MB95200 SERIES - low pin count devices

MB95200 series overview
MB95200 series is a new member of F’CM-8FX family targeting home appliances, electrical tools, consumer health care products as well as car accessories.

Features of MB95200 series
- 2.3V to 5.5V operation
- Flash content protection
- Low voltage reset
- Clock supervisor
- ± 2% on-chip RC oscillator
- 10-bit ADC on every device
- Serial interfaces support LIN, synchronous/asynchronous USART and SPI (not on 8-pin devices)
- Flexible composite timers (interval timer, PWM, PWC, input capture)
- Single wire debug interface with low cost development system

MB95200 series – 20-pin devices
MB95200/260 Series of 20-pin Microcontrollers with derivatives from 4kB flash / 240B RAM up to 20kB dual-operation flash / 496B RAM includes 6ch 10-bit ADC, 6ch external interrupts, 2ch composite timer, 2ch PPG (PWM) and 1ch LIN-USART.

The LIN-USART supports serial communication protocols like synchronous and asynchronous serial, SPI and LIN. The flexible composite timer can be configured to work as interval timer, PWM, PWC or input capture function. 2ch of composite timers can be used to fully control one DC motor (forward/backward/speed).

The devices can run on the internal RC oscillator, the integrated clock supervisor and watch-dog combined with the low voltage reset, eliminate the necessity for external components.
FACTSHEET
MB95200 SERIES LPC DEVICES

Development tool
Starter kit MB2146-410-01-E enables easy evaluation of MB95200 series and its peripherals.

BGM Adapter
- Low cost
- Small size
- 128 x 55 x 29mm
- USB interface to PC/50FTUNE - Compliance with USB 1.1
- Single-wire interface to MB95200 series (Total 5-pins needed to connect to the target MCU board)

Starter kit features
- BGM Adapter
- Evaluation board
- Sample codes (Users can easily evaluate MB95200 series and its peripherals based on starter kit board and sample codes)
- Starter kit order number MB2146-410-01-E

Overview of MB95200 series

<table>
<thead>
<tr>
<th>Features</th>
<th>Part Number</th>
<th>Flash (kByte)</th>
<th>RAM (Byte)</th>
<th>Power Supply Voltage</th>
<th>Max. Clock MHz</th>
<th>Max External Ports</th>
<th>Ext. Intr.</th>
<th>PWM Functions</th>
<th>Timer Functions</th>
<th>LIN-UART</th>
<th>ADC</th>
<th>Special Features</th>
<th>Power Saving Mode</th>
<th>Pin Count</th>
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<tr>
<td>MB95200</td>
<td>MB95F202</td>
<td>4</td>
<td>240</td>
<td>2.3-5.5V</td>
<td>16 (with internal RC)</td>
<td>17</td>
<td>6</td>
<td>2 (2ch composite timer)</td>
<td>2 (2ch composite timer)</td>
<td>1</td>
<td>6 x 10-bit</td>
<td>1-wire debug +/-2% RC oscillator</td>
<td>SLEEP STOP WATCH TIMER</td>
<td>SOP20</td>
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<td>MB95F212</td>
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<td>1 (1ch composite timer)</td>
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<td>MB95F262</td>
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<td>SOP16</td>
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Notes:
- Low voltage reset
- No low voltage reset
* Composite timer can be used as 2ch x 8-bit timer or 1ch x 16-bit timer or built-in timer function, PWM function, capture function and square waveform output

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