## 8-bit I/O type micro-controller with voice function

## **Features**

• Single chip 8-bit CPU

Operation voltage: 2.4V to 5.5V

• Memory:

ROM (shared by program and data):
 1024K ~ 48KBytes

• Data RAM: 256 Bytes

• 16 input/output pins with wake-up function

 Two power-down modes for saving power consumption:

 Sleep mode: micro-controller no operation (main-oscillator still oscillating)

• Stop mode: micro-controller no operation

(all oscillators stop oscillating)

- Two current DAC output for voice synthesizer
- Dual-channel melody with programmable envelope
- Three re-loadable 16-bit timers
- One watchdog timer built-in
- Oscillator
  - Main oscillator operation at crystal or RC mode is selected by code option
  - Crystal/Ceramic oscillator up to 4MHz
    2.4V and 6MHz
    3.6V
  - ◆ RC oscillator up to 4MHz @ 2.4V

## **Selection Information**

	MLS918B	MLS916	В	MLS914B		MLS912B		MLS910B	
ROM	1024K x 8-bit	768K x 8-	bit	512K x 8-bit		384K x 8-bit		256K x 8-bit	
(Program ROM)	(32K x 8-bit)	(32K x 8-b	oit)	(32K x 8-bit)		(32K x 8-bit)		(32K x 8-bit)	
I/O	16	16		16		16		16	
	MLS908B	MLS906B	ML	_S904B	MLS903B		MLS902B		MLS900B
ROM	192K x 8-bit	128K x 8-bit	96K x 8-bit		80K x 8-bit		64K x 8-bit		48K x 8-bit
(Program ROM)	(32K x 8-bit)	(32K x 8-bit)	(32K x 8-bit)		(32K x 8-bit)		(32K x 8-bit)		(32K x 8-bit)
I/O	16	16		16	16		16		16

## **Application Field**

Toy controller

General IR controller

