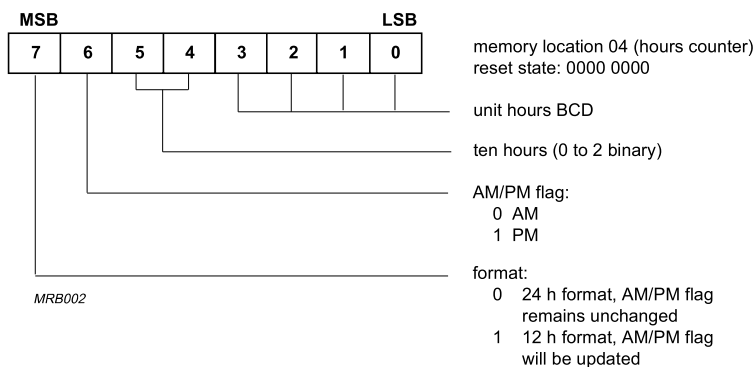
Fig.5 Format of the hours counter.

MSB   LSB

| 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |

memory location 05 (year/date)
reset state: 0000 0001

unit days BCD

ten days (0 to 3 binary)

year (0 to 3 binary, read as 0 if
   the mask flag is set)

MRB003
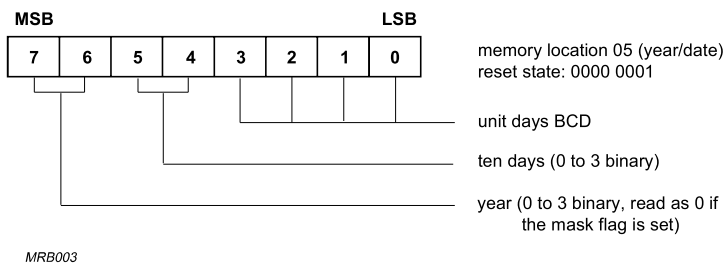
Fig.6 Format of the year/date counter.

MSB   LSB

| 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |

memory location 06 (weekdays/months)
reset state: 0000 0001

unit months BCD

ten months
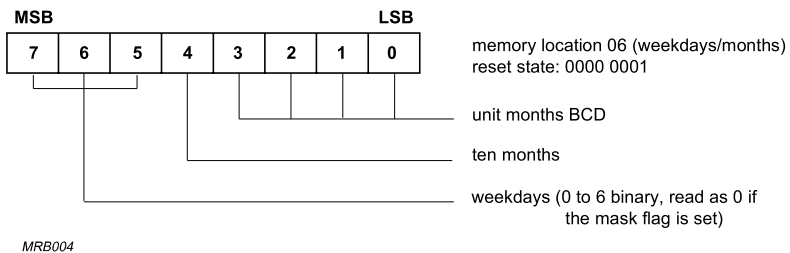
weekdays (0 to 6 binary, read as 0 if
   the mask flag is set)

MRB004

Fig.7 Format of the weekdays/month counter.