PCN # 2313

DATE: August 16, 2022

ANALOG DEVICES

AHEAD OF WHAT'S POSSIBLE™

EXPECTED PCN SHIP DATE: August 16, 2022

☐ **PROCESS CHANGE NOTICE**
☒ **PRODUCT CHANGE NOTICE**

ANALOG DEVICES HEREBY ISSUES NOTIFICATION OF CHANGE
THAT MAY AFFECT THE FOLLOWING CATEGORIES:

☐ DESIGN	☐ WAFER FAB	☐ ASSEMBLY	☐ TEST	☒ ELEC/MECH SPECS

AFFECTED PRODUCT:

Ordering P/N: (See PN listing XLS in PCN ZIP file)

CHANGE FROM: -	CHANGE TO: -

Existing firmware revision V1.07 for Trinamic TMCM-1617-CANopen modules	New firmware revision V1.08
	
	This firmware introduces the following:
	
	1) The following object entries were added:
	  a) Within Object 2042h: Velocity Mode Settings:
	    Sensor_Selection (subindex 5)
	    Velocity_Filter (subindex 6)
	    Velocity_Unit (subindex 7)
	    Motor_Halted_Velocity (subindex 8)
	  b) Sensor_Selection (subindex 5) within Object 2043h: Position Mode Settings
	2) Fix the data type of Steps (subindex 2) within Object 2080h: ABN
	3) Encoder Settings changed from UNSIGNED16 to UNSIGNED32
	4) Default parameters were changed:
	  a) Object 2050h: Motor Type from 0 (no motor) to 3 (Three phase BLDC motor)
	  b) P_ Parameter (subindex 1) of the Object 2043h: Position Mode Settings changed from 300 to 50
	5) Rework of the implementation of Object 1010h: Store Parameters and Object 1011h: Restore Parameters. PDO configuration can now be stored as part of the "Communication Parameters".
	6) The internal scaling of the PI regulators P parameter changed, thus after an update a new tuning of the position regulation P parameter is required.
	7) Implement the Overcurrent flag and Driver Error flag of the Object 2101h.
	8) Implement Motor Status Flags.
	9) Implement error LED output handling
	10) Fix: First position move after power on reset has bad ramp.
	11) Fix: Some axis parameters have wrong or no limit check.
	
	This change is classified as a major change.

JUSTIFICATION: New batches of the modules will be delivered together with this new release of the firmware. Modules already shipped can be updated to this new release of the firmware using the provided firmware update feature of the TMCL-IDE. Prior firmware releases are still available on the corresponding product pages on www.trinamic.com.

Notice that after a firmware update coming from a different firmware version, all previous EERPOM stored parameters will get lost, because the new firmware will apply its default parameter values during first reboot.

This PCN is effective as of 16AUG2022 and is for information only

Part Number:	Manufacturer Part #:
TMCM-1617-CANopen	TMC-11-0046

TRACEABILITY: Analog Device maintains full traceability by device marking, packaging labels and shipment documents.

Analog Devices's Change Notification System is designed to keep our customer base apprised of major product, manufacturing, or facility improvements.

Nasser Ali Chaouche

Nasser AliChaouche / PCN Coordinator

For further information, please contact either of the people listed below.

Contact your local Analog Devices Company Representative   or   Nasser AliChaouche, PCN Coordinator

408-601-5660 / pcn.coordinator@maximintegrated.com