

# TantoMPC5

## Test and Analysis Tool

### The Motorola MPC5xx family

The MPC5xx Family combines a high performance 32-bit RISC core with an integrated set of peripherals, up to 1MB embedded FLASH and up to 36k RAM. Applicable not only for automotive systems but also for industrial applications the MPC5xx derivatives are getting more important. Beside the BDM debugging port the most of the MPC5xx controllers have an additional NEXUS port (class 3) with additional branch trace, data trace and ownership trace.

### Tanto Base for MPC5

Tanto Base-MPC5 is a high performant run control system. High speed downloads of up to 200MBytes per second are possible due to the intelligent hardware. Beside an almost unlimited number of software breakpoints also the four internal hardware breakpoints can be used. These hardware breakpoints can also be used as triggers on addresses, data and status. These triggers can be combined with an event counter or

combined as a sequence to detect the complex bugs in real time. A lot of controller events like reset, machine check or alignment exceptions can be used to stop the application. Data accesses "on the fly" are possible without loss of real time. With MPC5, Tanto and the user interface HiTOP debugging can be much more than only setting breakpoints or stepping lines.

### Tanto PT for MPC5

The Tanto PT expansion is able to handle the NEXUS trace messages. All messages coming out of the NEXUS interface are collected and stored in the large trace buffer. Marked with an additional time stamp time measurements are possible. An optional logic probe enables the trace to store additional external signals. To make an interpretation of the messages convenient HiTOP completes it to a real trace like a full trace recording from a classical bus trace. The display mechanisms are the raw trace, instruction trace, line trace and signal trace.

## Highlights

- Full support of the MPC5 debugging features
- Code and data breakpoints
- Four triggers with counters and sequence
- Fast download speed
- OSEK support
- Support of all common compilers

### Tanto PL, the connection to the Target

The connection to the target is standardized. The NEXUS connector normally has 50 pins, available and supported are also connectors with 40 and 28 pins. A description can be found at [http://www.hitex.de/pdf/App\\_Tanto\\_MPC\\_002.pdf](http://www.hitex.de/pdf/App_Tanto_MPC_002.pdf). For the MPC555 or targets which only have a BDM connector the TantoPL-MPC5-BDM can be used.



Order Code	Description
Tanto-MPC5	Tanto Base for the MPC5 family including HiTOP
TantoPT-MPC5*	Tanto trace expansion for MPC5 including HiTOP
TANTOPL-MPC5-NEX	Port Link for NEXUS connector
TANTOPL-MPC5-BDM*	Port Link for BDM connector

\*in preparation

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