

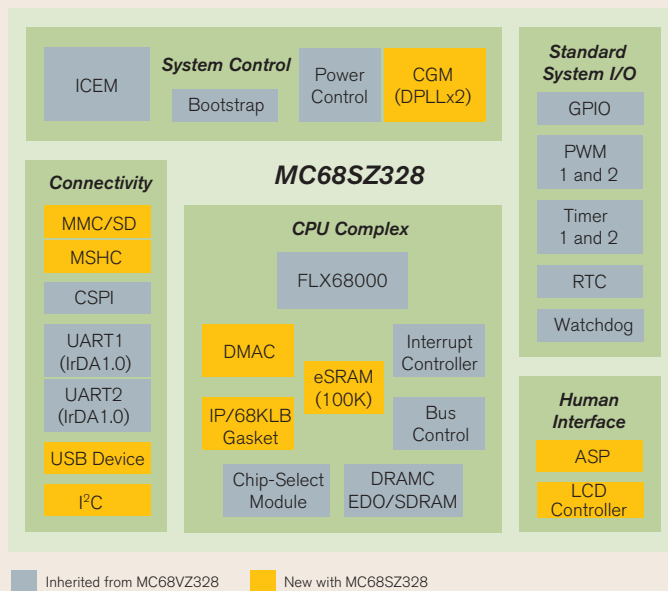
DragonBall™ Super VZ

Overview

The DragonBall™ series of applications processors is specifically designed for advanced information appliances and messaging applications including PDAs, smartphones, Web appliances and next-generation wireless communicators. To meet these market needs, Freescale presents the DragonBall Super VZ, the fourth generation in the DragonBall series of products. DragonBall Super VZ is designed to reduce system and software development time and programming steps with its software reuse capability. In addition, the DragonBall Super VZ is designed to decrease overall system costs with additional on-chip peripherals, while increasing performance.

With backward compatibility with previous generations of 68K core-based applications processors, the Super VZ provides designers of handheld portable devices with high performance and integration and long battery life. In addition, compared to previous versions of DragonBall applications processors, the advanced DragonBall Super VZ offers:

- > Improved system speed
- > TFT color LCD support
- > A/D converter (ADC) with touch panel control
- > MMC/SD and Memory Stick® host controllers
- > DMA controller
- > Embedded SRAM
- > USB device controller
- > I²C interface



Features

- > Static FLX68000 CPU
- > Clock generation module (CGM) and power control module
- > Chip-select module
- > DRAM controller (DRAMC)
- > Embedded SRAM (eSRAM)
- > Direct memory access controller (DMAC)
- > LCD controller (LCDC)
- > Analog signal processing (ASP) module
- > Two identical general-purpose timers/counters
- > Real-time clock and sampling timer (RTC)
- > Watchdog timer (WD)
- > Pulse-width modulation (PWM) modules
- > Interrupt controller
- > General-purpose I/O (GPIO) ports
- > Multimedia card and secure digital (MMC/SD) host controller

- > Memory Stick host controller (MSHC)
- > Universal asynchronous receiver/transmitters (UARTs)
- > Configurable serial peripheral interface (CSPI)
- > Reset module
- > Bootstrap mode function
- > Universal Serial Bus (USB) device
- > Inter-IC (I²C) bus module
- > In-circuit emulation module (ICEM)
- > Operating system frequency up to 66.32 MHz
- > 1.8-volt core operating voltage; 2.7-volt to 3.3-volt supply voltage
- > 12 mm x 12 mm, 196-pin MAPBGA package

Development Tools

CodeWarrior® Development Studio for 68K Embedded Systems harnesses the power of the DragonBall Super VZ architecture and the integrated on-chip peripherals. Designed to reduce software development time, CodeWarrior tools enable reuse of existing code while adding stationery, register settings and libraries for the DragonBall Super VZ.

The CodeWarrior Integrated Development Environment (IDE) supports the DragonBall Super VZ platform, offering a suite of highly integrated tools that work together to speed and simplify embedded development at every phase, from early boards bring-up to application debugging and production testing. Within the IDE, developers can take advantage of numerous CodeWarrior features and optimizations targeting the DragonBall Super VZ. Because there is no need to leave the CodeWarrior environment at any time during the development cycle, developers spend less time navigating between tools and more time generating code.

AgentM Network

Freescale's AgentM Network is designed to provide you with the platforms, tools, technology and expertise to get your product to market faster. With early access to the newest tools, AgentM members are better equipped to deliver mobile wireless solutions to a global audience in less time, with less effort, and at a lower cost. Join the AgentM Network and accelerate your next development project. For details, and to become an agent today, visit www.agentm.net.



Benefits

- > Features a high level of on-chip integration
- > Designed to provide uncompromised performance in a very low power system design
- > Optimized for multimedia applications
- > Designed to support a wide variety of applications including PDA designs, Web appliances, smartphones and next-generation wireless communicators

For more information about the CodeWarrior Development Studio for 68K Embedded Systems, visit

www.metrowerks.com/MW/Develop/Embedded/68K.

Learn More: For more information about the DragonBall family of applications processors, visit www.freescale.com.

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