EN

ZC - 8TC

CANopen I/O Module
8 Thermocouple
or
8 mVoltmeter
Analog inputs

User Manual

Contents:

FEATURES

TECHNICAL DATA	
Baud rate	20, 50, 125, 250, 500, 800, 1000 Kbits/s
Typical Conversion Time	20 ms for 4 Channels / 40ms for 8 Channels
Thermocouple supported	J, K, R, S, T, B, E, N
Range in mVoltmeter mode	From -10.1 mV to + 81.4 mV
Built-in Cold Junction Compensation	YES (Configurable)
CANopen TECHNICAL DATA	
NMT	SLAVE
ERROR CONTROL	NODE GUARDING
NODE ID	HW SWITCH OR SOFTWARE
NUMBER OF PDO	4 TX
PDO MODES	Event Triggered, Sync (cyclic), Sync (acyclic)
PDO MAPPING	VARIABLE
PDO LINKING	SUPPORTED
NUMBER OF SDO	1 SERVER
ERROR MESSAGE	YES
SUPPORTED APPLICATION LAYER	CiA 301 v4.02
SUPPORTED PROFILE	CiA 401 v2.01

SUPPORTED THERMOCUPLES		
TC TYPE	RANGE	LINEARIZATION ERROR
J	-210 – 1200°C	0,05 °C
K	-200 – 1372 °C	0,05 °C
R	-50 – 1768 °C	0,02 °C
S	-50 – 1768 °C	0,02 °C
T	-200 – 400 °C	0,04 °
B	250 – 1820 °C	0,03 °C
E	-200 – 1000 °C	0,02 °C
N	-200 – 1300°C	0,04 °C

TPDO TRANSMISSIONS TYPE SUPPORTED

OBJECT VALUE 0x180x sub 2	TRANSMISSION TYPE
0	Synchronous - acyclic
From 1 to 240	Synchronous - cyclic
255	Asynchronous

PDOs MAPPING

OBJECTS FOR DEFAULT MAPPING				
PDO NR	COB-ID	MAPPED OBJECT	INDEX	SUBINDEX
TPDO 2	0x40000280 + NodeId	Value CH1 16 bits	0x6401	1
		Value CH2 16 bits	0x6401	2
		Value CH3 16 bits	0x6401	3
		Value CH4 16 bits	0x6401	4
TPDO 3	0x40000380 + NodeId	Value CH5 16 bits	0x6401	5
		Value CH6 16 bits	0x6401	6
		Value CH7 16 bits	0x6401	7
		Value CH8 16 bits	0x6401	8

Note that a TPDO COB-ID must start with 0x4

EMERGENCY MESSAGE

The Emergency message is composed by:
2 bytes of EEC (Emergency Error Code)
1 byte of ER (Error register)
A Maximum of 4 bytes of MEF (Manufacturer Error Filed Object 0x1002)

EEC (Emergency Error Code)	
CODE	DESCRIPTION
0x0000	No Error
0x1000	Generic error
0x4201	CPU Temperature over HOT STOP ERROR
0x4202	CPU Temperature over HOT STOP
0x4203	CPU Temperature under COLD ERROR
0x8110	Communication Can Overrun
0x8120	Error Passive
0x8130	Life Guard Error
0x8140	Recovered From Bus Off
0xFF10	General Input Channels Error
0xFF11	Command for Input Channels Error
0xFF20	CPU Error

ER (Error Register)							
BIT 7	BIT 6	BIT 5	BIT 4	BIT 3	BIT 2	BIT1	BIT 0
Generic	0	0	Temperature	Communication	0	0	Manifacture

Where if a bit is 0 means no error

SENECA s.r.l.
Via Germania, 34 - 35127 - Z.I. CAMIN - PADOVA - ITALY Tel. +39.049.8705359 - Fax +39.049.8706287 e-mail: info@seneca.it - www.seneca.it

For EEC code 0xFF10 the EMERGENCY MESSAGE is:

EMERGENCY MESSAGE				
BYTE 0	BYTE 1	**BYTE 2**	BYTE 3	BYTE 4
0xFF10		0x81	**MEF**	

With this MEF:

MEF (Manufacturer-specific Error Field) for EEC 0xFF10		
BIT	DESCRIPTION	OBJECT FOR ERROR DETAILS
15	CHANNEL 1 / 2 FAIL	0x2120 Subindex 1
14	CHANNEL 3 / 4 FAIL	0x2120 Subindex 2
13	CHANNEL 5 / 6 FAIL	0x2120 Subindex 3
12	CHANNEL 7 / 8 FAIL	0x2120 Subindex 4
11	CHANNEL 1 NOT CONNECTED OR ACQUISITION ERROR	0x2120 Subindex 1
10	CHANNEL 2 NOT CONNECTED OR ACQUISITION ERROR	0x2120 Subindex 1
9	CHANNEL 3 NOT CONNECTED OR ACQUISITION ERROR	0x2120 Subindex 2
8	CHANNEL 4 NOT CONNECTED OR ACQUISITION ERROR	0x2120 Subindex 2
7	CHANNEL 5 NOT CONNECTED OR ACQUISITION ERROR	0x2120 Subindex 3
6	CHANNEL 6 NOT CONNECTED OR ACQUISITION ERROR	0x2120 Subindex 3
5	CHANNEL 7 NOT CONNECTED OR ACQUISITION ERROR	0x2120 Subindex 4
4	CHANNEL 8 NOT CONNECTED OR ACQUISITION ERROR	0x2120 Subindex 4
3	CHANNEL 1 / 2 COMMUNICATION FAIL	0x2121 Subindex 1
2	CHANNEL 3 / 4 COMMUNICATION FAIL	0x2121 Subindex 2
1	CHANNEL 5 / 6 COMMUNICATION FAIL	0x2121 Subindex 3
0	CHANNEL 7 / 8 COMMUNICATION FAIL	0x2121 Subindex 4

For "Voltage Error" the Emergency Message will be:

EMERGENCY MESSAGE				
BYTE 0	BYTE 1	**BYTE 2**	BYTE 3	BYTE 4
0xFF10		0x85	**OBJECT 0x2100**	

For "Timeout command" or "Error Command" the Emergency Message will be:

EMERGENCY MESSAGE					
BYTE 0	BYTE 1	**BYTE 2**	BYTE 3	BYTE 4	BYTE 5
0xFF11		0x81	**CHANNEL ID**	**Object 0x2103 Subindex CHANNELID**	

Where the meaning of CHANNEL ID is:

CHANNEL ID	
CHANNEL ID	DESCRIPTION
0x01	CHANNEL 1 / 2
0x02	CHANNEL 3 / 4
0x03	CHANNEL 5 / 6
0x04	CHANNEL 7 / 8

For "CPU Error" the Emergency Message will be:

EMERGENCY MESSAGE						
BYTE 0	BYTE 1	**BYTE 2**	BYTE 3	BYTE 4	**BYTE 5**	BYTE 6
0xFF20		0X81	**Object 0x1002**			

OBJECT 0x1002: MANUFACTURER STATUS REGISTER

Object 0x1002 is the CPU status.

OBJECT 0x1002 : MANUFACTURER STATUS REGISTER	
BIT	DESCRIPTION
31..10	NA
9	Good Data Value
8	Precision Data Value
7..1	NA
0	FLASH CRC ERROR

OBJECT 0x1006: COMMUNICATION WINDOW LENGTH

OBJECT 0x1006 : COMMUNICATION WINDOW LENGTH	
MIN VAL [ms]	MAX VAL [ms]
10	10000

OBJECT 0x1007: SYNCHRONOUS WINDOW LENGTH

OBJECT 0x1006 : COMMUNICATION WINDOW LENGTH	
MIN VAL [ms]	MAX VAL [ms]
2	2000

SENECA s.r.l.
Via Germania, 34 - 35127 - Z.I. CAMIN - PADOVA - ITALY Tel. +39.049.8705359 - Fax +39.049.8706287 e-mail: info@seneca.it - www.seneca.it

MANUFACTURER SPECIFIC PROFILE AREA

OBJECT 0x2001 NODE ADDRESS

If Hardware switches are in "from memory" mode the node address is selectable by object 0x2001.

NODE ADDRESS (Object 0x2001)	
OBJECT VALUE	DESCRIPTION
0..127	Node Address

OBJECT 0x2002 Baud Rate

If Hardware switches are in "from memory" mode the baud rate is selectable by object 0x2002.

BAUD RATE (Object 0x2002)	
OBJECT VALUE	DESCRIPTION
1	20 Kbit/s
2	50 Kbit/s
3	125 Kbit/s
4	250 Kbit/s
5	500 Kbit/s
6	800 Kbit/s
7	1 Mbit/s

OBJECT 0x2030 CPU TEMPERATURE

Object can be used for monitoring the CPU temperature. The HOT STOP Temperature sends in pre-operational the station.

The HOT ERROR and the COLD ERROR Temperature sends the Emergency Object.

The Object is Read Only.

CPU TEMPERATURE (Object 0x2030)	
SUBINDEX	DESCRIPTION
1	Actual Temperature [°C/10]
2	Temperature for HOT STOP ERROR [°C/10] 95.0°C
3	Temperature for HOT ERROR [°C/10] 90.0°C
4	Temperature for COLD ERROR [°C/10] -25.0°C

OBJECT 0x2100: CHANNELS STATUS

Object 0x2100 contains the channels status:

CHANNELS STATUS (OBJECT 0x2100)		
BIT	DESCRIPTION	OBJECT FOR ERROR DETAILS
15 (MSB)	CHANNEL 1 / 2 FAIL	0x2120 Subindex 1
14	CHANNEL 3 / 4 FAIL	0x2120 Subindex 2
13	CHANNEL 5 / 6 FAIL	0x2120 Subindex 3
12	CHANNEL 7 / 8 FAIL	0x2120 Subindex 4
11	CHANNEL 1 NOT CONNECTED OR ACQUISITION ERROR	0x2120 Subindex 1
10	CHANNEL 2 NOT CONNECTED OR ACQUISITION ERROR	0x2120 Subindex 1
9	CHANNEL 3 NOT CONNECTED OR ACQUISITION ERROR	0x2120 Subindex 2
8	CHANNEL 4 NOT CONNECTED OR ACQUISITION ERROR	0x2120 Subindex 2
7	CHANNEL 5 NOT CONNECTED OR ACQUISITION ERROR	0x2120 Subindex 3
6	CHANNEL 6 NOT CONNECTED OR ACQUISITION ERROR	0x2120 Subindex 3
5	CHANNEL 7 NOT CONNECTED OR ACQUISITION ERROR	0x2120 Subindex 4
4	CHANNEL 8 NOT CONNECTED OR ACQUISITION ERROR	0x2120 Subindex 4
3	CHANNEL 1 / 2 COMMUNICATION FAIL	0x2121 Subindex 1
2	CHANNEL 3 / 4 COMMUNICATION FAIL	0x2121 Subindex 2
1	CHANNEL 5 / 6 COMMUNICATION FAIL	0x2121 Subindex 3
0 (LSB)	CHANNEL 7 / 8 COMMUNICATION FAIL	0x2121 Subindex 4

OBJECT 0x2106 - 0x2107 - 0x2108 - 0x2109: CHANNELS CONFIGURATION

Object 0x2106 contains the channels 1-2 configurations:

CHANNELS 1-2 CONFIGURATIONS (Object 0x2106)	
SUBINDEX	DESCRIPTION
1	CHANNEL A ENABLE (1 = enable 0 = disable)
2	CHANNEL B ENABLE (1 = enable 0 = disable)
3	DATA TYPE (1 = mV 0 = temperature)
4	COLD JUNCTION ENABLE (1 = enable 0 = disable)
5	FREQUENCY REJECTION (1 = 60Hz 0 = 50 Hz)
6	FILTER
7	CHANNEL A THERMOCOUPLE TYPE
8	CHANNEL B THERMOCOUPLE TYPE

Objects 0x2107, 0x2108, 0x2109 contain respective the channels 3-4, 5-6, 7-8 configurations.

FILTER VALUES	
VALUE	**FILTER TYPE**
0	DISABLED
1	AVERAGE FILTER
2	HIRES + AVERAGE FILTER
3	HIRES + AVERAGE + EXPONENTIAL (LEVEL 1) FILTER
..	..
7	HIRES + AVERAGE + EXPONENTIAL (LEVEL 5) FILTER

SENECA s.r.l.
Via Germania, 34 - 35127 - Z.I. CAMIN - PADOVA - ITALY Tel. +39.049.8705359 - Fax +39.049.8706287 e-mail: info@seneca.it - www.seneca.it

THERMOCOUPLE TYPE	
VALUE	THERMOCOUPLE TYPE
0	TYPE J
1	TYPE K
2	TYPE R
3	TYPE S
4	TYPE T
5	TYPE B
6	TYPE E
7	TYPE N

OBJECT 0x2125 FAULT ACTIONS

Object 0x2125 sets the fault actions.

FAULT ACTIONS (Object 0x2125)	
BIT	DESCRIPTION
15	FAULT ACTION CH1 0=load 0x2360 1= last good
14	FAULT ACTION CH2 0=load 0x2360 1= last good
13	FAULT ACTION CH3 0=load 0x2360 1= last good
12	FAULT ACTION CH4 0=load 0x2360 1= last good
11	FAULT ACTION CH5 0=load 0x2360 1= last good
10	FAULT ACTION CH6 0=load 0x2360 1= last good
9	FAULT ACTION CH7 0=load 0x2360 1= last good
8	FAULT ACTION CH8 0=load 0x2360 1= last good

OBJECT 0x2354: COLD JUNCTION TEMPERATURE

Object 0x2354 contains the cold junction temperature for each channel:

COLD JUNCTION TEMPERATURE (OBJECT 0x2354)	
SUBINDEX	DESCRIPTION
1	CHANNELS 1-2 COLD JUNCTION TEMPERATURE [°C/10]
2	CHANNELS 3-4 COLD JUNCTION TEMPERATURE [°C/10]
3	CHANNELS 5-6 COLD JUNCTION TEMPERATURE [°C/10]
4	CHANNELS 7-8 COLD JUNCTION TEMPERATURE [°C/10]

OBJECT 0x2360: FAULT VALUES

Object 0x2360 contains the floating point value (32 bit) to use in fault case (in agreement with object 0x2125). In agreement with object 0x2106 the measure unit can be in °C or mV.

FAULT VALUES (OBJECT 0x2360)	
SUBINDEX	DESCRIPTION
1	CHANNEL 1 FAULT VALUE
2	CHANNEL 2 FAULT VALUE
3	CHANNEL 3 FAULT VALUE
4	CHANNEL 4 FAULT VALUE
5	CHANNEL 5 FAULT VALUE
6	CHANNEL 6 FAULT VALUE
7	CHANNEL 7 FAULT VALUE
8	CHANNEL 8 FAULT VALUE

LED DESCRIPTION

SERVICE LED DESCRIPTION		
LED	STATE	DESCRIPTION
RUN	BLINKING	Pre-operational mode
	SINGLE FLASH	Stop mode
	ON	Operational mode
ERROR	SINGLE FLASH	At least one error counter has reached or exceeded the warning level
	DOUBLE FLASH	Guard Event
	TRIPLE FLASH	The SYNC hasn't received within the configurated communication cycle time out period
	ON	The Can controller is BUS OFF
	OFF	No error
FAIL	BLINKING	Data receiving from front jack
	ON	At least one channel is in error mode
POWER	ON	Power Supply

DIP SWITCH CONFIGURATION

DIP-SWITCH SETTINGS (CANopen PROTOCOL)

BAUD RATE		ADDRESS	
1 2 3	SOFTWARE PROGRAMMED	4 5 6 7 8 9 10	SOFTWARE PROGRAMMED
	20 kbps	0000001	ADD. 001
	50 kbps	0000010	ADD. 002
	125 kbps	0000011	ADD. 003
	250 kbps	0000100	ADD. 004
	500 kbps	0000101	ADD. 005
	800 kbps	.....	.....
	1 Mbps	1111111	ADD. 127
		0000000	

SENECA s.r.l.
Via Germania, 34 - 35127 - Z.I. CAMIN - PADOVA - ITALY Tel. +39.049.8705359 - Fax +39.049.8706287 e-mail: info@seneca.it - www.seneca.it

OBJECTS FOR ANALOG DATA

OBJECT 0x6401 16 BIT INPUT VALUE

Object 0x6401 contains the 16 bit (signed) values for channels 1..8 in [°C/10] or [mV/100] (in agreement with object 0x2106).

16 BIT INTEGER INPUT (OBJECT 0x6401)	
SUBINDEX	DESCRIPTION
1	Channel 1 16bit Input value
2	Channel 2 16bit Input value
3	Channel 3 16bit Input value
4	Channel 4 16bit Input value
5	Channel 5 16bit Input value
6	Channel 6 16bit Input value
7	Channel 7 16bit Input value
8	Channel 8 16bit Input value

OBJECT 0x6403 32 BIT INPUT VALUE

Object 0x6403 contanins the real (32 bits) values for channels 1..8 in [°C] or [mV] (in agreement with object 0x2106).

32 BIT REAL INTEGER INPUT (OBJECT 0x6403)	
SUBINDEX	DESCRIPTION
1	Channel 1 real Input value
2	Channel 2 real Input value
3	Channel 3 real Input value
4	Channel 4 real Input value
5	Channel 5 real Input value
6	Channel 6 real Input value
7	Channel 7 real Input value
8	Channel 8 real Input value

OBJECT 0x6423 INTERRUPT ENABLE

If Object = "1" the station can generate asynchronous TxPDO.
Else if Object = "0" the station can't generate asynchronous TxPDO.

SENECA s.r.l.
Via Germania, 34 - 35127 - Z.I. CAMIN - PADOVA - ITALY Tel. +39.049.8705359 - Fax +39.049.8706287 e-mail: info@seneca.it - www.seneca.it

OBJECT 0x6424 INTERRUPT UPPER LIMIT INTEGER

If enabled (see 0x6423 object), an interrupt is triggered when the analogue input is equal or rises above the given value. As long as the trigger condition is met, every change of the analogue input data generates a new interrupt only if interrupt delta (Object 0x6426) is also true.

INTERRUPT UPPER LIMIT 16 BIT INTEGER (OBJECT 0x6424)	
SUBINDEX	DESCRIPTION
1	Channel 1 upper limit integer [°C/10] or [mV/100]
2	Channel 2 upper limit integer [°C/10] or [mV/100]
3	Channel 3 upper limit integer [°C/10] or [mV/100]
4	Channel 4 upper limit integer [°C/10] or [mV/100]
5	Channel 5 upper limit integer [°C/10] or [mV/100]
6	Channel 6 upper limit integer [°C/10] or [mV/100]
7	Channel 7 upper limit integer [°C/10] or [mV/100]
8	Channel 8 upper limit integer [°C/10] or [mV/100]

OBJECT 0x6425 INTERRUPT LOWER LIMIT INTEGER

If enabled (see 0x6423 object), an interrupt is triggered when the analogue input falls below the given value. As long as the trigger condition is met, every change of the analogue input data generates a new interrupt onlyif interrupt delta (Object 0x6426) is also true.

INTERRUPT LOWER LIMIT 16 BIT INTEGER (OBJECT 0x6425)	
SUBINDEX	DESCRIPTION
1	Channel 1 lower limit integer [°C/10] or [mV/100]
2	Channel 2 lower limit integer [°C/10] or [mV/100]
3	Channel 3 lower limit integer [°C/10] or [mV/100]
4	Channel 4 lower limit integer [°C/10] or [mV/100]
5	Channel 5 lower limit integer [°C/10] or [mV/100]
6	Channel 6 lower limit integer [°C/10] or [mV/100]
7	Channel 7 lower limit integer [°C/10] or [mV/100]
8	Channel 8 lower limit integer [°C/10] or [mV/100]

OBJECT 0x6426 INTERRUPT DELTA UNSIGNED

This object sets the delta value (rising or falling above or below the last communicated value) for interrupt-enabled analogue inputs (if Object 0x6423 enables the interrupt).

INTERRUPT DELTA UNSIGNED INTEGER 16 BIT (OBJECT 0x6426)	
SUBINDEX	DESCRIPTION
1	Channel 1 delta unsigned [°C/10] or [mV/100]
2	Channel 2 delta unsigned [°C/10] or [mV/100]
3	Channel 3 delta unsigned [°C/10] or [mV/100]
4	Channel 4 delta unsigned [°C/10] or [mV/100]
5	Channel 5 delta unsigned [°C/10] or [mV/100]
6	Channel 6 delta unsigned [°C/10] or [mV/100]
7	Channel 7 delta unsigned [°C/10] or [mV/100]
8	Channel 8 delta unsigned [°C/10] or [mV/100]

OBJECT 0x6429 INTERRUPT UPPER LIMIT FLOAT (32 BIT)

This object sets the converted upper limits for interrupt-enabled analogue inputs (see 0x6423 object). As long as the trigger condition is met, every change of the analogue input data generates a new interrupt only if interrupt delta (Object 0x642B) is also true.

INTERRUPT UPPER LIMIT 32 BIT FLOAT (OBJECT 0x6429)	
SUBINDEX	DESCRIPTION
1	Channel 1 upper limit float [°C] or [uV]
2	Channel 2 upper limit float [°C] or [uV]
3	Channel 3 upper limit float [°C] or [uV]
4	Channel 4 upper limit float [°C] or [uV]
5	Channel 5 upper limit float [°C] or [uV]
6	Channel 6 upper limit float [°C] or [uV]
7	Channel 7 upper limit float [°C] or [uV]
8	Channel 8 upper limit float [°C] or [uV]

OBJECT 0x642A INTERRUPT LOWER LIMIT FLOAT (32BIT)

This object sets the lower limits for interrupt-enabled analogue inputs (see 0x6423 object). As long as the trigger condition is met, every change of the analogue input data generates a new interrupt only if interrupt delta (Object 0x642B) is also true.

INTERRUPT LOWER LIMIT 16 BIT INTEGER (OBJECT 0x6425)	
SUBINDEX	DESCRIPTION
1	Channel 1 lower limit float [°C] or [uV]
2	Channel 2 lower limit float [°C] or [uV]
3	Channel 3 lower limit float [°C] or [uV]
4	Channel 4 lower limit float [°C] or [uV]
5	Channel 5 lower limit float [°C] or [uV]
6	Channel 6 lower limit float [°C] or [uV]
7	Channel 7 lower limit float [°C] or [uV]
8	Channel 8 lower limit float [°C] or [uV]

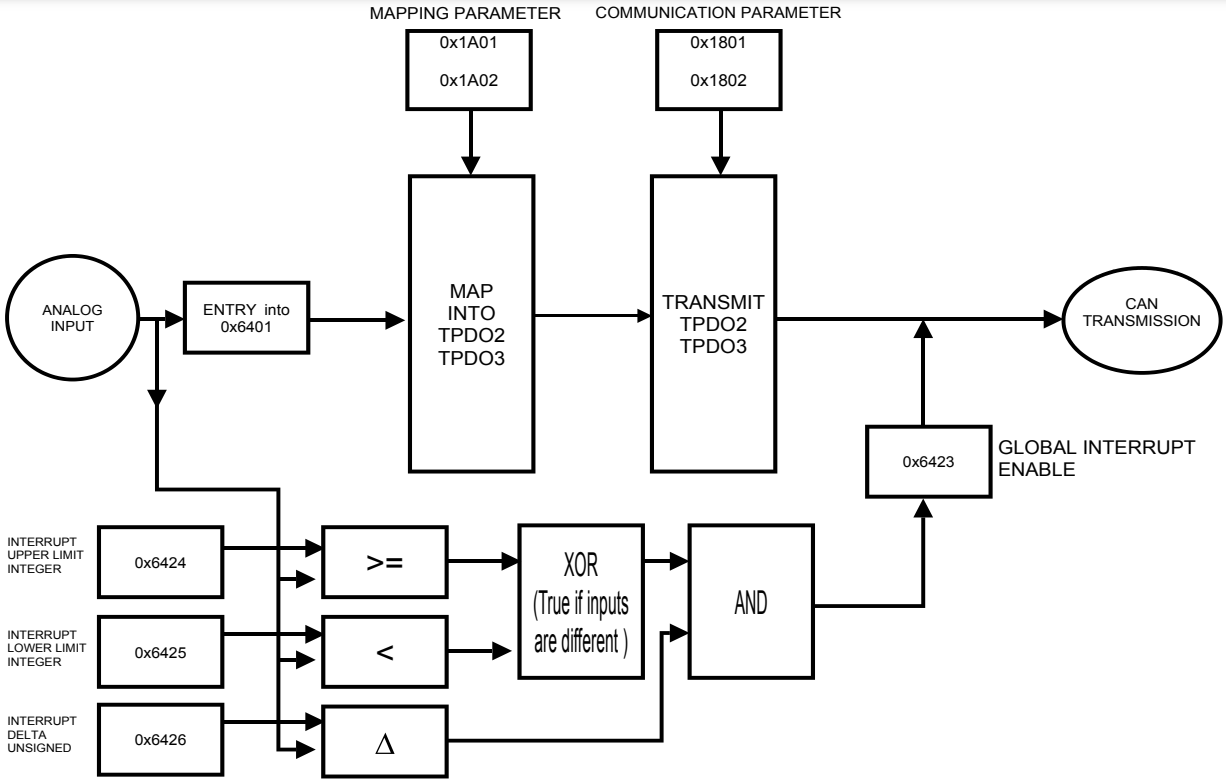
OBJECT 0x642B INTERRUPT DELTA FLOAT (32 BIT)

This object sets the delta value (rising or falling above or below the last sample) in Float format for interrupt-enabled analogue inputs (if Object 0x6423 enables the interrupt).

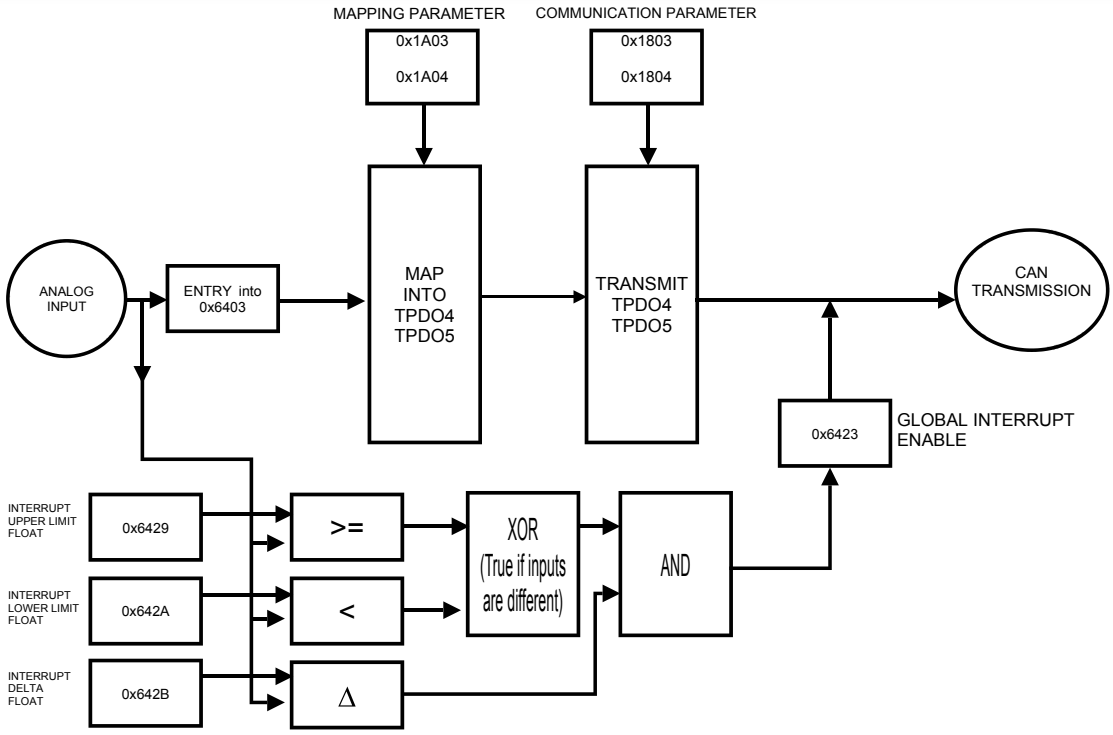
INTERRUPT DELTA FLOAT 32 BIT (OBJECT 0x642B)	
SUBINDEX	DESCRIPTION
1	Channel 1 delta float[°C] or [mV]
2	Channel 2 delta float[°C] or [mV]
3	Channel 3 delta float[°C] or [mV]
4	Channel 4 delta float[°C] or [mV]
5	Channel 5 delta float[°C] or [mV]
6	Channel 6 delta float[°C] or [mV]
7	Channel 7 delta float[°C] or [mV]
8	Channel 8 delta float[°C] or [mV]

SENECA s.r.l.
Via Germania, 34 - 35127 - Z.I. CAMIN - PADOVA - ITALY Tel. +39.049.8705359 - Fax +39.049.8706287 e-mail: info@seneca.it - www.seneca.it

FUNCTIONAL DIAGRAM FOR INTEGER VALUES



FUNCTIONAL DIAGRAM FOR FLOAT VALUES



SENECA s.r.l.
Via Germania, 34 - 35127 - Z.I. CAMIN - PADOVA - ITALY Tel. +39.049.8705359 - Fax +39.049.8706287 e-mail: info@seneca.it - www.seneca.it

OBJECT DICTIONARY

COMMUNICATION PROFILE AREA

INDEX	SUB INDEX	NAME	DESCRIPTION	TYPE	ACCESS	DEFAULT
0x1000	0	Device Type	Device Type (Profile 401 = 0x191)	UNSIGNED 32	RO	0x00010191
0x1001	0	Error register	Error register (DS 401)	UNSIGNED 8	RO	0
0x1002	0	Manufacturer Status Register	Status Register	UNSIGNED 32	RO	0
0x1005	0	SYNC COB-ID	The device consumes the SYNC message	UNSIGNED 32	RW	0x80
0x1006	0	Communication Window Length	Sync interval [us]	UNSIGNED 32	RW	0
0x1007	0	Synchronous Window Length	Time window [us] for the PDO transmission after the SYNC	UNSIGNED 32	RW	0
0x1008	0	Manufacturer Device name	Device name	VISIBLE STRING	RO	“ZC-8TC”
0x1009	0	Manufacturer Hardware Version	Hardware version	VISIBLE STRING	RO	“SC000000”
0x100A	0	Manufacturer Software Version	Software version	VISIBLE STRING	RO	“SW001130”
0x100C	0	Guard Time	Guard Time [ms]	UNSIGNED 16	RW	0
0x100D	0	Life Time Factor	Max delay between two guarding telegrams = Guard_Time*Life_Time_Factor	UNSIGNED 8	RW	0
0x1010	0	Store Parameters	Max Subindex Number	UNSIGNED 8	RO	8
	1	Save All Parameters	Store not volatile parameters (Write in ASCII “save” for store process MSB 0x65766173 LSB)	UNSIGNED 32	RW	1
	2	Save Communication Parameters	Store not volatile parameters (Write in ASCII “save” for store process MSB 0x65766173 LSB)	UNSIGNED 32	RW	1
	3	Save Application Parameters	Store not volatile parameters (Write in ASCII “save” for store process MSB 0x65766173 LSB)	UNSIGNED 32	RW	1
	4	Save Manufacturer Parameters	Store not volatile parameters (Write in ASCII “save” for store process MSB 0x65766173 LSB)	UNSIGNED 32	RW	1
	5	Save CH1-2 Parameters	Store not volatile parameters (Write in ASCII “save” for store process MSB 0x65766173 LSB)	UNSIGNED 32	RW	1
	6	Save CH3-4 Parameters	Store not volatile parameters (Write in ASCII “save” for store process MSB 0x65766173 LSB)	UNSIGNED 32	RW	1
	7	Save CH5-6 Parameters	Store not volatile parameters (Write in ASCII “save” for store process MSB 0x65766173 LSB)	UNSIGNED 32	RW	1
	8	Save CH7-8 Parameters	Store not volatile parameters (Write in ASCII “save” for store process MSB 0x65766173 LSB)	UNSIGNED 32	RW	1

SENECA s.r.l.
Via Germania, 34 - 35127 - Z.I. CAMIN - PADOVA - ITALY Tel. +39.049.8705359 - Fax +39.049.8706287 e-mail: info@seneca.it - www.seneca.it

INDEX	SUB INDEX	NAME	DESCRIPTION	TYPE	ACCESS	DEFAULT
0x1011	0	Restore Default	Max Subindex Number	UNSIGNED 8	RO	8
	1	Restore All Parameters	Restore not volatile parameters (Write in ASCII “load” for load process MSB 0x64616F6C LSB)	UNSIGNED 32	RW	0
	2	Restore Communication Parameters	Restore not volatile parameters (Write in ASCII “load” for load process MSB 0x64616F6C LSB)	UNSIGNED 32	RW	0
	3	Restore Application Parameters	Restore not volatile parameters (Write in ASCII “load” for load process MSB 0x64616F6C LSB)	UNSIGNED 32	RW	0
	4	Save Manufacturer Parameters	Restore not volatile parameters (Write in ASCII “load” for load process MSB 0x64616F6C LSB)	UNSIGNED 32	RW	0
	5	Restore CH1-2 Parameters	Restore not volatile parameters (Write in ASCII “load” for load process MSB 0x64616F6C LSB)	UNSIGNED 32	RW	0
	6	Restore CH3-4 Parameters	Restore not volatile parameters (Write in ASCII “load” for load process MSB 0x64616F6C LSB)	UNSIGNED 32	RW	0
	7	Restore CH5-6 Parameters	Restore not volatile parameters (Write in ASCII “load for load process MSB 0x64616F6C LSB)	UNSIGNED 32	RW	0
	8	Restore CH7-8 Parameters	Restore not volatile parameters (Write in ASCII “load” for load process MSB 0x64616F6C LSB)	UNSIGNED 32	RW	0
0x1014	0	COB-ID Emergency Object	COB-ID for Emergency Object	UNSIGNED 32	RO	NODEID+0x80
0x1018	0	Identity Object	Max Subindex Number	UNSIGNED 8	RO	4
	1	Vendor ID	Seneca srl	UNSIGNED 32	RO	0x00000249
	2	Product Code	Machine ID Code	UNSIGNED 32	RO	0x0000001C
	3	Revision Number	Revision	UNSIGNED 32	RO	0
	4	Serial Number	Serial Number Code	UNSIGNED 32	RO	0
0x1200	0	Server SDO Parameters	Max Subindex Number	UNSIGNED 8	RO	2
	1	Receive SDO COB-ID	COB-ID of Receive SDO	UNSIGNED 32	RO	NODEID + 0x600
	2	Transmit SDO COB-ID	COB-ID of Transmit SDO	UNSIGNED 32	RO	NODEID + 0x580

SENECA s.r.l.
Via Germania, 34 - 35127 - Z.I. CAMIN - PADOVA - ITALY Tel. +39.049.8705359 - Fax +39.049.8706287 e-mail: info@seneca.it - www.seneca.it

INDEX	SUB INDEX	NAME	DESCRIPTION	TYPE	ACCESS	DEFAULT
0x1801	0	Transmit PDO2 Communication Parameters	Max Subindex Number	UNSIGNED 8	RO	3
	1	COB-ID	COB-ID of TxPDO5	UNSIGNED 32	RW	NODEID + 0x40000280
	2	Transmission Type	Transmission Type for TxPDO1 0x00 = Synchronous - acyclic 0x01 to 0xF0 = Synchronous-cyclic 0xFF = Asynchronous	UNSIGNED 8	RW	0xFF
	3	Inhibit Time	Min. delay for the next PDO (ms/10)	UNSIGNED 16	RW	0x0000
0x1802	0	Transmit PDO3 Communication Parameters	Max Subindex Number	UNSIGNED 8	RO	3
	1	COB-ID	COB-ID of TxPDO6	UNSIGNED 32	RW	NODEID + 0x40000380
	2	Transmission Type	Transmission Type for TxPDO1 0x00 = Synchronous - acyclic 0x01 to 0xF0 = Synchronous-cyclic 0xFF = Asynchronous	UNSIGNED 8	RW	0xFF
	3	Inhibit Time	Min. delay for the next PDO (ms/10)	UNSIGNED 16	RW	0x0000
0x1803	0	Transmit PDO4 Communication Parameters	Max Subindex Number	UNSIGNED 8	RO	3
	1	COB-ID	COB-ID of TxPDO7	UNSIGNED 32	RW	NODEID + 0xC0000000
	2	Transmission Type	Transmission Type for TxPDO1 0x00 = Synchronous - acyclic 0x01 to 0xF0 = Synchronous-cyclic 0xFF = Asynchronous	UNSIGNED 8	RW	0xFF

SENECA s.r.l.
Via Germania, 34 - 35127 - Z.I. CAMIN - PADOVA - ITALY Tel. +39.049.8705359 - Fax +39.049.8706287 e-mail: info@seneca.it - www.seneca.it

INDEX	SUB INDEX	NAME	DESCRIPTION	TYPE	ACCESS	DEFAULT
	3	Inhibit Time	Min. delay for transmit the next TxPDO (ms/10)	UNSIGNED 16	RW	0x0000
0x1804	0	Transmit PDO5 Communication Parameters	Max Subindex Number	UNSIGNED 8	RO	3
	1	COB-ID	COB-ID of TxPDO8	UNSIGNED 32	RW	NODEID + 0xC0000000
	2	Transmission Type	Transmission Type for TxPDO1 0x00 = Synchronous - acyclic 0x01 to 0xF0 = Synchronous-cyclic 0xFF = Asynchronous	UNSIGNED 8	RW	0xFF
	3	Inhibit Time	Min. delay for the next PDO (ms/10)	UNSIGNED 16	RW	0x0000
0x1A00	0	Transmit PDO1 Mapping	Max Subindex Number	UNSIGNED 8	RO	1
	1	Object NR1	First Object (None)	UNSIGNED 32	RO	0
0x1A01	0	Transmit PDO2 Mapping	Max Subindex Number	UNSIGNED 8	RO	4
	1	Object NR1	First Object (default:: CHANNEL 1 16 BITS INPUT)	UNSIGNED 32	RW	0x64010110 Object = 0x6401 subindex = 1 Length = 16 bit
	2	Object NR2	Second Object (default:: CHANNEL 2 16 BITS INPUT)	UNSIGNED 32	RW	0x64010210 Object = 0x6401 subindex = 2 Length = 16 bit
	3	Object NR3	Third Object (default:: CHANNEL 3 16 BITS INPUT)	UNSIGNED 32	RW	0x64010310 Object = 0x6401 subindex = 3 Length = 16 bit
	4	Object NR4	Fourth Object (default:: CHANNEL 4 16 BITS INPUT)	UNSIGNED 32	RW	0x64010410 Object = 0x6401 subindex = 4 Length = 16 bit
0x1A02	0	Transmit PDO3 Mapping	Max Subindex Number	UNSIGNED 8	RO	4
	1	Object NR1	First Object (default:: CHANNEL 5 16 BITS INPUT)	UNSIGNED 32	RW	0x64010510 Object = 0x6401 subindex = 5 Length = 16 bit
	2	Object NR2	Second Object (default:: CHANNEL 6 16 BITS INPUT)	UNSIGNED 32	RW	0x64010610 Object = 0x6401 subindex = 6 Length = 16 bit
	3	Object NR3	Third Object (default:: CHANNEL 7 16 BITS INPUT)	UNSIGNED 32	RW	0x64010710 Object = 0x6401 subindex = 7 Length = 16 bit
	4	Object NR4	Fourth Object (default:: CHANNEL 8 16 BITS INPUT)	UNSIGNED 32	RW	0x64010810 Object = 0x6401 subindex = 8 Length = 16 bit

SENECA s.r.l.
Via Germania, 34 - 35127 - Z.I. CAMIN - PADOVA - ITALY Tel. +39.049.8705359 - Fax +39.049.8706287 e-mail: info@seneca.it - www.seneca.it

INDEX	SUB INDEX	NAME	DESCRIPTION	TYPE	ACCESS	DEFAULT
0x1A03	0	Transmit PDO4 Mapping	Max Subindex Number	UNSIGNED 8	RO	4
	1	Object NR1	First Object (default::NONE)	UNSIGNED 32	RW	0
	2	Object NR2	Second Object (default::NONE)	UNSIGNED 32	RW	0
	3	Object NR3	Third Object (default::NONE)	UNSIGNED 32	RW	0
	4	Object NR4	Fourth Object (default::NONE)	UNSIGNED 32	RW	0

SENECA s.r.l.
Via Germania, 34 - 35127 - Z.I. CAMIN - PADOVA - ITALY Tel. +39.049.8705359 - Fax +39.049.8706287 e-mail: info@seneca.it - www.seneca.it

MANUFACTURER SPECIFIC PROFILE AREA

INDEX	SUB INDEX	NAME	DESCRIPTION	TYPE	ACCESS	DEFAULT
0x2001	0	Module Address	Station Address (only if dip switch 4,5,6,7,8,9,10 are OFF)	UNSIGNED 8	RW	127
0x2002	0	Buad Rate	Station Baud Rate (only if dip switch 1,2,3 are OFF) 1 = 20Kbps 2 = 50Kbps 3 = 125Kbps 4 = 250Kbps 5 = 500Kbps 6 = 800Kbps 7 = 1Mbps	UNSIGNED 8	RW	7
0x2030	0	Device Temperature	Max Subindex Number	UNSIGNED 8	RO	4
	1	Internal Temperatue	Station internal Temperature [°C/10]	INTEGER 16	RO	0
	2	Hi Hi Temperature	Critical Hot Temperature (All operations Stop) [°C/10]	INTEGER 16	RO	950
	3	Hi Temperature	Warning for Too Hot Temperature [°C/10]	INTEGER 16	RO	900
	4	Lo Temperature	Critical Low Temperature (All operations Stop) [°C/10]	INTEGER 16	RO	-250
0x2104	0	CHANNELS CMD	Slave Command	UNSIGNED 8	RO	0
	1	CMD CH1-2	Writing 0xC0DE will return the Channel fw code into 0x2105	UNSIGNED 16	RW	0
	2	CMD CH3-4	Writing 0xC0DE will return the Channel fw code into 0x2105	UNSIGNED 16	RW	0
	3	CMD CH5-6	Writing 0xC0DE will return the Channel fw code into 0x2105	UNSIGNED 16	RW	0
	4	CMD CH7-8	Writing 0xC0DE will return the Channel fw code into 0x2105	UNSIGNED 16	RW	0
0x2105	0	CHANNELS AUX_CMD	Command Return Values	UNSIGNED 8	RO	0
	1	AUX CMD CH1-2	FW Code Return value	UNSIGNED 16	RW	0
	2	AUX CMD CH3-4	FW Code Return value	UNSIGNED 16	RW	0
	3	AUX CMD CH5-6	FW Code Return value	UNSIGNED 16	RW	0
	4	AUX CMD CH7-8	FW Code Return value	UNSIGNED 16	RW	0
0x2106	0	Channels 1-2 Parameters	Max Subindex Number	UNSIGNED 8	RO	8
	1	Channel 1 Enable	0 = disable 1 = enable	UNSIGNED 8	RW	1
	2	Channel 2 Enable	0 = disable 1 = enable	UNSIGNED 8	RW	1
	3	Measure Type	0 = °C 1 = mV	UNSIGNED 8	RW	0
	4	Cold Junction Enable	0 = disable 1 = enable	UNSIGNED 8	RW	1
	5	Line frequency Rejection	0 = 50 Hz 1 = 60 Hz	UNSIGNED 8	RW	0
	6	Filter	0 = disable, 1 = average, 2 = Hires+average, 3 = Exp lev1,..., 7 = Exp lev 5	UNSIGNED 8	RW	2
	7	TC 1 TYPE	0=J,1=K,2=R,3=S,4=T,5=B,6=E, 7=N	UNSIGNED 8	RW	0
	8	TC 2 TYPE	0=J,1=K,2=R,3=S,4=T,5=B,6=E, 7=N	UNSIGNED 8	RW	0

SENECA s.r.l.
Via Germania, 34 - 35127 - Z.I. CAMIN - PADOVA - ITALY Tel. +39.049.8705359 - Fax +39.049.8706287 e-mail: info@seneca.it - www.seneca.it

INDEX	SUB INDEX	NAME	DESCRIPTION	TYPE	ACCESS	DEFAULT
0x2107	0	Channels 3-4 Parameters	Max Subindex Number	UNSIGNED 8	RO	8
	1	Channel 3 Enable	0 = disable 1 = enable	UNSIGNED 8	RW	1
	2	Channel 4 Enable	0 = disable 1 = enable	UNSIGNED 8	RW	1
	3	Measure Type	0 = °C 1 = mV	UNSIGNED 8	RW	0
	4	Cold Junction Enable	0 = disable 1 = enable	UNSIGNED 8	RW	1
	5	Line frequency Rejection	0 = 50 Hz 1 = 60 Hz	UNSIGNED 8	RW	0
	6	Filter	0 = disable, 1 = average, 2 = Hires+average, 3 = Exp lev1,..., 7 = Exp lev 5	UNSIGNED 8	RW	2
	7	TC 3 TYPE	0=J,1=K,2=R,3=S,4=T,5=B,6=E, 7=N	UNSIGNED 8	RW	0
	8	TC 4 TYPE	0=J,1=K,2=R,3=S,4=T,5=B,6=E, 7=N	UNSIGNED 8	RW	0
0x2108	0	Channels 5-6 Parameters	Max Subindex Number	UNSIGNED 8	RO	8
	1	Channel 5 Enable	0 = disable 1 = enable	UNSIGNED 8	RW	1
	2	Channel 6 Enable	0 = disable 1 = enable	UNSIGNED 8	RW	1
	3	Measure Type	0 = °C 1 = mV	UNSIGNED 8	RW	0
	4	Cold Junction Enable	0 = disable 1 = enable	UNSIGNED 8	RW	1
	5	Line frequency Rejection	0 = 50 Hz 1 = 60 Hz	UNSIGNED 8	RW	0
	6	Filter	0 = disable, 1 = average, 2 = Hires+average, 3 = Exp lev1,..., 7 = Exp lev 5	UNSIGNED 8	RW	2
	7	TC 5 TYPE	0=J,1=K,2=R,3=S,4=T,5=B,6=E, 7=N	UNSIGNED 8	RW	0
	8	TC 6 TYPE	0=J,1=K,2=R,3=S,4=T,5=B,6=E, 7=N	UNSIGNED 8	RW	0
0x2109	0	Channels 7-8 Parameters	Max Subindex Number	UNSIGNED 8	RO	8
	1	Channel 7 Enable	0 = disable 1 = enable	UNSIGNED 8	RW	1
	2	Channel 8 Enable	0 = disable 1 = enable	UNSIGNED 8	RW	1
	3	Measure Type	0 = °C 1 = mV	UNSIGNED 8	RW	0
	4	Cold Junction Enable	0 = disable 1 = enable	UNSIGNED 8	RW	1
	5	Line frequency Rejection	0 = 50 Hz 1 = 60 Hz	UNSIGNED 8	RW	0
	6	Filter	0 = disable, 1 = average, 2 = Hires+average, 3 = Exp lev1,..., 7 = Exp lev 5	UNSIGNED 8	RW	2
	7	TC 7 TYPE	0=J,1=K,2=R,3=S,4=T,5=B,6=E, 7=N	UNSIGNED 8	RW	0
	8	TC 8 TYPE	0=J,1=K,2=R,3=S,4=T,5=B,6=E, 7=N	UNSIGNED 8	RW	0
0x2125	0	Fault Actions mask	1 = last good 0 = load object 0x2360 Bit 7..0 Not used	UNSIGNED 8	RW	0xFF00

SENECA s.r.l.
Via Germania, 34 - 35127 - Z.I. CAMIN - PADOVA - ITALY Tel. +39.049.8705359 - Fax +39.049.8706287 e-mail: info@seneca.it - www.seneca.it

INDEX	SUB INDEX	NAME	DESCRIPTION	TYPE	ACCESS	DEFAULT
0x2120	0	Advanced Channels Status		UNSIGNED 8	RO	0
	1	CH1-2 STATUS	ADVANCED CH1 - CH2 STATUS	UNSIGNED 16	RO	0
	2	CH3-4 STATUS	ADVANCED CH3 - CH4 STATUS	UNSIGNED 16	RO	0
	3	CH5-6 STATUS	ADVANCED CH5 - CH6 STATUS	UNSIGNED 16	RO	0
	4	CH7-8 STATUS	ADVANCED CH7 - CH8 STATUS	UNSIGNED 16	RO	0
0x2125	0	Fault Actions mask	1 = last good 0 = load object 0x2360 Bit 7..0 Not used	UNSIGNED 8	RW	0xFF00
0x2354	0	Cold Junction Temperature	Max Subindex Number	UNSIGNED 8	RO	4
	1	CH1-CH2 CJ Val	Channels 1-2 cold junction temperature [°C/10]	INTEGER 16	RO	0
	2	CH3-CH4 CJ Val	Channels 3-4 cold junction temperature [°C/10]	INTEGER 16	RO	0
	3	CH5-CH6 CJ Val	Channels 5-6 cold junction temperature [°C/10]	INTEGER 16	RO	0
	4	CH7-CH8 CJ Val	Channels 7-8 cold junction temperature [°C/10]	INTEGER 16	RO	0
0x2360	0	Fault Values	Max Subindex Number	UNSIGNED 8	RO	8
	1	CH1Fault Value	Fault Value [°C] or [mV] for Channel 1	REAL 32	RW	2000.0
	2	CH2 Fault Value	Fault Value [°C] or [mV] for Channel 2	REAL 32	RW	2000.0
	3	CH3 Fault Value	Fault Value [°C] or [mV] for Channel 3	REAL 32	RW	2000.0
	4	CH4 Fault Value	Fault Value [°C] or [mV] for Channel 4	REAL 32	RW	2000.0
	5	CH5 Fault Value	Fault Value [°C] or [mV] for Channel 5	REAL 32	RW	2000.0
	6	CH6 Fault Value	Fault Value [°C] or [mV] for Channel 6	REAL 32	RW	2000.0
	7	CH7 Fault Value	Fault Value [°C] or [mV] for Channel 7	REAL 32	RW	2000.0
	8	CH8 Fault Value	Fault Value [°C] or [mV] for Channel 8	REAL 32	RW	2000.0

SENECA s.r.l.
Via Germania, 34 - 35127 - Z.I. CAMIN - PADOVA - ITALY Tel. +39.049.8705359 - Fax +39.049.8706287 e-mail: info@seneca.it - www.seneca.it

STANDARD DEVICE PROFILE AREA

INDEX	SUB INDEX	NAME	DESCRIPTION	TYPE	ACCESS	DEFAULT
0x6401	0	Channels Values Integer	Max Subindex Number	UNSIGNED 8	RO	8
	1	CH1 value 16Bits	Channel 1 Value [°C/10] or [mV]	INTEGER 16	RO	0
	2	CH2 value 16Bits	Channel 2 Value [°C/10] or [mV]	INTEGER 16	RO	0
	3	CH3 value 16Bits	Channel 3 Value [°C/10] or [mV]	INTEGER 16	RO	0
	4	CH4 value 16Bits	Channel 4 Value [°C/10] or [mV]	INTEGER 16	RO	0
	5	CH5 value 16Bits	Channel 5 Value [°C/10] or [mV]	INTEGER 16	RO	0
	6	CH6 value 16Bits	Channel 6 Value [°C/10] or [mV]	INTEGER 16	RO	0
	7	CH7 value 16Bits	Channel 7 Value [°C/10] or [mV]	INTEGER 16	RO	0
	8	CH8 value 16Bits	Channel 8 Value [°C/10] or [mV]	INTEGER 16	RO	0
0x6403	0	Channels Values Real	Max Subindex Number	UNSIGNED 8	RO	8
	1	CH1 value Real	Channel 1 Value [°C/10] or [mV]	REAL 32	RO	0
	2	CH2 value Real	Channel 2 Value [°C/10] or [mV]	REAL 32	RO	0
	3	CH3 value Real	Channel 3 Value [°C/10] or [mV]	REAL 32	RO	0
	4	CH4 value Real	Channel 4 Value [°C/10] or [mV]	REAL 32	RO	0
	5	CH5 value Real	Channel 5 Value [°C/10] or [mV]	REAL 32	RO	0
	6	CH6 value Real	Channel 6 Value [°C/10] or [mV]	REAL 32	RO	0
	7	CH7 value Real	Channel 7 Value [°C/10] or [mV]	REAL 32	RO	0
	8	CH8 value Real	Channel 8 Value [°C/10] or [mV]	REAL 32	RO	0

SENECA s.r.l.
Via Germania, 34 - 35127 - Z.I. CAMIN - PADOVA - ITALY Tel. +39.049.8705359 - Fax +39.049.8706287 e-mail: info@seneca.it - www.seneca.it

INDEX	SUB INDEX	NAME	DESCRIPTION	TYPE	ACCESS	DEFAULT
0x6423	0	Analogue Input Interrupt Global Enable	0 = Disable asynchronous TxPDO 1 = Enable asynchronous TxPDO	BOOLEAN	RW	0
0x6424	0	Integer Analogue Interrupt Upper Limit	Max Subindex Number	UNSIGNED 8	RO	8
	1	CH1 Interrupt upper value	Channel 1 integer analogue interrupt upper limit value [°C/10] or [mV]	INTEGER16	RW	20000
	2	CH2 Interrupt upper value	Channel 2 integer analogue interrupt upper limit value [°C/10] or [mV]	INTEGER16	RW	20000
	3	CH3 Interrupt upper value	Channel 3 integer analogue interrupt upper limit value	INTEGER16	RW	20000
	4	CH4 Interrupt upper value	Channel 4 integer analogue interrupt upper limit value [°C/10] or [mV]	INTEGER16	RW	20000
	5	CH5 Interrupt upper value	Channel 5 integer analogue interrupt upper limit value [°C/10] or [mV]	INTEGER16	RW	20000
	6	CH6 Interrupt upper value	Channel 6 integer analogue interrupt upper limit value [°C/10] or [mV]	INTEGER16	RW	20000
	7	CH7 Interrupt upper value	Channel 7 integer analogue interrupt upper limit value [°C/10] or [mV]	INTEGER16	RW	20000
	8	CH8 Interrupt upper value	Channel 8 integer analogue interrupt upper limit value [°C/10] or [mV]	INTEGER16	RW	20000
0x6425	0	Integer Analogue Interrupt lower Limit	Max Subindex Number	UNSIGNED 8	RO	8
	1	CH1 Interrupt lower value	Channel 1 integer analogue interrupt lower limit value [°C/10] or [mV]	INTEGER16	RW	-250
	2	CH2 Interrupt lower value	Channel 2 integer analogue interrupt lower limit value [°C/10] or [mV]	INTEGER16	RW	-250
	3	CH3 Interrupt lower value	Channel 3 integer analogue interrupt lower limit value [°C/10] or [mV]	INTEGER16	RW	-250
	4	CH4 Interrupt lower value	Channel 4 integer analogue interrupt lower limit value [°C/10] or [mV]	INTEGER16	RW	-250
	5	CH5 Interrupt lower value	Channel 5 integer analogue interrupt lower limit value [°C/10] or [mV]	INTEGER16	RW	-250
	6	CH6 Interrupt lower value	Channel 6 integer analogue interrupt lower limit value [°C/10] or [mV]	INTEGER16	RW	-250
	7	CH7 Interrupt lower value	Channel 7 integer analogue interrupt lower limit value [°C/10] or [mV]	INTEGER16	RW	-250
	8	CH8 Interrupt lower value	Channel 8 integer analogue interrupt lower limit value [°C/10] or [mV]	INTEGER16	RW	-250

SENECA s.r.l.
Via Germania, 34 - 35127 - Z.I. CAMIN - PADOVA - ITALY Tel. +39.049.8705359 - Fax +39.049.8706287 e-mail: info@seneca.it - www.seneca.it

INDEX	SUB INDEX	NAME	DESCRIPTION	TYPE	ACCESS	DEFAULT
0x6426	0	Unsigned Analogue Interrupt Delta	Max Subindex Number	UNSIGNED 8	RO	8
	1	CH1 Interrupt delta value	Channel 1 unsigned analogue interrupt delta value [°C/10] or [mV]	UNSIGNED 16	RW	10
	2	CH2 Interrupt delta value	Channel 2 unsigned analogue interrupt delta value [°C/10] or [mV]	UNSIGNED 16	RW	10
	3	CH3 Interrupt delta value	Channel 3 unsigned analogue interrupt delta value [°C/10] or [mV]	UNSIGNED 16	RW	10
	4	CH4 Interrupt delta value	Channel 4 unsigned analogue interrupt delta value	UNSIGNED 16	RW	10
	5	CH5 Interrupt delta value	Channel 5 unsigned analogue interrupt delta value [°C/10] or [mV]	UNSIGNED 16	RW	10
	6	CH6 Interrupt delta value	Channel 6 unsigned analogue interrupt delta value [°C/10] or [mV]	UNSIGNED 16	RW	10
	7	CH7 Interrupt delta value	Channel 7 unsigned analogue interrupt delta value [°C/10] or [mV]	UNSIGNED 16	RW	10
	8	CH8 Interrupt delta value	Channel 8 unsigned analogue interrupt delta value [°C/10] or [mV]	UNSIGNED 16	RW	10
0x6429	0	Float Analogue Interrupt upper Limit	Max Subindex Number	UNSIGNED 8	RO	8
	1	CH1 Interrupt upper value	Channel 1 float analogue interrupt upper limit value [°C] or [mV]	REAL 32	RW	2000.0
	2	CH2 Interrupt upper value	Channel 2 float analogue interrupt upper limit value [°C] or [mV]	REAL 32	RW	2000.0
	3	CH3 Interrupt upper value	Channel 3 float analogue interrupt upper limit value [°C] or [mV]	REAL 32	RW	2000.0
	4	CH4 Interrupt upper value	Channel 4 float analogue interrupt upper limit value [°C] or [mV]	REAL 32	RW	2000.0
	5	CH5 Interrupt upper value	Channel 5 float analogue interrupt upper limit value [°C] or [mV]	REAL 32	RW	2000.0
	6	CH6 Interrupt upper value	Channel 6 float analogue interrupt upper limit value [°C] or [mV]	REAL 32	RW	2000.0
	7	CH7 Interrupt upper value	Channel 7 float analogue interrupt upper limit value [°C] or [mV]	REAL 32	RW	2000.0
	8	CH8 Interrupt upper value	Channel 8 float analogue interrupt upper limit value [°C] or [mV]	REAL 32	RW	2000.0

SENECA s.r.l.
Via Germania, 34 - 35127 - Z.I. CAMIN - PADOVA - ITALY Tel. +39.049.8705359 - Fax +39.049.8706287 e-mail: info@seneca.it - www.seneca.it

INDEX	SUB INDEX	NAME	DESCRIPTION	TYPE	ACCESS	DEFAULT
0x642A	0	Float Analogue Interrupt lower Limit	Max Subindex Number	UNSIGNED 8	RO	8
	1	CH1 Interrupt lower value	Channel 1 float analogue interrupt lower limit value [°C] or [mV]	REAL 32	RW	-250.0
	2	CH2 Interrupt lower value	Channel 2 float analogue interrupt lower limit value [°C] or [mV]	REAL 32	RW	-250.0
	3	CH3 Interrupt lower value	Channel 3 float analogue interrupt lower limit value [°C] or [mV]	REAL 32	RW	-250.0
	4	CH4 Interrupt lower value	Channel 4 float analogue interrupt lower limit value	REAL 32	RW	-250.0
	5	CH5 Interrupt lower value	Channel 5 float analogue interrupt lower limit value [°C] or [mV]	REAL 32	RW	-250.0
	6	CH6 Interrupt lower value	Channel 6 float analogue interrupt lower limit value [°C] or [mV]	REAL 32	RW	-250.0
	7	CH7 Interrupt lower value	Channel 7 float analogue interrupt lower limit value [°C] or [mV]	REAL 32	RW	-250.0
	8	CH8 Interrupt lower value	Channel 8 float analogue interrupt lower limit value [°C] or [mV]	REAL 32	RW	-250.0
0x642B	0	Float Analogue Interrupt Delta	Max Subindex Number	UNSIGNED 8	RO	8
	1	CH1 Interrupt Delta value	Channel 1 float analogue interrupt delta value [°C] or [mV]	REAL 32	RW	0
	2	CH2 Interrupt Delta value	Channel 2 float analogue interrupt delta limit value [°C] or [mV]	REAL 32	RW	0
	3	CH3 Interrupt Delta value	Channel 3 float analogue interrupt delta limit value [°C] or [mV]	REAL 32	RW	0
	4	CH4 Interrupt Delta value	Channel 4 float analogue interrupt delta limit value [°C] or [mV]	REAL 32	RW	0
	5	CH5 Interrupt Delta value	Channel 5 float analogue interrupt delta limit value [°C] or [mV]	REAL 32	RW	0
	6	CH6 Interrupt Delta value	Channel 6 float analogue interrupt delta limit value [°C] or [mV]	REAL 32	RW	0
	7	CH7 Interrupt Delta value	Channel 7 float analogue interrupt delta limit value [°C] or [mV]	REAL 32	RW	0
	8	CH8 Interrupt Delta value	Channel 8 float analogue interrupt delta limit value [°C] or [mV]	REAL 32	RW	0

SENECA s.r.l.
Via Germania, 34 - 35127 - Z.I. CAMIN - PADOVA - ITALY Tel. +39.049.8705359 - Fax +39.049.8706287 e-mail: info@seneca.it - www.seneca.it