Special Function Registers of the SAB 80C517

Block	Symbol	Name	Address	Contents after Reset
CPU	**ACC**	**Accumulator**	**$0E0_H$** [1]	**00_H**
	B	**B-Register**	**$0F0_H$** [1]	**00_H**
	DPH	Data Pointer, High Byte	83_H	00_H
	DPL	Data Pointer, Low Byte	82_H	00_H
	DPSEL	Data Pointer Select Register	92_H	$XXXX.X000_B$ [3]
	PSW	**Program Status Word Register**	**$0D0_H$** [1]	**00_H**
	SP	Stack Pointer	81_H	07_H
A/D-Converter	**ADCON0**	**A/D Converter Control Register 0**	**$0D8_H$** [1]	**00_H**
	ADCON1	A/D Converter Control Register 1	$0DC_H$	$XXXX.0000_B$ [3]
	ADDAT	A/D Converter Data Register	$0D9_H$	00_H
	DAPR	D/A Converter Program Register	$0DA_H$	00_H
Interrupt System	**IEN0**	**Interrupt Enable Register 0**	**$0A8_H$** [1]	**00_H**
	CTCON [2]	Com. Timer Control Register	$0E1_H$	$0XXX.0000_B$ [3]
	IEN1	**Interrupt Enable Register 1**	**$0B8_H$** [1]	00_H
	IEN2	Interrupt Enable Register 2	$9A_H$	$XXXX.00X0_B$ [3]
	IP0	Interrupt Priority Register 0	$0A9_H$	00_H
	IP1	Interrupt Priority Register 1	$0B9_H$	$XX00.0000_B$ [3]
	IRCON	**Interrupt Request Control Register**	**$0C0_H$** [1]	**00_H**
	TCON [2]	**Timer Control Register**	**88_H** [1]	**00_H**
	T2CON [2]	**Timer 2 Control Register**	**$0C8_H$** [1]	**00_H**
MUL/DIV Unit	ARCON	Arithmetic Control Register	$0EF_H$	$0XXX.XXXX_B$ [3]
	MD0	Multiplication/Division Register 0	$0E9_H$	XX_H [3]
	MD1	Multiplication/Division Register 1	$0EA_H$	XX_H [3]
	MD2	Multiplication/Division Register 2	$0EB_H$	XX_H [3]
	MD3	Multiplication/Division Register 3	$0EC_H$	XX_H [3]
	MD4	Multiplication/Division Register 4	$0ED_H$	XX_H [3]
	MD5	Multiplication/Division Register 5	$0EE_H$	XX_H [3]

1) Bit-addressable special function registers.
2) This special function register is listed repeatedly since some bits of it also belong to other functional blocks.
3) X means that the value is indeterminate.

Special Function Registers of the SAB 80C517 (cont'd)

Block	Symbol	Name	Address	Contents after Reset
Compare/ Capture Unit (CCU)	CCEN	Compare/Capture Enable Register	$0C1_H$	00_H
	CC4EN	Compare/Capture 4 Enable Register	$0C9_H$	$X000.0000_B$ [3]
	CCH1	Compare/Capture Register 1, High Byte	$0C3_H$	00_H
	CCH2	Compare/Capture Register 2, High Byte	$0C5_H$	00_H
	CCH3	Compare/Capture Register 3, High Byte	$0C7_H$	00_H
	CCH4	Compare/Capture Register 4, High Byte	$0CF_H$	00_H
	CCL1	Compare/Capture Register 1, Low Byte	$0C2_H$	00_H
	CCL2	Compare/Capture Register 2, Low Byte	$0C4_H$	00_H
	CCL3	Compare/Capture Register 3, Low Byte	$0C6_H$	00_H
	CCL4	Compare/Capture Register 4, Low Byte	$0CE_H$	00_H
	CMEN	Compare Enable Register	$0F6_H$	00_H
	CMH0	Compare Register 0, High Byte	$0D3_H$	00_H
	CMH1	Compare Register 1, High Byte	$0D5_H$	00_H
	CMH2	Compare Register 2, High Byte	$0D7_H$	00_H
	CMH3	Compare Register 3, High Byte	$0E3_H$	00_H
	CMH4	Compare Register 4, High Byte	$0E5_H$	00_H
	CMH5	Compare Register 5, High Byte	$0E7_H$	00_H
	CMH6	Compare Register 6, High Byte	$0F3_H$	00_H
	CMH7	Compare Register 7, High Byte	$0F5_H$	00_H
	CML0	Compare Register 0, Low Byte	$0D2_H$	00_H
	CML1	Compare Register 1, Low Byte	$0D4_H$	00_H
	CML2	Compare Register 2, Low Byte	$0D6_H$	00_H
	CML3	Compare Register 3, Low Byte	$0E2_H$	00_H
	CML4	Compare Register 4, Low Byte	$0E4_H$	00_H
	CML5	Compare Register 5, Low Byte	$0E6_H$	00_H
	CML6	Compare Register 6, Low Byte	$0F2_H$	00_H
	CML7	Compare Register 7, Low Byte	$0F4_H$	00_H
	CMSEL	Compare Input Select	$0F7_H$	00_H
	CRCH	Com./Rel./Capt. Register, High Byte	$0CB_H$	00_H
	CRCL	Com./Rel./Capt. Register, Low Byte	$0CA_H$	00_H
	CTCON	Com. Timer Control Register	$0E1_H$	$0XXX.0000_B$ [3]
	CTRELH	Com. Timer Rel. Register, High Byte	$0DF_H$	00_H
	CTRELL	Com. Timer Rel. Register, Low Byte	$0DE_H$	00_H
	TH2	Timer 2, High Byte	$0CD_H$	00_H
	TL2	Timer 2, Low Byte	$0CC_H$	00_H
	T2CON	**Timer 2 Control Register**	**$0C8_H$** [1]	**00_H**

1) Bit-addressable special function registers.
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3) X means that the value is indeterminate.

Special Function Registers of the SAB 80C517 (cont'd)

Block	Symbol	Name	Address	Contents after Reset
Ports	**P0**	**Port 0**	**80_H** 1)	**FF_H**
	P1	**Port 1**	**90_H** 1)	**FF_H**
	P2	**Port 2**	**$0A0_H$** 1)	**FF_H**
	P3	**Port 3**	**$0B0_H$** 1)	**FF_H**
	P4	**Port 4**	**$0E8_H$** 1)	**FF_H**
	P5	**Port 5**	**$0F8_H$** 1)	**FF_H**
	P6	Port 6	$0FA_H$	FF_H
	P7	Port 7, Analog/Digital Input	$0DB_H$	XX_H 3)
	P8	Port 8, Analog/Digital Input, 4Bit	$0DD_H$	XX_H 3)
Pow. Sav.M	PCON	Power Control Register	87_H	00_H
Serial Channels	**ADCON0** 2)	**A/D Converter Control Register**	**$0D8_H$** 1)	**00_H**
	PCON 2)	Power Control Register	87_H	00_H
	S0BUF	Serial Channel 0, Buffer Register	99_H	XX_H 3)
	S0CON	**Serial Channel 0 Control Register**	**98H**1)	**00_H**
	S0RELL4)	Serial Channel 0, Reload Reg., low byte	$0AA_H$	$0D9_H$
	S0RELH4)	Serial Channel 0, Reload Reg., high byte	$0BA_H$	$XXXX.XX11_B$ 3)
	S1BUF	Serial Channel 1, Buffer Register	$9C_H$	XX_H 3)
	S1CON	Serial Channel 1, Control Register	$9B_H$	$0X00.0000_B$ 3)
	S1REL	Serial Channel 1, Reload Register	$9D_H$	00_H
	S1RELH4)	Serial Channel 1, Reload Reg., high byte	OBB_H	XXXX.XX11B 3)
Timer0/ Timer1	**TCON**	**Timer Control Register**	**88_H** 1)	**00_H**
	TH0	Timer 0, High Byte	$8C_H$	00_H
	TH1	Timer 1, High Byte	$8D_H$	00_H
	TL0	Timer 0, Low Byte	$8A_H$	00_H
	TL1	Timer 1, Low Byte	$8B_H$	00_H
	TMOD	Timer Mode Register	89_H	00_H
Watchdog	**IEN0** 2)	**Interrupt Enable Register 0**	**$0A8_H$** 1)	**00_H**
	IEN1 2)	**Interrupt Enable Register 1**	**$0B8_H$** 1)	**00_H**
	IP0 2)	Interrupt Priority Register 0	$0A9_H$	00_H
	IP1 2)	Interrupt Priority Register 1	$0B9_H$	$XX00.0000_B$3)
	WDTREL	Watchdog Timer Reload Register	86_H	00_H

1) Bit-addressable special function registers.
2) This special function register is listed repeatedly since some bits of it also belong to other functional blocks.
3) X means that the value is indeterminate.
4) These registers are available in the CA step and later steps.