‘ MOTOROLA ’

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okminezdjw@sohu.com

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motorola

LZC-Ⅰ

MC68HC08 . , , flash

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, LZC-Ⅰ

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LZC-CⅠ

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- 0~99
- 20~80
- 24h
- LED

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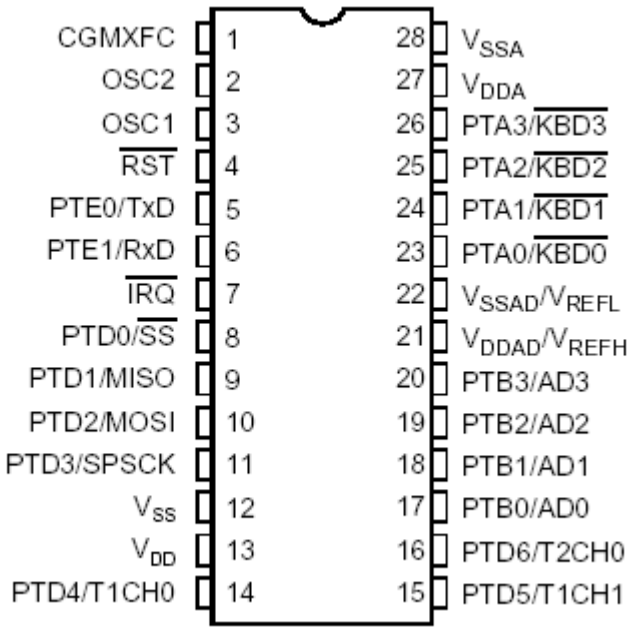
2 MC68HC908GR8



68HC08GR8

motorola MC68HC908GR8
CPU08 CGM
MEMORY ADC TIM1 TIM2
TBM SCI SPI COP

- 8 CPU 8MHz ,
  125ns c
- 64kB
  7680bytes FLASH

  386bytes RAM 36B 310B
  ROM.
- 16 256
- 24
- 2 16 / TIM1,TIM2 16
  TCNT,16 TMOD,8 TSC
  I/O I/O
  I/O

-

- 6 8 A/D

- KBI PPA0~PTA3
  I/O
- 5 I/O 21 A D

Table 22 Port Control Register Bits Summary

Port	Bit	DDR	Module Control		Pin
A	0	DDRA0	KBD	KBIE0	PTA0/KBD0
	1	DDRA1		KBIE1	PTA1/KBD1
	2	DDRA2		KBIE2	PTA2/KBD2
	3	DDRA3		KBIE3	PTA3/KBD3
	-	--		-	–
	-	--		-	–
	-	--		-	–
	-	--		-	–
B	0	DDRB0	ADC	CH0	PTB0/ATD0
	1	DDRB1		CH1	PTB1/ATD1
	2	DDRB2		CH2	PTB2/ATD2
	3	DDRB3		CH3	PTB3/ATD3
	4	DDRB4		CH4	PTB4/ATD4
	5	DDRB5		CH5	PTB5/ATD5
	-	--		-	–
	-	--		-	–
C	0	DDRC0			PTC0
	1	DDRC1			PTC1
	-	--			–
	-	--			–
	-	--			–
	-	--			–
	-	--			–
D	0	DDRD0	SPI		PTD0/SS
	1	DDRD1			PTD1/MISO
	2	DDRD2			PTD2/MOSI
	3	DDRD3			PTD3/SPSCK
	4	DDRD4	TIM1		PTD4/T1CH0
	5	DDRD5			PTD5/T1CH1
	6	DDRD6	TIM2		PTD6/T2CH0
	-	--			–
E	0	DDRE0	SCI		PTE0/TxD
	1	DDRE1			PTE1/RxD

- SPI LED
- COP Watchdog

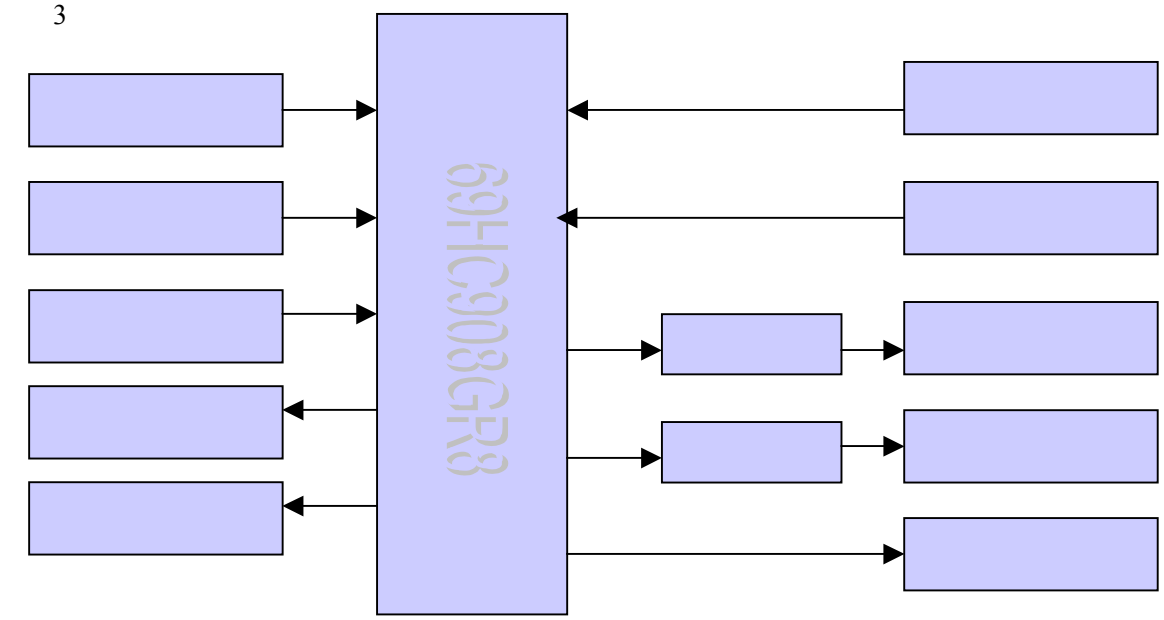
Table 1 . Vector Addresses

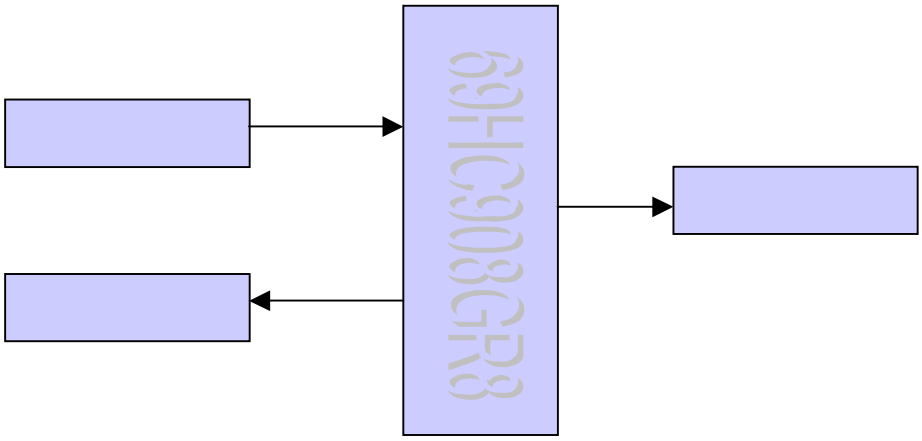
Vector Priority	Vector	Address	Vector
Lowest	IF16	$FFDC	Timebase Vector (High)
		$FFDD	Timebase Vector (Low)
	IF15	$FFDE	ADC Conversion Complete Vector (High)
		$FFDF	ADC Conversion Complete Vector (Low)
	IF14	$FFE0	Keyboard Vector (High)
		$FFE1	Keyboard Vector (Low)
	IF13	$FFE2	SCI Transmit Vector (High)
		$FFE3	SCI Transmit Vector (Low)
	IF12	$FFE4	SCI Receive Vector (High)
		$FFE5	SCI Receive Vector (Low)
	IF11	$FFE6	SCI Error Vector (High)
		$FFE7	SCI Error Vector (Low)
	IF10	$FFE8	SPI Transmit Vector (High)
		$FFE9	SPI Transmit Vector (Low)
	IF9	$FFEA	SPI Receive Vector (High)
		$FFEB	SPI Receive Vector (Low)
	IF8	$FFEC	TIM2 Overflow Vector (High)
		$FFED	TIM2 Overflow Vector (Low)
	IF7	$FFEE	Reserved
		$FFEF	Reserved
	IF6	$FFF0	TIM2 Channel 0 Vector (High)
		$FFF1	TIM2 Channel 0 Vector (Low)
	IF5	$FFF2	TIM1 Overflow Vector (High)
		$FFF3	TIM1 Overflow Vector (Low)
	IF4	$FFF4	TIM1 Channel 1 Vector (High)
		$FFF5	TIM1 Channel 1 Vector (Low)
	IF3	$FFF6	TIM1 Channel 0 Vector (High)
		$FFF7	TIM1 Channel 0 Vector (Low)
	IF2	$FFF8	PLL Vector (High)
		$FFF9	PLL Vector (Low)
	IF1	$FFFA	$\overline{\text{IRQ}}$ Vector (High)
		$FFFB	$\overline{\text{IRQ}}$ Vector (Low)
	—	$FFFC	SWI Vector (High)
		$FFFD	SWI Vector (Low)
	—	$FFFE	Reset Vector (High)
Highest		$FFFF	Reset Vector (Low)

- .CPU WAIT WAIT

WAIT CPU
I 12mA stop IRQKBILVI
CPU WAIT
LVI CPU STOP

3





68hc908gr8

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MC7812T MC7805T
+5V +12V .OSC1,OSC2 8kHz

2

PTA2,PTA3

3

LED SPI

74LS164

lcd led

4 A/D PTB0

CPU,

( ) (K 100K)

PTB1

5

M54123L CPU

CPU

CPU 10ms

10mA

M54123L CPU CPU

6

7

stop

MC34064 PTA0~PTA3 keyboard

2*4 stop

6MHZ

LCD (4543)

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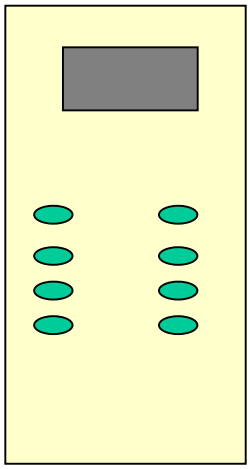

A/D

TBM

TIM TBM

LCD TBM

TBM

1 CPU COP

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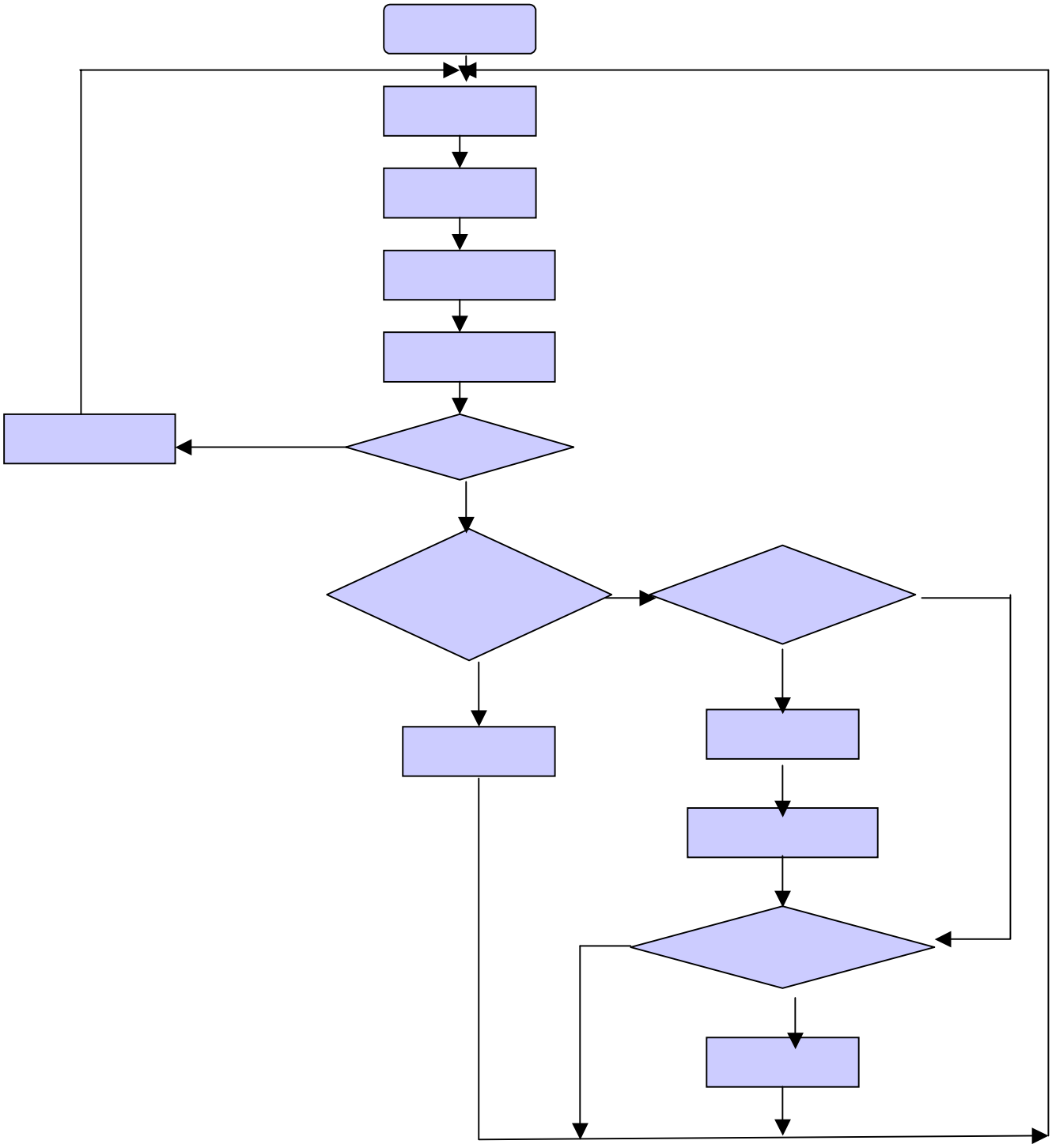

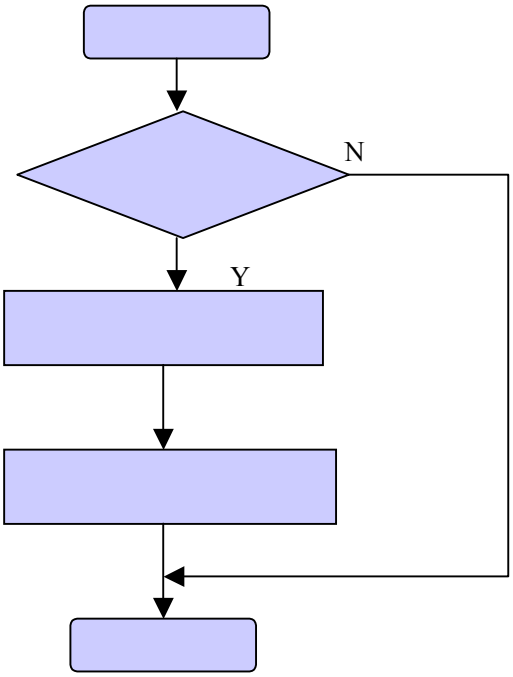

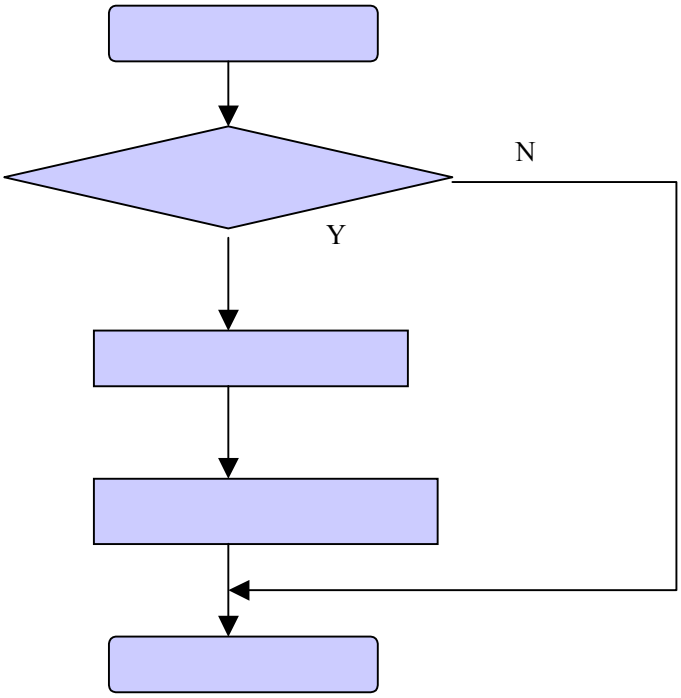

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68HC908GR8 SCI USB

MC68HC08