RAppID ToolBox
(Enabling the “rapid” in Rapid Prototyping)

REDUCE DEVELOPMENT TIME!
RAppID ToolBox is an add-on library, for Matlab/Simulink, of configurable low level drivers for the MPC55XX peripherals. The ToolBox enables you to quickly take your control algorithm models directly onto your MPC55XX target board. Enhance the performance of your control algorithms by using the target optimized code blocks for DSP functions like IIR, FIR, FFT. Measure performance of your algorithms by utilizing the profiler block function. The blocksets are seamlessly integrated into automatic code generators like Real Time Workshop, Embedded Coder And TargetLink.

Product Highlights:
• Configurable Blocks for peripheral low level drivers:
  • Queued Analog to Digital Conversion Block with Trigger Function - Single & continuous scan modes.
  • eMIOS Block, one per Channel with mode based driver functions and trigger functions.
  • Serial Peripheral Interface Block
  • eTPU Interface blocks for registered eTPU API functions.
  • CAN Interface block along with CAN packing and unpacking blocks
    • Full Buffer Initialization Support Transmit at Thread rate,
    • Receive using IRQ function
    • XCP Protocol Support for interfacing with Calibration Tools
  • Interface for digital I/O with pin conflict checks.
The Peripheral Blocks seamlessly leverage the Interrupt and DMA capabilities of the processor.
• Target optimized blocks that leverage SIMD
  • Fast Fourier Transform (FFT) Block
  • Infinite Impulse Response (IIR) Filter Block
  • Finite Impulse Response (FIR) Filter Block
These blocks are Simulatable and you chose - C code or assembly!
• Embedded Targets
  • Support for DIAB, GHS & Freescale compilers.
  • Generic Scheduler Target with multi-rate, synch./asynch. Task support.
  • OSEK Target : Freescale OSEK Turbo
  • Built-in consistency checks between target & model
• On Target Profiling Support
  • Function profiling
  • Task Profiling
  • Profiling Data communicated back over SCI

SYSTEM REQUIREMENTS
Microsoft Windows NT, 2000 and XP
512 MB RAM recommended
Minimum 1 GHz processor recommended
Standard screen resolutions supported

Compatible with
Matlab Version R14sp1, R14sp2, R14sp3, and R2006a.
TargetLink Version 2.1
RAppID Version 1.1.1

The RAppID initialization tool is also seamlessly integrated into the Matlab/Simulink environment.

Target Rapid Prototyping Is Just a Click Away......
Envision, Configure, Build
RAppID ToolBox … Target Rapid Prototyping is a just a Click Away!

The RAppID Toolbox Demo Library provides examples of every block and target to reduce your learning curve on the tool & the processor.

Intuitive GUI for Filter Design

You don’t have to be a DSP expert to use our Target Optimized DSP Blocks. But our filter designer block will make you look like one!

What our Customers are saying about the RAppID ToolBox:

“The RAppID toolbox is helping us to achieve our goal of moving concepts from research to production intent – and bridging some of the gaps in the tool chain.”

-A Major Industrial Company Engineer

Ordering and Contact Information

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