C515C - A Multipurpose Microcontroller

The high peripheral performance and the CAN feature is ideal for automotive and industrial control applications. Due to EMC/RFI enhancements and power consumption reduction this design excels especially for car radio applications.

C515C

8 Bit Microcontroller with On-Chip Full-CAN Module

Related Solutions/Applications

Features:

- 600 ns Instruction Cycle Time at 10MHz CPU Clock without clock prescaler
- 15 Interrupt Vectors with four Priority Levels selectable
- 64 KByte On-Chip ROM/OTP memory. ROM-Protection available
- 256 Byte On-Chip Internal RAM (IRAM)
- 2 KByte On-Chip Extended RAM (XRAM)
- Supports external Address Range of up to 64 KByte Program and Data Memory
- Full CAN Module Version 2.0B active with 15 Message Objects and Basic-CAN Feature
- Synchronous Serial Interface (SSC) with full SPI Compatibility
- Three 16-Bit Timer/Counters
- 4 Channel Capture/Compare Unit for PWM Generation
- 8-Channel 10-bit A/D Converter
- Full Duplex Serial Interface with Asynchronous and Synchronous Modes and Programmable Baudrate Generator
- Extended Power Saving Modes
- Programmable Watchdog Timer
- 80-Pin P-MQFP Package
- Temperature ranges: 0C to + 70C / -40C to + 85C / -40C to + 110C

Typelist (for details see Parameterlist)

Product Type	Attachment	Description	Order Code
SAB C515C-8RM	Datasheet	8-Bit CMOS microcontroller with mask-programmable ROM (10MHz)	Q67121-DXXXX
SAF C515C-8RM	N/A	8-Bit CMOS microcontroller with mask-programmable ROM (10MHz)	Q67121-DXXXX
SAF C515C-LM	N/A	8-Bit CMOS microcontroller for external memory (10MHz)	Q67121-C1058
SAB C515C-LM	N/A	8-Bit CMOS microcontroller for external memory (10MHz)	Q67121-C1066
SAH C515C-xxxx	N/A	8-Bit CMOS microcontroller for extended temperature ranges	obsolete
SAF C515C-8EM	N/A	8-Bit CMOS microcontroller with OTP memory (10MHz)	on request
SAB C515C-8EM	N/A	8-Bit CMOS microcontroller with OTP memory (10MHz)	on request

Additional Documentation and Information:

Datasheet

Description	Date/State	Size
C515C-L,-8R,-8E Datasheet (d515c.pdf)	12.97 | OK	398 kB

User's Manual

Description	Date/State	Size
C515C Users Manual (m515c.pdf)	04.98	800 kB

Product Brief

Description	Date/State	Size
Product Brief C515C (ProdBrief515C.pdf)	06.02.2001	2.15 MB

Application Notes

Description	Date/State	Size

Connecting C166 and C500 Microcontrollers to CAN (81C90,91) (ap290002.pdf)	06.97 | Rel.01	833 kB
C515 - CAN Bit Timing - Calculation: CP_515CEXE 1 (ap082801.exe)	01.98 | Rel.0	400 kB
C515 - CAN Bit Timing - Calculation: CP_515C.EXE 2 (ap082801.pdf)	01.89 | Rel.01	12 kB
The CAN Controller in the C515C (ApNote) (ap082001.pdf)	12.96 | Rel.01	445 kB
The CAN Controller in the C515C (prog-file) (ap082001.exe)	05.97 | Rel.01	19 kB
Power Supply Concept for the C515C (ap082501.pdf)	05.97 Rel.01	57 kB
C515C-L/4R/8R (c515-l-8r_aa14.pdf)	12.09.2001	29.9 kB

Errata Sheet

Description	Date/State	Size
C515C - 8EM (c515c8e_bb_es_v1.3_2001_02.pdf)	23.02.2001	26 kB
C515C-8EM (c515c-8e_bb_14.pdf)	12.06.2001	26.6 kB