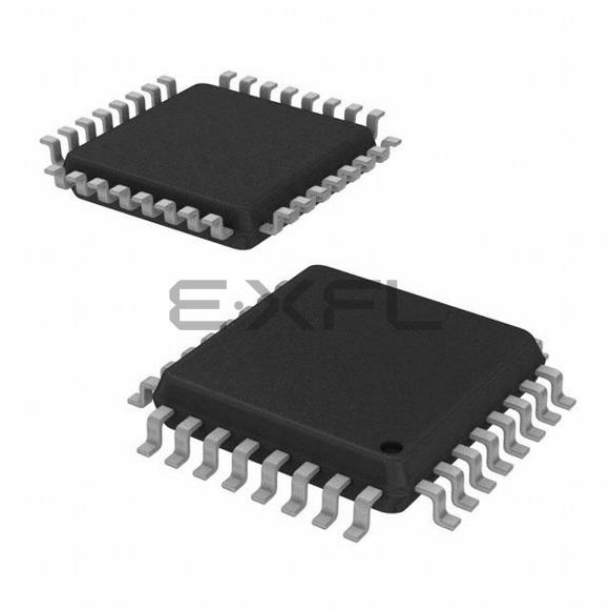

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What is "Embedded - Microcontrollers"?

"Embedded - Microcontrollers" refer to small, integrated circuits designed to perform specific tasks within larger systems. These microcontrollers are essentially compact computers on a single chip, containing a processor core, memory, and programmable input/output peripherals. They are called "embedded" because they are embedded within electronic devices to control various functions, rather than serving as standalone computers. Microcontrollers are crucial in modern electronics, providing the intelligence and control needed for a wide range of applications.

Applications of "Embedded - Microcontrollers"

Details	
Product Status	Obsolete
Core Processor	HC08
Core Size	8-Bit
Speed	8MHz
Connectivity	CANbus, LINbus, SCI, SPI
Peripherals	LVD, POR, PWM
Number of I/O	21
Program Memory Size	8KB (8K x 8)
Program Memory Type	FLASH
EEPROM Size	-
RAM Size	1K x 8
Voltage - Supply (Vcc/Vdd)	3V ~ 5.5V
Data Converters	A/D 8x10b
Oscillator Type	Internal
Operating Temperature	-40°C ~ 85°C (TA)
Mounting Type	Surface Mount
Package / Case	32-LQFP
Supplier Device Package	32-LQFP (7x7)
Purchase URL	https://www.e-xfl.com/product-detail/nxp-semiconductors/mc68908gz8cfjer

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Addr.	Register Name		Bit 7	6	5	4	3	2	1	Bit 0
$0018	ESCI Data Register (SCDR) See page 204.	Read:	R7	R6	R5	R4	R3	R2	R1	R0
		Write:	T7	T6	T5	T4	T3	T2	T1	T0
		Reset:	Unaffected by reset							
$0019	ESCI Baud Rate Register (SCBR) See page 204.	Read: Write:	LINT	LINR	SCP1	SCP0	R	SCR2	SCR1	SCR0
		Reset:	0	0	0	0	0	0	0	0
$001A	Keyboard Status and Control Register (INTKBSCR) See page 107.	Read:	0	0	0	0	KEYF	0	IMASKK	MODEK
		Write:						ACKK		
		Reset:	0	0	0	0	0	0	0	0
$001B	Keyboard Interrupt Enable Register (INTKBIER) See page 108.	Read: Write:	KBIE7	KBIE6	KBIE5	KBIE4	KBIE3	KBIE2	KBIE1	KBIE0
		Reset:	0	0	0	0	0	0	0	0
$001C	Timebase Module Control Register (TBCR) See page 254.	Read:	TBIF	TBR2	TBR1	TBR0	0	TBIE	TBON	R
		Write:					TACK			
		Reset:	0	0	0	0	0	0	0	0
$001D	IRQ Status and Control Register (INTSCR) See page 102.	Read:	0	0	0	0	IRQF	0	IMASK	MODE
		Write:						ACK		
		Reset:	0	0	0	0	0	0	0	0
$001E	Configuration Register 2 (CONFIG2)(1) See page 79.	Read:	0	0	0	0	MSCANEN	TMCLKSEL	OSCENIN-STOP	ESCIBD-SRC
		Write:								
		Reset:	0	0	0	0	0	0	0	1
$001F	Configuration Register 1 (CONFIG1)(1) See page 80.	Read: Write:	COPRS	LVISTOP	LVIRSTD	LVIPWRD	LVI5OR3 (Note 1)	SSREC	STOP	COPD
		Reset:	0	0	0	0	0	0	0	0

1. One-time writable register after each reset, except LVI5OR3 bit. LVI5OR3 bit is only reset via POR (power-on reset).

$0020	Timer 1 Status and Control Register (T1SC) See page 265.	Read:	TOF	TOIE	TSTOP	0	0	PS2	PS1	PS0
		Write:	0			TRST				
		Reset:	0	0	1	0	0	0	0	0
$0021	Timer 1 Counter Register High (T1CNTH) See page 266.	Read:	Bit 15	14	13	12	11	10	9	Bit 8
		Write:								
		Reset:	0	0	0	0	0	0	0	0
$0022	Timer 1 Counter Register Low (T1CNTL) See page 266.	Read:	Bit 7	6	5	4	3	2	1	Bit 0
		Write:								
		Reset:	0	0	0	0	0	0	0	0
$0023	Timer 1 Counter Modulo Register High (T1MODH) See page 267.	Read: Write:	Bit 15	14	13	12	11	10	9	Bit 8
		Reset:	1	1	1	1	1	1	1	1

= Unimplemented R = Reserved U = Unaffected

Figure 2-2. Control, Status, and Data Registers (Sheet 3 of 8)