

#### TEST DRIVE

 Download and run a demo! www.ashware.com

### CONFIGURATIONS

- Single-Core Simulates the code on a single core.
- Four-Core Simulates the actual silicon configuration with a master and three slaves with single-click switching between the cores.
- eTPU/MC33816 Co-Simulation Allows connection of eTPU and MC33816 pins for a realistic system simulation.







Yes! ASH WARE's MC33816
Development Tool
is here.



ASH WARE Inc.

is proud to announce the release of our MC33816 Development Tool.

With full support of Freescale's MC33816, the Development Tool provides not only standard IDE features like project management, code editing and integrated build, but a wide range of sophisticated simulation and debugging capabilities such as a waveform window that integrates the capabilities of both a logic analyzer and oscilloscopes to view synchronized analog and digital waveforms, code coverage analysis, watch windows, advanced tracing and support for automated regression testing.



A single IDE provides an integrated simulator, graphical state machine editor, code editor, and built-in 'make'.



# ASH WARE, Trusted Embedded Tools Supplier Since 1994...

The MC33816 Development Tool is the latest in a long line of ASH WARE products supporting Freescale microcontrollers. ASH WARE has earned Freescale's 'Proven Partner' designation.



Powerful, intuitive project capability with **built-in 'make'.** 

Breakpoints, code

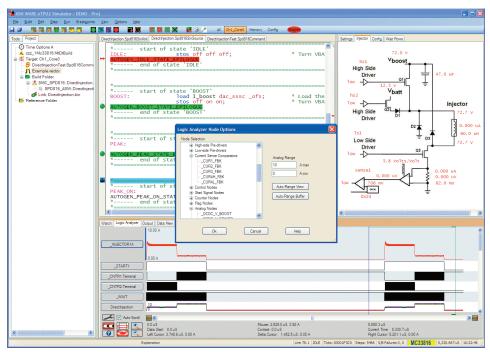
coverage, bookmarks.

source views provide a powerful editing and

debugging experience.

clickable sidebars,

syntax-highlighted



View external and internal nodes including voltages, currents, power, and element values

Fully customizable.

View time-synchronized analog, digital, and wait / thread activity signals. Analog signals are easily auto-ranged.

# ASH WARE's MC33816 PRODUCT FEATURES

- User-friendly interface, which runs under Windows 7, 8, XP, 2000, NT. ASH WARE tools can be run under Linux by using 'wine'.
- Full Integrated Development Environment write, build and debug code all in one tool! The MC33816 Development Tool includes project configuration, integrated software build, and syntax highlighting code editor capabilities.
- Combined 'Logic Analyzer' & 'Oscilloscope' Waveform Window view analog & digital signals and data variables. Advanced view control; zoom 'in', 'out', 'to cursors', etc. Drag & drop waveform events (pin transition, thread start, data variable change, etc.) to reset & simulate to that point in time.

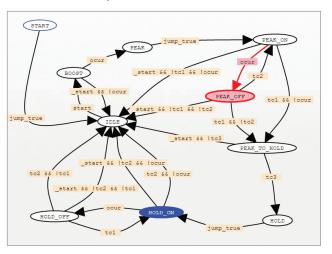


 When using graphical state machine development, view states as a color-coded, vertically-keyed, enumeration. Vertical cursors can snap to the state transitions and the cursor time can be dropped into the simulation thereby resetting simulation to the start of the snapped-state.



- Symbolic Data Debugging named memory locations (via the #define Freescale assembler capability) are treated as 16-bit variables thereby supporting symbolic debugging. Drag & drop your named locations into the watch window.
- Full debugging execution control including goto cursor (instruction or script command), breakpoints, single step, stepout, goto time, goto delta-time, and state stepping capabilities, step thread, etc.

- Powerful C-like scripting language.
- Powerful test vector generation language with embedded loops and node grouping.
- Graphical State Machine Development define your states and state transition events (ocur, start, tc, fx, etc.) within a graphical state machine window. State and the state transition code (cwer, wait) are automatically generated. Just fill in the state code. Simulate to state, step state transition, etc.



- Functional verification and automated regression testing define your pin-transitions and data flow requirements and verify your code against these requirements. Automated batch mode results in a single PASS or FAIL indication.
- Code and jump coverage analysis to help ensure thorough testing – helps you meet testing standards such as DO178B by providing critical test completeness indices.
- Powerful project file including a built-in 'make' utility that examines time stamps of source files (including included files) and generated files that rebuilds code only when needed.
- Easy-Transition to Real Hardware a script command conversion capability exports your script commands (that drive the simulation) as SPI commands such that your simulation stimuli can be used to run your actual hardware. An included companion utility drives Freescale's KIT33816 development board with the exported SPI commands file including verification commands.
- Simulate your own hardware include user-defined DLL hardware model

## RELATED PRODUCTS

- MC33816 Development Tool –
   Read more at http://ashware.com/mc33816-ide-details.htm
- MC33816 Programming Course A hands-on three day course covering the hardware and programming. Time is money, you will leave the course understanding the device and able to architect and program a wide variety of applications. Read more at https://www.ashware.com/MC33816-training.htm
- Consulting Go to the pros for all your MC33816 and eTPU consulting needs.
- eTPU/eTPU2 Development Kit Includes both the eTPU2 Simulator and the ETEC Compiler Tool Suite integrated in ASH WARE's new Development Tool.
- eTPU Programming Course This three-day course is regularly scheduled world-wide and can also be provided at customer sites. For information: (in Europe) www.hilf.com, (outside Europe) www.ashware.com
- eTPU Programming Made Easy Book Focus is on solving timing problems using the eTPU including C framework issues as well as nuances of the channel hardware.
- MPC5554/ MPC5553 Revealed book Written by Munir Bannoura and Richard Soja provides a complete understanding of the first member of a new microcontroller family based on the Book E PowerPCTM1 architecture. www.amtpublishing.com.





## **O**RDERING

- Fax purchase order to 503-214-8693
- Order online at www.ashware.com
- 30-day money-back guarantee.

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