STC3117 register map

	Name	Address (decimal)	Address (hexa)	Type	Power-On reset	Soft Reset	Description	LSB unit
Control registers	REG_MODE	0	0x00	R/W			Mode register	
	REG_CTRL	1	0x01	R/W			Control and status register	
	REG_SOC (L)	2	0x02	R/W			Battery SOC (2 bytes)	1/512 %
	REG_SOC (H)	3	0x03					
	REG_COUNTER (L)	4	0x04	R	0x00	0x00	Number of conversions (2 bytes)	0.5 s
	REG_COUNTER (H)	5	0x05					
	REG_CURRENT (L)	6	0x06	R	0x00	0x00	Battery current (2 bytes)	5.88 µV
	REG_CURRENT (H)	7	0x07					
	REG_VOLTAGE (L)	8	0x08	R	0x00	0x00	Battery voltage (2 bytes)	2.2 mV
	REG_VOLTAGE (H)	9	0x09					
	REG_TEMPERATURE	10	0x0A	R	0x00	0x00	Temperature	1 °C
	REG_AVG_CURRENT (L)	11	0x0B	R/W	0x00	0x00	Battery average current or SOC change rate (2 bytes)	1.47 µV or 0.008789 C
	REG_AVG_CURRENT (H)	12	0x0C					
	REG_OCV (L)	13	0x0D	R/W	0x00	0x00	OCV register (2 bytes)	0.55 mV
	REG_OCV (H)	14	0x0E					
	REG_CC_CNF (L)	15	0x0F	R/W	395	395	Coulomb counter gas gauge configuration (2 bytes)	
	REG_CC_CNF (H)	16	0x10					
	REG_VM_CNF (L)	17	0x11	R/W	321	321	Voltage gas gauge algorithmparameter(2 bytes)	
	REG_VM_CNF (H)	18	0x12					
	REG_ALARM_SOC	19	0x13	R/W	0x02	0x02	SOC alarm level (default = 1 %)	1/2 %
	REG_ALARM_VOLTAGE	20	0x14	R/W	0xAA	0xAA	Battery low voltage alarm level (default is 3 V)	17.6 mV
	REG_CURRENT_THRES	21	0x15	R/W	0x0A	0x0A	Current threshold for current monitoring (bits 6-0)	47.04 µV
	REG_CMONIT_COUNT	22	0x16	R	0x78	0x78	Current monitoring counter	
	REG_CMONIT_MAX	23	0x17	R/W	0x78	0x78	Maximum counter value for current monitoring	
	REG_ID	24	0x18	R	0x16	0x16	Part type ID = 16h	
	reserved	25	0x19					
	reserved	26	0x1A					
	REG_CC_ADJ (L)	27	0x1B	R	0x00	0x00	Coulomb counter adjustment register (2 bytes)	1/512 %
	REG_CC_ADJ (H)	28	0x1C					
	REG_VM_ADJ (L)	29	0x1D	R	0x00	0x00	Voltage mode adjustment register (2 bytes)	1/512 %
	REG_VM_ADJ (H)	30	0x1E					
RAM registers	REG_RAM_0	32	0x20	R/W	0x00	0x00	Working register 0 for gas gauge	
	REG_RAM_1	33	0x21	R/W	0x00	0x00	Working register 1 for gas gauge	
	REG_RAM_2	34	0x22	R/W	0x00	0x00	Working register 2 for gas gauge	
	REG_RAM_3	35	0x23	R/W	0x00	0x00	Working register 3 for gas gauge	
	REG_RAM_4	36	0x24	R/W	0x00	0x00	Working register 4 for gas gauge	
	REG_RAM_5	37	0x25	R/W	0x00	0x00	Working register 5 for gas gauge	
	REG_RAM_6	38	0x26	R/W	0x00	0x00	Working register 6 for gas gauge	
	REG_RAM_7	39	0x27	R/W	0x00	0x00	Working register 7 for gas gauge	
	REG_RAM_8	40	0x28	R/W	0x00	0x00	Working register 8 for gas gauge	
	REG_RAM_9	41	0x29	R/W	0x00	0x00	Working register 9 for gas gauge	
	REG_RAM_10	42	0x2A	R/W	0x00	0x00	Working register 10 for gas gauge	
	REG_RAM_11	43	0x2B	R/W	0x00	0x00	Working register 11 for gas gauge	
	REG_RAM_12	44	0x2C	R/W	0x00	0x00	Working register 12 for gas gauge	
	REG_RAM_13	45	0x2D	R/W	0x00	0x00	Working register 13 for gas gauge	
	REG_RAM_14	46	0x2E	R/W	0x00	0x00	Working register 14 for gas gauge	
	REG_RAM_15	47	0x2F	R/W	0x00	0x00	Working register 15 for gas gauge	
OCV table registers	REG_OCVTAB_0 (L)	48	0x30	R/W	0x1770	0x1770	OCV points, 2 bytes per point (32 registers)	0.55 mV
	REG_OCVTAB_0 (H)	49	0x31	R/W				
	REG_OCVTAB_1 (L)	50	0x32	R/W	0x1926	0x1926	OCV points, 2 bytes per point (32 registers)	0.55 mV
	REG_OCVTAB_1 (H)	51	0x33	R/W				
	REG_OCVTAB_2 (L)	52	0x34	R/W	0x19B2	0x19B2	OCV points, 2 bytes per point (32 registers)	0.55 mV
	REG_OCVTAB_2 (H)	53	0x35	R/W				
	REG_OCVTAB_3 (L)	54	0x36	R/W	0x19FB	0x19FB	OCV points, 2 bytes per point (32 registers)	0.55 mV
	REG_OCVTAB_3 (H)	55	0x37	R/W				
	REG_OCVTAB_4 (L)	56	0x38	R/W	0x1A3E	0x1A3E	OCV points, 2 bytes per point (32 registers)	0.55 mV
	REG_OCVTAB_4 (H)	57	0x39	R/W				
	REG_OCVTAB_5 (L)	58	0x3A	R/W	0x1A6D	0x1A6D	OCV points, 2 bytes per point (32 registers)	0.55 mV
	REG_OCVTAB_5 (H)	59	0x3B	R/W				
	REG_OCVTAB_6 (L)	60	0x3C	R/W	0x1A9D	0x1A9D	OCV points, 2 bytes per point (32 registers)	0.55 mV
	REG_OCVTAB_6 (H)	61	0x3D	R/W				
	REG_OCVTAB_7 (L)	62	0x3E	R/W	0x1AB6	0x1AB6	OCV points, 2 bytes per point (32 registers)	0.55 mV
	REG_OCVTAB_7 (H)	63	0x3F	R/W				
	REG_OCVTAB_8 (L)	64	0x40	R/W	0x1AD5	0x1AD5	OCV points, 2 bytes per point (32 registers)	0.55 mV
	REG_OCVTAB_8 (H)	65	0x41	R/W				
	REG_OCVTAB_9 (L)	66	0x42	R/W	0x1B01	0x1B01	OCV points, 2 bytes per point (32 registers)	0.55 mV
	REG_OCVTAB_9 (H)	67	0x43	R/W				
	REG_OCVTAB_10 (L)	68	0x44	R/W	0x1B70	0x1B70	OCV points, 2 bytes per point (32 registers)	0.55 mV
	REG_OCVTAB_10 (H)	69	0x45	R/W				
	REG_OCVTAB_11 (L)	70	0x46	R/W	0x1BB1	0x1BB1	OCV points, 2 bytes per point (32 registers)	0.55 mV
	REG_OCVTAB_11 (H)	71	0x47	R/W				
	REG_OCVTAB_12 (L)	72	0x48	R/W	0x1BE8	0x1BE8	OCV points, 2 bytes per point (32 registers)	0.55 mV
	REG_OCVTAB_12 (H)	73	0x49	R/W				
	REG_OCVTAB_13 (L)	74	0x4A	R/W	0x1C58	0x1C58	OCV points, 2 bytes per point (32 registers)	0.55 mV
	REG_OCVTAB_13 (H)	75	0x4B	R/W				
	REG_OCVTAB_14 (L)	76	0x4C	R/W	0x1CF3	0x1CF3	OCV points, 2 bytes per point (32 registers)	0.55 mV
	REG_OCVTAB_14 (H)	77	0x4D	R/W				
	REG_OCVTAB_15 (L)	78	0x4E	R/W	0x1DA9	0x1DA9	OCV points, 2 bytes per point (32 registers)	0.55 mV
	REG_OCVTAB_15 (H)	79	0x4F	R/W				
	REG_SOCTAB_0	80	0x50	R/W	0x00	0x00	SOC points, 1 byte per point (16 registers)	1/2 %
	REG_SOCTAB_1	81	0x51	R/W	0x06	0x06	SOC points, 1 byte per point (16 registers)	1/2 %
	REG_SOCTAB_2	82	0x52	R/W	0x0C	0x0C	SOC points, 1 byte per point (16 registers)	1/2 %
	REG_SOCTAB_3	83	0x53	R/W	0x14	0x14	SOC points, 1 byte per point (16 registers)	1/2 %
	REG_SOCTAB_4	84	0x54	R/W	0x1E	0x1E	SOC points, 1 byte per point (16 registers)	1/2 %
	REG_SOCTAB_5	85	0x55	R/W	0x28	0x28	SOC points, 1 byte per point (16 registers)	1/2 %
	REG_SOCTAB_6	86	0x56	R/W	0x32	0x32	SOC points, 1 byte per point (16 registers)	1/2 %
	REG_SOCTAB_7	87	0x57	R/W	0x3C	0x3C	SOC points, 1 byte per point (16 registers)	1/2 %
	REG_SOCTAB_8	88	0x58	R/W	0x50	0x50	SOC points, 1 byte per point (16 registers)	1/2 %
	REG_SOCTAB_9	89	0x59	R/W	0x64	0x64	SOC points, 1 byte per point (16 registers)	1/2 %
	REG_SOCTAB_10	90	0x5A	R/W	0x78	0x78	SOC points, 1 byte per point (16 registers)	1/2 %
	REG_SOCTAB_11	91	0x5B	R/W	0x82	0x82	SOC points, 1 byte per point (16 registers)	1/2 %
	REG_SOCTAB_12	92	0x5C	R/W	0x8C	0x8C	SOC points, 1 byte per point (16 registers)	1/2 %
	REG_SOCTAB_13	93	0x5D	R/W	0xA0	0xA0	SOC points, 1 byte per point (16 registers)	1/2 %
	REG_SOCTAB_14	94	0x5E	R/W	0xB4	0xB4	SOC points, 1 byte per point (16 registers)	1/2 %
	REG_SOCTAB_15	95	0x5F	R/W	0xC8	0xC8	SOC points, 1 byte per point (16 registers)	1/2 %