



8-bit Microcontrollers

S08SC4

Simplicity with substance

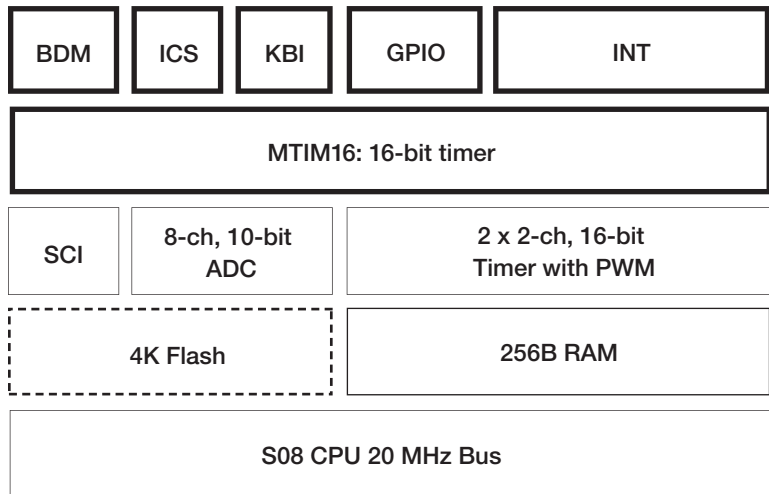
Target Applications

- Pushbutton control
- Simple lighting
- Basic motor control
- Sensors
- LIN nodes
- Widgets
- HVAC blowers
- Mirror dimming
- Relay controllers

Overview

Simplicity, a small footprint, high performance and aggressive pricing make the S08SC4 the ideal solution for cost-sensitive and space-constrained body applications. The SC4 is a feature-reduced version of the 8-bit S08SG4, equipped with an serial communications interface (SCI) making it cost effective for entry level local interconnect networking (LIN) communication.

S08SC4 Block Diagram



Also, it is easy to design into an application as a result of its non intrusive, single wire background debug module (BDM), which allows you to read registers without stopping execution on the chip. This means that development time is reduced since changes can be made while in application and in real time. Low cost, improved quality and smaller board space are achieved with the SC4's on-chip components which eliminate need for an external crystal, LVI circuit, voltage regulator, I/O mux, watchdog circuit, and ADC.

The SC4 is available in a 16-pin TSSOP package and is pin and software compatible with the S08SG family, which allows you to easily migrate to other devices as your needs grow.

S08SC4 Feature Set

Device	Bus Frequency	Flash	RAM	UART	Analog (ADC)	Timer	Clock	Additional Features	Operating Voltage	Temp. Range	Package
S08SC4	20 MHz	4K	256B	1 x SCI	Up to 8-ch., 10-bit	2 x 2-ch. 16-bit timers	ICS	40 MHz CPU, Watchdog OSC/Timer, COP, LVI, BDM, POR, KBI, Temp Sensor	4.5 to 5.5	-40°C to +125°C	16-TSSOP

Development Tools

Development Tool	Part Number	MSRP	Features
Demonstration Board	DEM09S08SC4	\$49	N/A
BDM Multilink	USBMULTILINKBDME	\$99	<ul style="list-style-type: none"> Real-time in-circuit debug through BDM interface Fast in-circuit flash programming USB-to-BDM interface
Cyclone Pro	M68CYCLONEPROE	\$499	<ul style="list-style-type: none"> Provides all the capabilities of the BDM Multilink, but adds USB/Ethernet interfaces, LEDs and the ability to function as a standalone programmer with pushbuttons to control operation
CodeWarrior Development Software	N/A	N/A	<ul style="list-style-type: none"> Visit freescale.com/codewarrior for complete details
Emulation Support	N/A	N/A	<ul style="list-style-type: none"> Available today through use of existing DEM09S08SG8AUTO demo board with ICE

Learn more: For more information about the S08SC4, please visit www.freescale.com/automotive.