



MUZE—Maximum Memory with a UART and ZiLOG's Expandable EPROM

The MUZE OTP microcontrollers are the newest members of ZiLOG's large Z8 product family. The MUZE chips offer you reduced risk and greater design flexibility. All of the MUZE family parts have the same function and pinout with a memory range from 4K to 64K for easy migration. The chips are available in 20-, 28-, 40-, and 44-pin packages and support easy code migration for designs requiring more I/O ports. The range of memory sizes, the on-chip features, and the Z8 core architecture allow you to develop your application and get it to market quickly.

Features In-Circuit Serial Programmable Memory

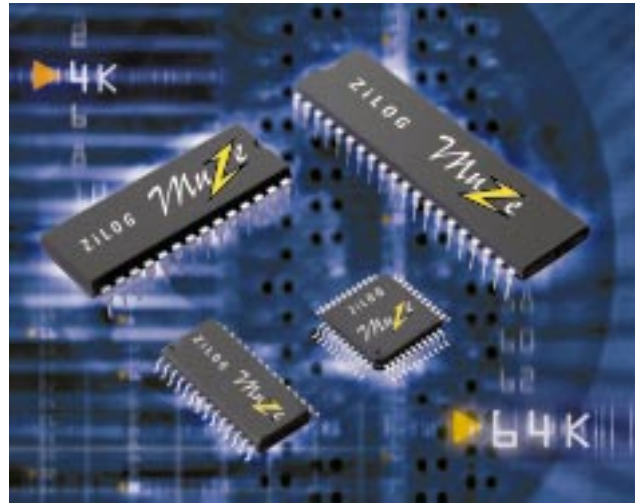
MUZE OTP chips are available in 4K, 8K, 16K, 32K, and 64K of In-Circuit Serial Programmable (ICSP) memory, supporting scalability and system upgrades without redesign. The ICSP capability enables parts to be programmed after they have been soldered to a PCB, allowing flexible configuration to meet market demand just before shipment.

Connects products

The on-chip industry-standard UART with baud rate generator enables MUZE products to communicate with a PC, host, or other microcontrollers. The easy-to-use hardware UART frees up the microcontroller to do other tasks.

Reduces program development time

ZiLOG's Z8 OTP products are available off-the-shelf or with very short lead-times, enabling fast design cycles and quick time to market for your products. ZiLOG's C-Compiler generates excellent code and programming is simplified with ZiLOG's Developer Studio (ZDS), a Windows®-based development system that offers a familiar, user-friendly work environment for all of ZiLOG's products. ZiLOG also offers a range of programmers and emulators to support your MUZE Product Family development needs.



Benefits

- Shorter development times and easy upgrades because of range of memory from 4K to 64K
- In-Circuit Serial Programming allows the parts to be soldered to the PC board and programmed immediately before shipping, offering greater flexibility
- UART supports fast, easy serial communication with a PC or other microcontroller

Applications

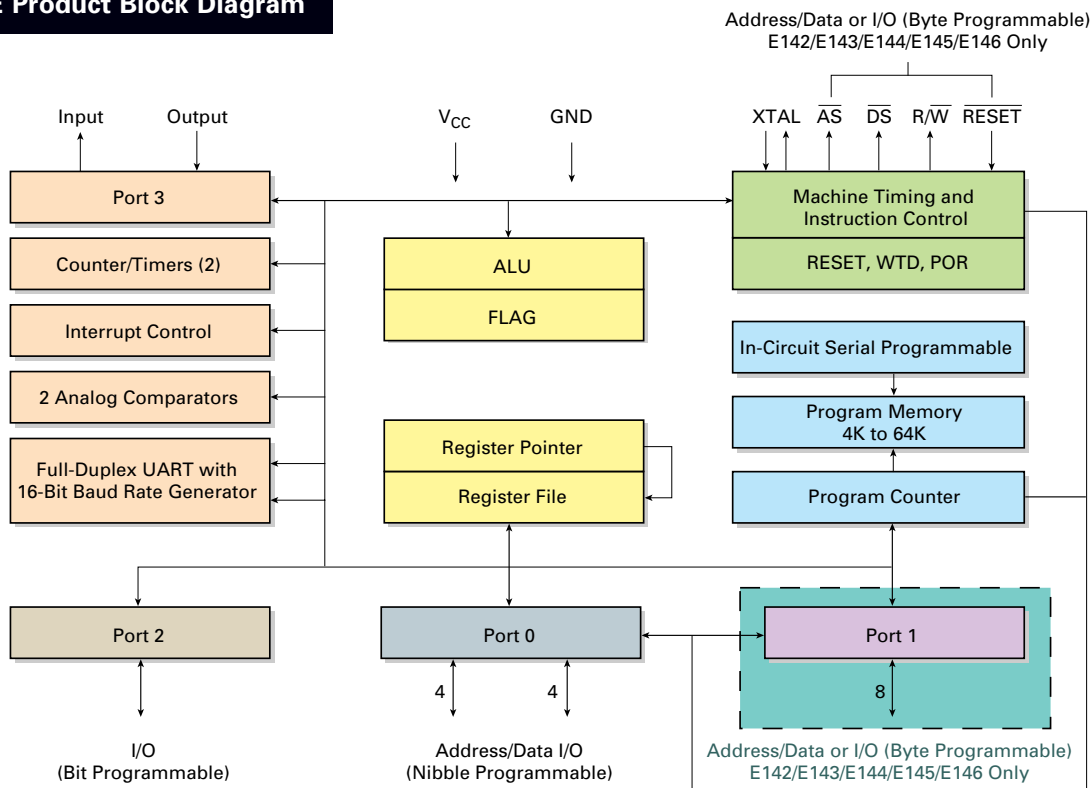
- Battery chargers
- HVAC/appliance controls
- Security systems
- Vending machines
- PIR and smart sensors
- Industrial control

For more information on ZiLOG's MUZE family, visit ZiLOG's website at www.zilog.com





MUZE Product Block Diagram



Features

- 4K to 64K OTP (In-circuit serial programmable)
 - 236 bytes RAM
 - Full-duplex UART with FIFO
 - Two analog comparators
 - Two 8-bit timers with 6-bit prescalers
 - Clock-free Watch-Dog Timer
 - Oscillator supports:
 - crystal, resonator, LC, RC
 - 16 MHz* (max. operating frequency)
 - 3.0-5.5 V (operating voltage)
 - 20-pin DIP, 28-pin DIP, 28-pin SOIC, 40-pin DIP, 44-pin QFP
- *V_{CC}=5V +/- 10%

Development Tools

Part Number	Description
Z86C3600ZEM	Emulator
Z86C00000ZUSP064	Signum Emulator: 64K memory
ZLGICSP0100ZPR	Programmer ZDS S/W support

Additional MUZE family products

Part	OTP (Bytes)	Pins	UART
Z86E126	64K	20	Yes
Z86E125	32K	20	Yes
Z86E124	16K	20	Yes
Z86E123	8K	20	Yes
Z86E122	4K	20	Yes
Z86E136	64K	28	Yes
Z86E135	32K	28	Yes
Z86E134	16K	28	Yes
Z86E133	8K	28	Yes
Z86E132	4K	28	Yes
Z86E146	64K	40/44	Yes
Z86E145	32K	40/44	Yes
Z86E144	16K	40/44	Yes
Z86E143	8K	40/44	Yes
Z86E142	4K	40/44	Yes

