EPT31CN PRESSURE SENSOR PARAMETER SET SURVEY

1. Hardware

Bus termnation included	☐ No	
	☐ Yes: 120 Ω	
	☐ Yes: Split (2x 60 Ω + 4,7nF)	
	☐ Yes: Switchable 120 Ω (-40...100°C)	
EMC requirments	☐ Industrial CE	☐ Railway applications
	☐ 12V/24V vehicles	

2. Software Parameter

2.1 General parameters

Initial bit rate	[kBit/s]	☐ 20	☐ 100
		☐ 33.333	☐ 125
		☐ 40	☐ 250
		☐ 47.619	☐ 500
		☐ 50	☐ 800
		☐ 83.333	☐ 1000
		☐ 95.238	☐ Other:.....
Endianness of measurements		☐ Little Endian *(CANopen Standard)*	☐ Big Endian
Bootup behaviour		☐ Automatical transfer to *Operational State* ("Autostart")	
		☐ No automatical transfer for *Operational State*	
Node-ID		☐ 0x20 (32_{10})	☐ Other:.....
Vendor-ID		☐ 0 x 00 00 04 50	☐ Other:.....
COB-ID settings	SYNC (0x1005)	☐ 0x80	☐ Other:.....
	TIME (0x1012)	☐ 0x100	☐ Other:.....
	EMCLY (0x1014)	☐ 0x80 + Node-ID	☐ Other:.....
	TPD01(0x1800)	☐ 0x00000180 + Node-ID	☐ Other:.....
	TPD02 (0x1801)	☐ 0x00000280 + Node-ID	☐ Other:.....
Process Value - Linear Scaling (in case of pressure transducer)	Pressure (Primary channel)	☐ 0.....20000 (measuring range)	☐ Other:.....
	Temperature (Secondary channel)	☐ 0.....20000 (-55...125°C)	☐ Other:.....

2.1 TPDO configuration

Communication parameters	Transmission trigger TPDO1	☐ Timer (time as follows.....ms)
		☐ SYNC (count as follows:.....)
	Transmission trigger TPDO2	☐ Timer (time as follows:.....ms)
		☐ SYNC (count as follows:.....)
Mappings (valid mapping entries see section 3)	TPDO1 mappings	Mapping 1:..... Mapping 2:..... Mapping 3:..... Mapping 4:.....
	TPDO2 mappings	Mapping 1:..... Mapping 2:..... Mapping 3:..... Mapping 4:.....

2.3 Additional parameters

Heartbeat producer	☐ Enabled (time as follows:.....ms) ☐ Disabled
User-defined serial number (Unsigned64; lower 32 bits used for LSS)	☐ Based on the engraved "Z..." number ☐ Other:.....
Device Name String (Corresponds to object entry 0x1008)	☐ Empty ☐ Other:.....
Comment String (Accessible via object entry 0x4020)	☐ Empty ☐ Other:.....

3. APPENDIX A - Valid TPDO mapping entries

TPDO mapping is a simple and flexible method to build *Process Data Messages* and to arrange the desired data values completely according to the user's needs. There are multiple values that can be mapped into TPDO1 and TPDO2. The following table shows all mappable entries.
A short explanation for better understanding: Each EPT CANopen sensor features two measuring channels. In case of a CANopen pressure sensor, the *primary measuring channel* corresponds to the measured *pressure*; the secondary measuring channel provides a coarse temperature signal (± 5K). In case of a temperature sensor, the *primary measuring channel* corresponds to the *temperature*; the secondary channel may be neglected.

Name	Valuetyp	Value range	Object index, sub-index
Error Register	Unsigend8	-	0x1001,-
Field Value *(Primary channel)* Field Value *(Secondary channel)*	Integer16 Integer16	0....20000 0....20000	0x7100,1 0x7100,2
Process Value *(Primary channel)*	Integer16 Integer32 Float32/Real	(Acc. to linear scaling, section 2.1) (Acc. to linear scaling, section 2.1) (Acc. to linear scaling, section 2.1)	0x7130,1 0x9130,1 0x6130,1
Process Value *(Secodary chanel)*	Integer16 Integer32 Float32/Real	(Acc. to linear scaling, section 2.1) (Acc. to linear scaling, section 2.1) (Acc. to linear scaling, section 2.1)	0x7130,2 0x9130,2 0x6130,2
Status Byte *(Primary channel)* Status Byte *(Secundary channel*	Unsigend8 Unsigned8	- -	0x6150,1 0x6150,2
Time stamp (Days since 1984-01-01) Time stamp (Milliseconds)	Unsigened16 Unsigned32	- -	0x3140,1 0x3140,2