Block isolation with imc CRONOS*flex* (CRFX)

Who benefits?

Main use cases:

- UNI-4:   in conjunction with its well-known additional
                                           channel-wise individual isolation of voltage channels

- UNI2-8, DCB2-8, BR2-4:   allowing them to increasingly compete with fully-isolated bridge amplifiers

- ISO2-8:   with optional global sensor supply,
                                           which will now generally be isolated

- HRENC: with their noise sensitive and delicate pulse signals

- ICPU2-8:   ICP current sources, that particularly benefit from ground loop suppression

Unique features of CRFX:

- Flagship series of imc CRONOS platform
- Block isolation
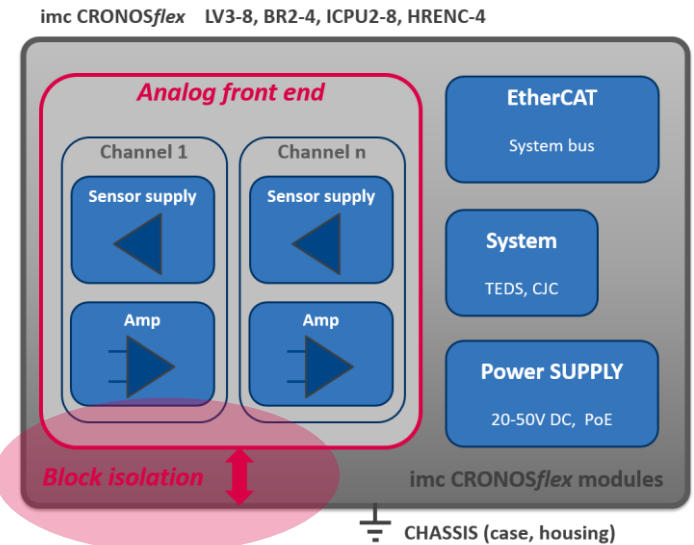- 24 Bit high resolution (Floating Point output format)

Isolation with imc CRONOSflex (CRFX)
Summary
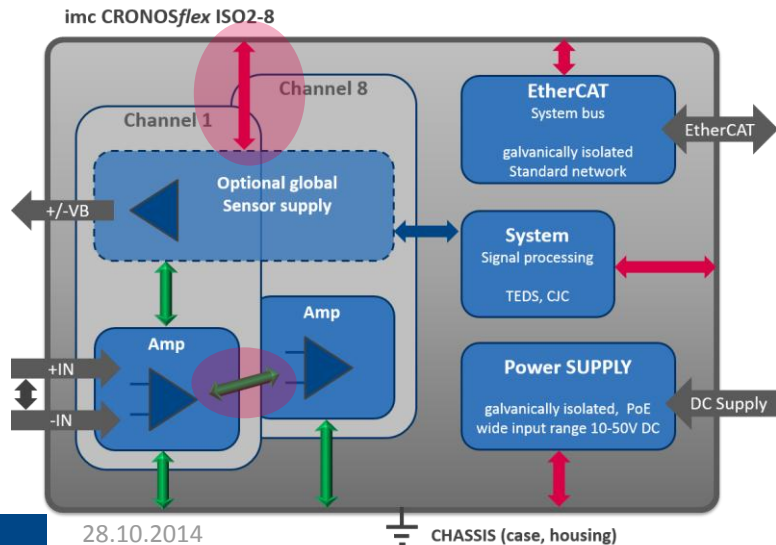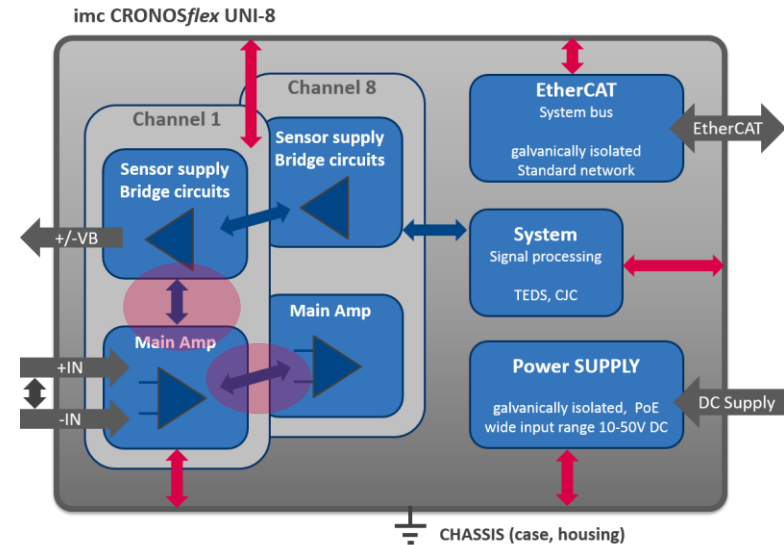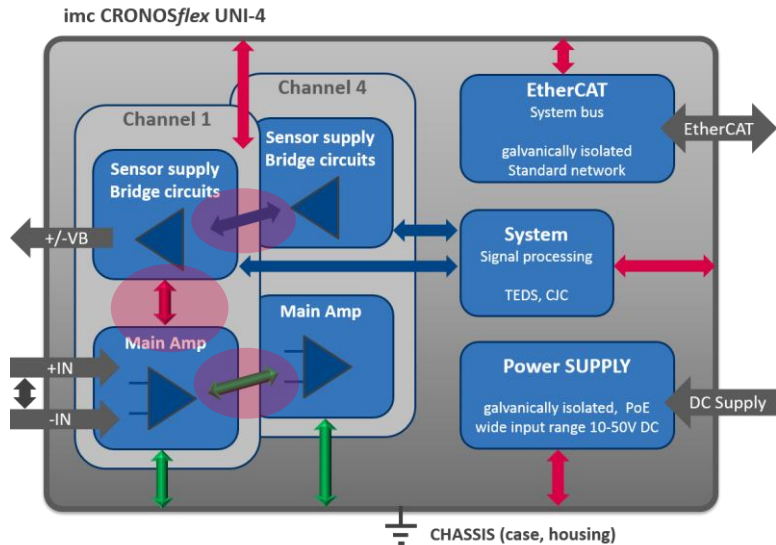
imc CRONOSflex UNI-4

imc CRONOSflex UNI-8

imc CRONOSflex ISO2-8

Degree of isolation

- Individual galvanical isolation
- Functional block isolation
- No isolation between components

imc CRONOSflex LV3-8, BR2-4, ICPU2-8, HRENC-4

Isolation with imc CRONOS*flex* (CRFX)
Summary

Degree of isolation

- Individual galvanical isolation
- Functional block isolation
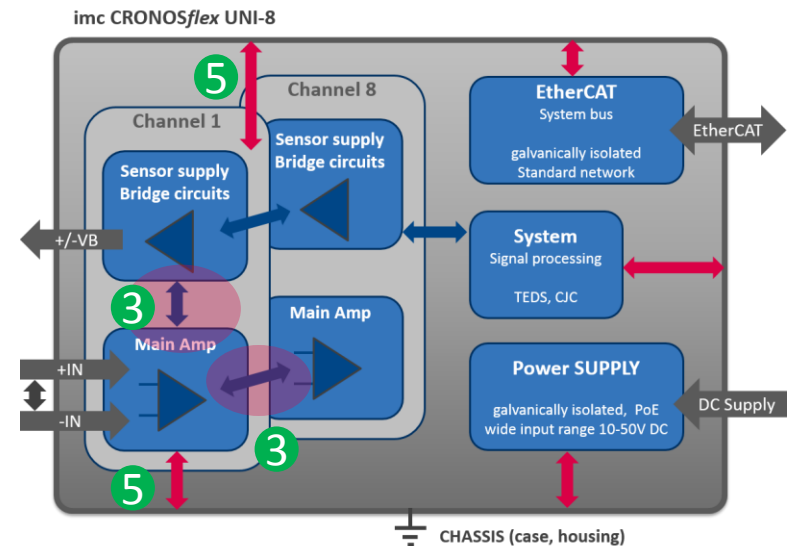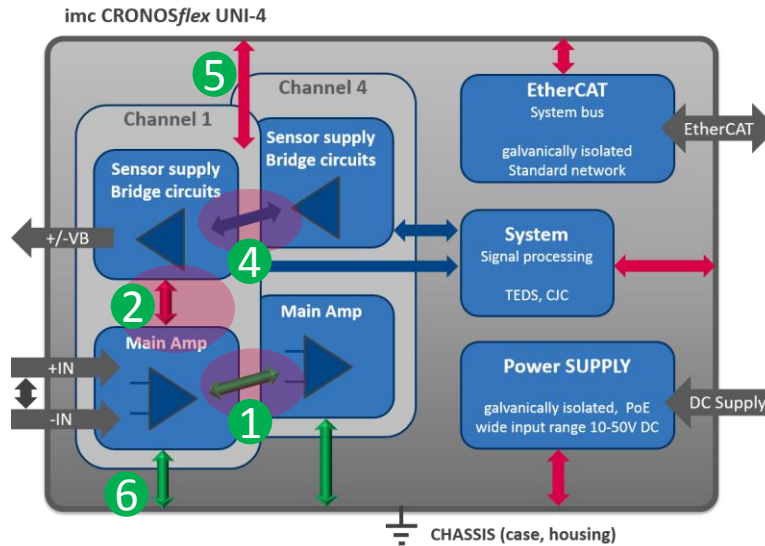- No isolation between components

imc CRONOS*flex* UNI-4

imc CRONOS*flex* UNI-8

imc CRONOS*flex*   LV3-8, BR2-4, ICPU2-8, HRENC-4

UNI-4 vs. UNI2-8 and CRFX block isolation

1. • UNI-4 has *individually isolated* voltage channels
2. • Also isolated against the supply unit as a whole
3. • This is an additional degree of flexibility compared to UNI2-8
4. • Sensor supply and *bridge circuits* are *NOT individually* isolated
1. • This *neutralizes individual isolation in the case of bridge mode (1) vs. (4)*

5. • CRFX features "*block isolation*" of the entire front end as an additional benefit, extending beyond the properties of CRC, C-SERIES, SPARTAN
6. • This is not quite as comprehensive as (6) – but often *well sufficient*!

3   28.10.2014