%4	OFF	
0x00	0x00	SEQ01_IDLE_DATA
0x01	0x04	SEQ0&1_USER_DATA
0x02	0x08	
0x03	0x0c	
0x04	0x10	
0x05		
0x06		
0x07		
0x08	0x20	
0x09	0x24	
0x0a	0x28	
0x0b	0x2c	
0x0c	0x30	
0x0d	0x34	
0x0e	0x38	
0x0f	0x3c	

%4	OFF	
0x10	0x40	
0x11	0x44	
0x12	0x48	
0x13	0x4c	
0x14	0x50	
0x15	0x54	
0x16	0x58	
0x17	0x5c	
0x18	0x60	
0x19	0x64	
0x1a	0x68	
0x1b	0x6c	
0x1c	0x70	
0x1d	0x74	
0x1e	0x78	
0x1f	0x7c	

4%	OFF	
0x20	0x80	SEQ2_IDLE_DATA
0x21	0x84	SEQ2_USER_DATA
0x22	0x88	
0x23	0x8c	
0x24	0x90	
0x25	0x94	
0x26	0x98	
0x27	0x9c	
0x28	0xa0	
0x29	0xa4	
0x2a	0xa8	
0x2b	0xac	
0x2c	0xb0	
0x2d	0xb4	
0x2e	0xb8	
0x2f	0xbc	

%4	OFF	
0x30	0xc0	
0x31	0xc4	
0x32	0xc8	
0x33	0xcc	
0x34	0xd0	
0x35	0xd4	
0x36	0xd8	
0x37	0xdc	
0x38	0xe0	
0x39	0xe4	
0x3a	0xe8	
0x3b	0xec	
0x3c	0xf0	
0x3d	0xf4	
0x3e	0xf8	
0x3f	0xfc	

%4	OFF	VarName
0x40	0x100	OUTPUT_A
	101	OUTPUT_B
	102	INPUT_A
	103	INPUT_B
0x41	0x104	IMM_PERIOD_L
	0x105	IMM_PERIOD_H
	0x106	INPUT_POL_A
	0x107	INPUT_POL_B
0x42	0x108	PWM0_VAL
	109	PWM1_VAL
	10a	PWM2_VAL
	10b	PWM3_VAL
0x43	10c	PWM4_VAL
	10d	PWM5_VAL
	10e	PWM6_VAL
	10f	PWM7_VAL
0x44	0x110	PWM8_VAL
	111	PWM9_VAL
	112	PWM10_VAL
	113	PWM11_VAL
0x45	114	PWM12_VAL
	0x115	PWM13_VAL
	116	PWM14_VAL
	117	PWM15_VAL
0x46	118	PWM_SEQ_INDEX (index in SEQ zone for 16 consecutive PWMs)
	119	PWM_SOURCE (0=0x108..0x117 / 1=SEQ zone cursor)
	11a	
	11b	
0x47	11c	IN_A_MASK_S (input mask)
	11d	IN_A_MODE_S (0=hi , 1=rise 2=fall 3 =both)
	11e	IN_A_STORE_S (0=any , 1=match user defined value)
	11f	IN_A_MATCH_S (user defined value)
0x48	120	IN_A_MASK_T
	121	IN_A_MODE_T
	122	IN_A_STORE_T
	123	IN_A_MATCH_T
0x49	124	IN_A_MASK_U
	125	IN_A_MODE_U
		IN_A_STORE_U
		IN_A_MATCH_U
0x4a	128	IN_A_MASK_V
		IN_A_MODE_Y
		IN_A_STORE_V
		IN_A_MATCH_V
0x4b	12c	IN_A_MASK_W (input mask)
		IN_A_MODE_W (0=hi , 1=rise 2=fall 3 =both)
		IN_A_STORE_W (0=any , 1=match user defined value)
		IN_A_MATCH_W (user defined value)
0x4c	130	IN_A_MASK_X
		IN_A_MODE_X
		IN_A_STORE_X
		IN_A_MATCH_X
0x4d	134	IN_A_MASK_Y
		IN_A_MODE_Y
		IN_A_STORE_Y
		IN_A_MATCH_Y
0x4e	138	IN_A_MASK_Z
		IN_A_MODE_Z
		IN_A_STORE_Z
	13b	IN_A_MATCH_Z
0x4f	13c	IN_B_MASK
	13d	IN_B_MODE (0=state, 1=rise 2=fall 3=both (0x26:IS OUTPUT , **new**)
	13e	IN_B_STORE (0=any true, 1=match user defined value)
	13f	IN_B_MATCH (user defined value)

%4	Offset(bit)	VarName
0x50	140	SEQ_STEP : 1=++ 0=0 2=--
	141	SEQ_CURSOR (0..ff)
	142	SEQ_START (0..ff)
	143	SEQ_END (0..ff)
0x51	144	SEQ_ASTEP_INC_TIME (8b)
	145	*SEQ_UNFREEZE_RESYNC*
	146	SEQ_WRAP (0:1)
	147	SEQ_MODE (00,01,10,11 : cursor 0, cursor 0+1 , cursor 0+2 , cursor 0+1+2
0x52	148	SEQ_USER_VAL_L
	149	SEQ_USER_VAL_H
	14a	SEQ_USER_PRESCA
	14b	SEQS_UNFREEZE_CURSOR
0x53	14c	ADC_VREF (0:VCC 1 : use ADC_D as VREF+)
	14d	
	14e	
	14f	
0x54	150	SEQ_MASK
	151	SEQ1_MASK
	152	SEQ2_MASK
0x153		BURST_MODE_FIX_DELAY
0x55	154	INPUT_B_FREEZE (write 0=freezed, other=run/output burst quantity)
	155	INPUT_B_REC_INDEX / output burst actual index
	156	INPUT_B_ROLLOVER_COUNT / output burst n/a
	157	INPUT_B_ZERO_INDEX (user's write 0 -> index=0) / output burst :n/A
0x56	158	IN_A_CPT_S
		IN_A_CPT_T
		IN_A_CPT_U
		IN_A_CPT_V
0x57	15c	IN_A_CPT_W
		IN_A_CPT_X
		IN_A_CPT_Y
		IN_A_CPT_Z
0x58	160	INPUT_B_REC0 / _OUTPUT_BURST_DATA0
0x59	164	
0x5a	168	
0x5b	16c	
		INPUT_B_REC15 / _OUTPUT_BURST_DATA15
0x5c	170	INPUT_B_REC16 / _OUTPUT_BURST_DELAY0
0x5d	174	
0x5e	178	
0x5f	17c	
		INPUT_B_REC31 / _OUTPUT_BURST_DELAY 15

0x60	180	COMMAND
	181	REGISTER
TMR0(OUT)	182	_DATA
	183	DATB
0x61	184	TOVAL_L
	185	TOVAL_H
	186	PRESCA
	187	AGAIN
0x62	188	OUTPUT_MODE (0 : 1 : 2 : 3) immediate/sequenced/EXEC/PWM
	189	AST_INC (internal counter)
	18a	AST1_INC (internal)
	18b	AST2_INC (internal)
0x63	18c	
	18d	
	18e	INPUT_A_PAST
	18f	INPUT_B_PAST
0x64	190	TOP0V
	191	TOP1V
	192	TOP2V
	193	TOP3V
0x65	194	TOP4V
	195	TOP5V
	196	TOP6V
	197	TOP7V
0x66	198	TOP8V
	199	TOP9V
	19a	TOP10V
	19b	TOP11V
0x67	19c	TOP12V
	19d	TOP13V
	19e	TOP14V
	19f	TOP15V
0x68	1a0	SEQ_TRIG internal sequencer with stepcount step triggers (0=off 1=trig)
	1a1	SEQ1_TRIG
	1a2	SEQ2_TRIG
	1a3	
0x69	1a4	SERVO_MODE_PERIOD_L
	1a5	SERVO_MODE_PERIOD_H
	1a6	SERMO_MODE_PRESCALE
	1a7	SERVO_MODE_PRECOMP_L
0x6a	1a8	SERVO_MODE_PRECOMP_H
	1a9	SERVO_MODE_PRECOMP_PRESCALE
	1aa	SEQ_SAVED_CURSOR
	1ab	SEQ1_SAVED_CURSOR
0x6b	1ac	SEQ2_SAVED_CURSOR
	1ad	MMO_SEQ_SAVED_CURSORP128
	1ae	
	1af	
0x6c	1b0	SCRATCHPAD (blocsize=16)
0x6d	1b4	
0x6e	1b8	
0x6f	1bc	
	1bd	
	1be	
	1bf	

%4	OFF	VarName
0x70	1c0	SEQ1_STEP
	1c1	SEQ1_CURSOR
	1c2	SEQ1_ASTEP_INC_TIME
	1c3	*SEQ1_UNFREEZE_RESYNC*
0x71	1c4	SEQ2_STEP
	1c5	SEQ2_CURSOR
	1c6	SEQ2_ASTEP_INC_TIME
	1c7	*SEQ2_UNFREEZE_RESYNC*
0x72	1c8	SEQ_FREEZE_COUNT
	1c9	SEQ1_FREEZE_COUNT
	1ca	SEQ2_FREEZE_COUNT
	1cb	SEQS_FREEZE_MASK
0x73	1cc	SEQ_PRESET_COUNT
	1cd	SEQ1_PRESET_COUNT
	1ce	SEQ2_PRESET_COUNT
	1cf	SEQ_PRESET_STEP (0:1:2 , sens)
0x74	1d0	SEQ1_PRESET_STEP
	1d1	SEQ2_PRESET_STEP
	1d2	SEQS_STEPCOUNT_RESTARTS (0=no 1= index @ start when finished)
	1d3	
0x75	1d4	STEPCOUNT_IN_PROGRESS (0=no, 1=yes)
0x76	1d8	ADC_A_L
		ADC_A_H
	1da	ADC_B_L
		ADC_B_H
0x77	1dc	ADC_C_L
		ADC_C_H
	1de	ADC_D_L
		ADC_D_H
0x78	1e0	
0x79	1e4	EPROM_MAGIC
	1e5	EPROM_BLOC (0..7)
0x7a	1e8	CM_WAS_RESET
	1e9	CORE_MODULE_GATEWAY_VERSION
	1ea	CORE_MODULE_TYPE_ID
	1eb	CORE_MODULE_FIRMWARE_VERSION
0x7b	1ec	*DEBUG*
0x7c	1f0	CORE_MODULE_EXEC_ADDR
0x7d	1f4	
0x7e	1f8	
0x7f	1fc	
	1ff	

0x200	0x2ff	256 pwm precomputed LATA/LATB output bytes (PWM SERVO mode)

	MMAP defined

0x00	module RUNNING/IDLE
0x01	IMMEDIATE MODE : RUN
0x02	SEQUENCER : FREEZE (mask)
0x03	SEQUENCER : RUN
0x04	SEQUENCER : UNFREEZE (using _SEQn_UNFREEZE_RESYNC)
0x05	SERVO PWM output : RUN
0x06	STOP
0x07	SEQUENCER : EXECUTE_STEPCOUNT
0x08	
0x09	
0x0a	special : OUTPUT BURST TTL DATA on INPUT B : ENABLE
0x0b	special : OUTPUT BURST TTL DATA on INPUT B : DISABLE
0x0c	special : EXECUTE OUTPUT BURST , variable interval time mode
0x0d	special : EXECUTE OUTPUT BURST , fixed interval time mode
0x10	config : WRITE
0x11	config : READ
0x12	config : INITIAL