

Symbolic name	Size	Address	Description	Units	Range
gData.mode	4 Byte	\$1EF	Operational mode of the servo-controller <i>Digital Torque Mode = \$1001</i> <i>Digital Speed Mode = \$2002</i> <i>Analog Torque Mode = \$8001</i> <i>Analog Speed Mode = \$10001</i> <i>Stepper Motor Mode = \$20004</i> <i>Position Absolute Mode = \$4004</i> <i>Position Relative (PG) = \$40004</i> <i>Position Relative (Resolver) = \$80004</i> <i>Encoder Mode = \$100004</i> <i>Trajectory CAN Mode = \$200004</i>		
gData.cmdAfterReset	2 Byte	\$1EE	State after reset <i>1 = servo ENABLE</i> <i>2 = servo DISABLE</i>		
gData.controlSource	2 Byte	\$1F1	Digital input modes <i>bit 0 = Enable (DI 1)</i> <i>bit 1 = Emr. Stop 1 (DI 2)</i> <i>bit 2 = Emr. Stop 2 (DI 3)</i> <i>bit 3</i> <i>bit 4</i> <i>bit 5</i> <i>bit 6</i> <i>bit 7</i>		
gData.pcMasterCmd	2 Byte	\$1ED	Control register- <i>requirement/answer</i> <i>1 = disable / 11 = servo disable</i> <i>2 = enable / 12 = servo enable</i> <i>3 = Save do EEPROM / 13 = Data stored</i> <i>4 = Read from EEPROM / 14 = Data read</i> <i>5 = Clear Fault / 15 = Faults cleared</i> <i>6 = RESET CPU /</i> <i>7 = Resolver set to 0 / 17= Resolver pos.=0</i> <i>8 = Read Default Param./ 18 = Default Read</i> <i>9 = Clear All Task / 19 = Task Cleared</i>		

Symbolic name	Size	Address	Description	Units	Range
appStatus	2 Byte	\$1A0	Status <i>bit 0 = Enable OK</i> <i>bit 1 = In Position</i> <i>bit 2 = CAN Control Mód aktivní</i> <i>bit 3 = Speed=0</i> <i>bit 4 = Emergency stop 1</i> <i>bit 5 = Emergency stop 2</i> <i>bit 6 = Fault</i>		
fault	2 Byte	\$1A1	Faults <i>0 = OK</i> <i>1 = PWM Error</i> <i>2 = Position Error</i> <i>3 = Over current</i> <i>4 = External ENABLE</i> <i>5 = Resolver Fault</i> <i>6 = Servo Termistor</i> <i>7 = Motor Termistor</i> <i>8 = Falsh Write Error</i> <i>9 = Low Voltage</i>		
dlq	2 Byte	\$190	Desired current	1017.6 * 1,41= 1.0 A	-10.0A ... 10.0A
dPos	4 Byte	\$192	Desired position (ABS)	1= 1 inc	-2000000000 ... 2000000000 inc
dSpeed	4 Byte	\$194	Desired speed	262.144= 1 inc/s	-7450 ... 7450 re/min
i_dq.q	2 Byte	\$1A8	actual current	1017.6 * 1,41= 1.0A	
rPos	4 Byte	\$196	actual position (ABS)	1 = 1 inc	
rSpeed	4 Byte	\$19A	actual speed	262.144= 1 inc/s	
posError	4 Byte	\$287	actual position error	1= 1 inc	
mData.an3	2 Byte	\$1B8	actual value of the analogue input	13,107= 1 mV	-2,5 .. 2,5V
mData.an2	2 Byte	\$1B6	actual value of the DC Bus	455,5= 1 V	0 .. 45V
rAngle	2 Byte	\$1B1	actual rotor position within 1 revolution	1= 1 inc	
wInPortVal	2 Byte	\$19F	actual status of the digital inputs	DI1 DI10 bits	
wOutPortVal	2 Byte	\$19E	actual status of the digital outputs	DO1..DO4 bits	
gData.ExtOutSignMask	2 Byte	\$1F2	mask digital outputs (DO1 ... DO4)		

Symbolic name	Size	Address	Description	Units	Range
gData.CAN_bRateIndex	2 Byte	\$1C7	CAN communication baud rate 0 = 1 Mb 1 = 500 kb 2 = 250 kb 3 = 125 kb		
gData.SCI_bRateIndex	2 Byte	\$1C6	RS232 communication baud rate 0 = 57600 kb/s 1 = 38400 kb/s 2 = 19200 kb/s 3 = 9600 kb/s		
gData.emerRamp	4 Byte	\$204	emergency deceleration ramp	178957= 1 ot/s ²	4 ... 309375 ms (50ot/s)
gData.speedRamp.acc	4 Byte	\$1D4	acceleration	178957= 1 r/s ²	4 ... 309375 ms (50r/s)
gData.speedRamp.dcc	4 Byte	\$1D6	deceleration	178957= 1 r/s ²	4 ... 309375 ms (50r/s)
gData.speedRamp.max	4 Byte	\$1D2	max.speed of the profile generator	262.144= 1 inc/s	-7450 ... 7450 re/min
gData.refPosError	4 Byte	\$1CB	max.position error	1= 1 inc	1 ... 2000000000 inc
gData.anOffset	2 Byte	\$1EC	analogue offset	655,36= 1%	-50% ... +50%
gData.StepScale	2 Byte	\$1E8	pulse multiplier of the pulse input	5= 2 e5	0 ... 32767 (2 e0 ... 2 e32767)
gData.NodeId	2 Byte	\$200	address	1= 1	0 .. 63
swVersion	2 Byte	\$1B0	firmware version	1= 0.1	
gData.idPI.iGain	2 Byte	\$1E3	integration gain of the d-current component	327.67= 1	0 .. 100
gData.idPI.pGain	2 Byte	\$1E2	proporcional gain of the d current component	327.67= 1	0 .. 100
gData.iqPI.iGain	2 Byte	\$1DE	integration gain of the q- current component	327.67= 1	0 .. 100
gData.iqPI.pGain	2 Byte	\$1DD	proporcional gain of the q-current component	327.67= 1	0 .. 100
gData.speedPI.iGain	2 Byte	\$1D9	integration gain for the speed controller.	327.67= 1	0 .. 100
gData.speedPI.pGain	2 Byte	\$1D8	proporcional gain for the speed controller	327.67= 1	0 .. 100
gData.speedPI.limit	2 Byte	\$1DC	peak current	1017.6 * 1,41= 1.0 A	0 ... 18.5A
gData.posPI.pGain	2 Byte	\$1E7	proporcional gain for the position controller	327.67= 1	0 .. 100
gData.nCurrent	2 Byte	\$1C2	nominal motor current	1017.6= 1.0 A	0 ... 10.0A
gData.ocLimit	2 Byte	\$1CA	over load time constant	1100= 5s na 2x	10 ... 3000
gData.nPolePairs	2 Byte	\$1C3	No. of pole pairs	1= 1 double	3, 5
gData.resAlign	2 Byte	\$1C4	Resolver offset	1= 1 inc	0 ... 65565

Symbolic name	Size	Address	Description	Units	Range
gData.vs.RunFlag	2 Byte	\$283	Enable internal timer after RESET 1 = <i>ENABLE</i> 2 = <i>DISABLE</i>		
vsRunFlg	2 Byte	\$6CC	Run internal timer 0 = <i>stop</i> 1 = <i>run</i>		
gData.vs.Period	2 Byte	\$284	period internal timer	2= 1 ms	0 .. 32700
comander	2 Byte	\$198	Run taskX 1 = <i>run task0</i> 2 = <i>run task1</i> 3 = <i>run task2</i> 4 = <i>run task3</i> 5 = <i>run task4</i> 6 = <i>run task5</i> 7 = <i>run task6</i> 8 = <i>run task7</i> 9 = <i>run task8</i> 10 = <i>run task9</i>		
gData.task0.Data.val1	4 Byte	\$20A	value of the chosen task (speed, torque, position)		
gData.task0.Data.val2	4 Byte	\$20C	value of the chosen task (max. speed, D. delay)		
gData.task0.Data.val3	4 Byte	\$20E	acceleration	178957= 1 r/s ²	4 ... 309375 ms (50r/s)
gData.task0.Data.val4	4 Byte	\$210	deceleration	178957= 1 r/s ²	4 ... 309375 ms (50r/s)
gData.task0.Dealy	2 Byte	\$208	time delay	4= 1 ms	0 ... 16380 ms
gData.task0.Edge	2 Byte	\$207	starting edge (<i>\$00 falling edge, \$01 rising edge</i>]		
gData.task0.Function	2 Byte	\$209	function (see DESCRIPTION OF THE FUNCTIONS)		
gData.task0.Mask	2 Byte	\$206	control input (see DESCRIPTION OF THE CONTROL INPUTS)		
gData.task1.Data.val1	4 Byte	\$216	value of the chosen task (speed, torque, position)		
gData.task1.Data.val2	4 Byte	\$218	maximal speed	262.144= 1 inc/s	0 ... 7450 ot/min
gData.task1.Data.val3	4 Byte	\$21A	acceleration	178957= 1 r/s ²	4 ... 309375 ms (50r/s)
gData.task1.Data.val4	4 Byte	\$21C	deceleration	178957= 1 r/s ²	4 ... 309375 ms (50r/s)
gData.task1.Dealy	2 Byte	\$214	time delay	4= 1 ms	0 ... 16380 ms
gData.task1.Edge	2 Byte	\$213	starting edge (<i>\$00 falling edge, \$01 rising edge</i>]		
gData.task1.Function	2 Byte	\$215	function (see DESCRIPTION OF THE FUNCTIONS)		
gData.task1.Mask	2 Byte	\$212	control input (see DESCRIPTION OF THE CONTROL INPUTS)		

Symbolic name	Size	Address	Description	Units	Range
gData.task2.Data.val1	4 Byte	\$222	value of the chosen task (speed, torque, position)		
gData.task2.Data.val2	4 Byte	\$224	maximal speed	262.144= 1 inc/s	0 ... 7450 ot/min
gData.task2.Data.val3	4 Byte	\$226	acceleration	178957= 1 r/s ²	4 ... 309375 ms (50r/s)
gData.task2.Data.val4	4 Byte	\$228	deceleration	178957= 1 r/s ²	4 ... 309375 ms (50r/s)
gData.task2.Dealy	2 Byte	\$220	time delay	4= 1 ms	0 ... 16380 ms
gData.task2.Edge	2 Byte	\$21F	starting edge (<i>\$00 falling edge, \$01 rising edge</i>]		
gData.task2.Function	2 Byte	\$221	function (see DESCRIPTION OF THE FUNCTIONS)		
gData.task2.Mask	2 Byte	\$21E	control input (see DESCRIPTION OF THE CONTROL INPUTS)		
gData.task3.Data.val1	4 Byte	\$22E	value of the chosen task (speed, torque, position)		
gData.task3.Data.val2	4 Byte	\$230	maximal speed	262.144= 1 inc/s	0 ... 7450 ot/min
gData.task3.Data.val3	4 Byte	\$232	acceleration	178957= 1 r/s ²	4 ... 309375 ms (50r/s)
gData.task3.Data.val4	4 Byte	\$234	deceleration	178957= 1 r/s ²	4 ... 309375 ms (50r/s)
gData.task3.Dealy	2 Byte	\$22C	time delay	4= 1 ms	0 ... 16380 ms
gData.task3.Edge	2 Byte	\$22B	starting edge (<i>\$00 falling edge, \$01 rising edge</i>]		
gData.task3.Function	2 Byte	\$22D	function (see DESCRIPTION OF THE FUNCTIONS)		
gData.task3.Mask	2 Byte	\$22A	control input (see DESCRIPTION OF THE CONTROL INPUTS)		
gData.task4.Data.val1	4 Byte	\$23A	value of the chosen task (speed, torque, position)		
gData.task4.Data.val2	4 Byte	\$23C	maximal speed	262.144= 1 inc/s	0 ... 7450 ot/min
gData.task4.Data.val3	4 Byte	\$23E	acceleration	178957= 1 r/s ²	4 ... 309375 ms (50r/s)
gData.task4.Data.val4	4 Byte	\$240	deceleration	178957= 1 r/s ²	4 ... 309375 ms (50r/s)
gData.task4.Dealy	2 Byte	\$238	time delay	4= 1 ms	0 ... 16380 ms
gData.task4.Edge	2 Byte	\$237	starting edge (<i>\$00 falling edge, \$01 rising edge</i>]		
gData.task4.Function	2 Byte	\$239	function (see DESCRIPTION OF THE FUNCTIONS)		
gData.task4.Mask	2 Byte	\$236	control input (see DESCRIPTION OF THE CONTROL INPUTS)		
gData.task5.Data.val1	4 Byte	\$246	value of the chosen task (speed, torque, position)		
gData.task5.Data.val2	4 Byte	\$248	maximal speed	262.144= 1 inc/s	0 ... 7450 ot/min
gData.task5.Data.val3	4 Byte	\$24A	acceleration	178957= 1 r/s ²	4 ... 309375 ms (50r/s)
gData.task5.Data.val4	4 Byte	\$24C	deceleration	178957= 1 r/s ²	4 ... 309375 ms (50r/s)
gData.task5.Dealy	2 Byte	\$244	time delay	4= 1 ms	0 ... 16380 ms
gData.task5.Edge	2 Byte	\$243	starting edge (<i>\$00 falling edge, \$01 rising edge</i>]		
gData.task5.Function	2 Byte	\$245	function (see DESCRIPTION OF THE FUNCTIONS)		
gData.task5.Mask	2 Byte	\$242	control input (see DESCRIPTION OF THE CONTROL INPUTS)		

Symbolic name	Size	Address	Description	Units	Range
gData.task6.Data.val1	4 Byte	\$252	value of the chosen task (speed, torque, position)		
gData.task6.Data.val2	4 Byte	\$254	maximal speed	262.144= 1 inc/s	0 ... 7450 ot/min
gData.task6.Data.val3	4 Byte	\$256	acceleration	178957= 1 r/s ²	4 ... 309375 ms (50r/s)
gData.task6.Data.val4	4 Byte	\$258	deceleration	178957= 1 r/s ²	4 ... 309375 ms (50r/s)
gData.task6.Dealy	2 Byte	\$250	time delay	4= 1 ms	0 ... 16380 ms
gData.task6.Edge	2 Byte	\$24F	starting edge (<i>\$00 falling edge, \$01 rising edge</i>]		
gData.task6.Function	2 Byte	\$251	function (see DESCRIPTION OF THE FUNCTIONS)		
gData.task6.Mask	2 Byte	\$24E	control input (see DESCRIPTION OF THE CONTROL INPUTS)		
gData.task7.Data.val1	4 Byte	\$25E	value of the chosen task (speed, torque, position)		
gData.task7.Data.val2	4 Byte	\$260	maximal speed	262.144= 1 inc/s	0 ... 7450 ot/min
gData.task7.Data.val3	4 Byte	\$262	acceleration	178957= 1 r/s ²	4 ... 309375 ms (50r/s)
gData.task7.Data.val4	4 Byte	\$264	deceleration	178957= 1 r/s ²	4 ... 309375 ms (50r/s)
gData.task7.Dealy	2 Byte	\$25C	time delay	4= 1 ms	0 ... 16380 ms
gData.task7.Edge	2 Byte	\$25B	starting edge (<i>\$00 falling edge, \$01 rising edge</i>]		
gData.task7.Function	2 Byte	\$25D	function (see DESCRIPTION OF THE FUNCTIONS)		
gData.task7.Mask	2 Byte	\$25A	control input (see DESCRIPTION OF THE CONTROL INPUTS)		
gData.task8.Data.val1	4 Byte	\$26A	value of the chosen task (speed, torque, position)		
gData.task8.Data.val2	4 Byte	\$26C	maximal speed	262.144= 1 inc/s	0 ... 7450 ot/min
gData.task8.Data.val3	4 Byte	\$26E	acceleration	178957= 1 r/s ²	4 ... 309375 ms (50r/s)
gData.task8.Data.val4	4 Byte	\$270	deceleration	178957= 1 r/s ²	4 ... 309375 ms (50r/s)
gData.task8.Dealy	2 Byte	\$268	time delay	4= 1 ms	0 ... 16380 ms
gData.task8.Edge	2 Byte	\$267	starting edge (<i>\$00 falling edge, \$01 rising edge</i>]		
gData.task8.Function	2 Byte	\$269	function (see DESCRIPTION OF THE FUNCTIONS)		
gData.task8.Mask	2 Byte	\$266	control input (see DESCRIPTION OF THE CONTROL INPUTS)		
gData.task9.Data.val1	4 Byte	\$276	value of the chosen task (speed, torque, position)		
gData.task9.Data.val2	4 Byte	\$278	maximal speed	262.144= 1 inc/s	0 ... 7450 ot/min
gData.task9.Data.val3	4 Byte	\$27A	acceleration	178957= 1 r/s ²	4 ... 309375 ms (50r/s)
gData.task9.Data.val4	4 Byte	\$27C	deceleration	178957= 1 r/s ²	4 ... 309375 ms (50r/s)
gData.task9.Dealy	2 Byte	\$274	time delay	4= 1 ms	0 ... 16380 ms
gData.task9.Edge	2 Byte	\$273	starting edge (<i>\$00 falling edge, \$01 rising edge</i>]		
gData.task9.Function	2 Byte	\$275	function (see DESCRIPTION OF THE FUNCTIONS)		
gData.task9.Mask	2 Byte	\$272	control input (see DESCRIPTION OF THE CONTROL INPUTS)		

Symbolic name	Size	Address	Description	Units	Range
gData.taskX.Function task0 ONLY !	2 Byte		DESCRIPTION OF THE FUNCTIONS <i>\$00 Absolute position control</i> <i>\$01 Relative position control-incremental</i> <i>\$02 Relative position control-resolver</i> <i>\$03 Deceleration ramp</i> <i>\$04 Set reference position</i> <i>\$05 Digital speed control</i> <i>\$06 Digital torque control</i> <i>\$07 Reset of the servo-controller</i> <i>\$08 Start of the internal timer</i> <i>\$09 Stop of the internal timer</i> <i>\$0A Homing</i>		
gDATA.task9.Mask	2 Byte		DESCRIPTION OF THE CONTROL INPUTS <i>\$00 No signal</i> <i>\$08 D4</i> <i>\$10 D5</i> <i>\$20 D6</i> <i>\$40 D7</i> <i>\$80 D8</i> <i>\$100 Internal timer</i> <i>\$200 In position</i> <i>\$400 Speed =0</i>		
gData.taskX.Data.val1	4 Byte		value of the chosen task <i>Position</i> <i>Speed</i> <i>Torque (High Word) (65536 * 1017.6 * 1,41 = 1.0 A)</i>	1= 1 inc 262.144= 1 inc/s	-2000000000 ... 2000000000 inc -7450 ... 7450 ot/min -18.5 ... 18.5A
gData.taskX.Data.val2 task0 ONLY !	4 Byte		value of the chosen task maximal speed D. delay	262.144= 1 inc/s 4= 1 ms	0 ... 7450 ot/min 0 ... 16380 ms