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
- 24 input/output pins with wake-up function
- Two power-down modes for saving power consumption:
- Sleep mode: micro-controller no operation (main- and sub-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
- One serial input port and voltage comparator built-in
- Three re-loadable 16-bit timers
- One watchdog timer built-in
- Oscillator
 - Single or dual clock operation is selected by code option
 - Main oscillator operation at crystal or RC mode is selected by code option
 - Crystal/Ceramic oscillator up to 4MHz @ 2.4V and 8MHz @ 3.6V
 - ◆RC oscillator up to 4MHz @ 2.4V

Selection Information

	MLC331B		MLC241B		MLC161B		MLC121B	
ROM	1024K x 8-bit		768K x 8-bit		512K x 8-bit		384K x 8-bit	
(Program ROM)	(32K x 8-bit)							
I/O	24			24	24		24	
	MLC081B	MLC061B		MLC041B	MLC031B	MLC021B		MLC017B
ROM	256K x 8-bit	192K x 8-bit		128K x 8-bit	96K 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	24	24		24	24	24		24

Application Field

Toy controller

General IR controller

