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Migration of LabVIEW into the Test of magnetic Properties

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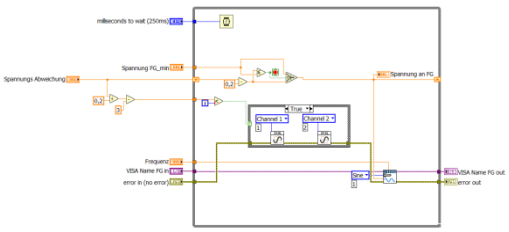
Summary

This project deals with the migration of a measuring-system for magnetic properties in a new environment. Main task of this project was the mapping of Pascal-Code into the graphical coding language of LabVIEW. Further work was done regarding enhancing the program by code optimizations as well as the implementation of some new features (e.g.: overcurrent protection, graphical user interface …).
The result is a more user-friendly and reasonable code for the latest hardware that can be used to identify the main characteristics of transformer sheets.

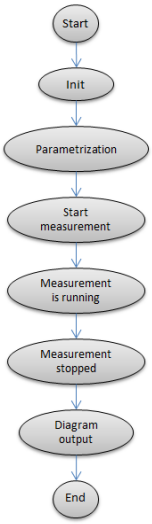
The Project

Subroutines Virtual Instruments

- hardware communication
- mathematical operations
- plotting

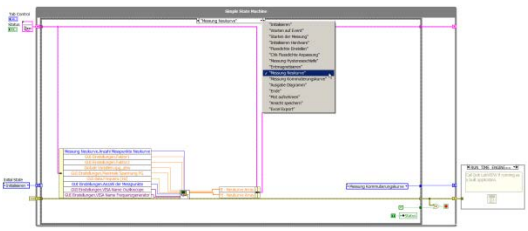


Flow Chart



Simple State Machine

- All states set up according to the flow chart
- Used for triggering events



Graphical User Interface (GUI)

- 3 tabs (main view, options, plot view)
- fully functional without the LabVIEW software

Plot View

- overview about all properties
- can be saved in different ways