## Phyt**©**n



## *High-End Emulator for AVR® with Unbeatable Features*

The Phyton line of emulators helps programmers complete their projects on-time and under budget, offering them quality products at competitive values. With Phyton's 1-year warranty, developers are assured that they will have the assistance that they need during development time.

- Real-time, non-intrusive emulation of the Classic and Tiny AVR® families up to 8 MHz\*
- Uses Atmel AVR® bond-out chips for accurate emulation
- Up to 256K of 16-bit words of program memory\*
- Up to 256K Bytes of data memory\*
- Finest external data memory mapping with one byte resolution
- Up to 256K true hardware breakpoints on code memory address access
- Up to 256K true hardware breakpoints on external data memory access (read, write and read/write)
- Four complex breakpoints and triggers
- 16K frames x 120 bit real-time tracer with programmable filters and forward, reverse and dynamical modes of trace recording
- Transparent on-the-fly access to the code memory, shadow memory, breakpoint processor, tracer and timer
- 48-bit timer provides timing and clock frequency measurement with 0.1% accuracy
- Precisely programmable clock generator from 1KHz to 60 MHz\* with 0.5% accuracy
- Programmable regulator precisely auto-adjusts to the target's voltage level and allows working alone at 1,2V to 5.5V settable with +/-20 mV accuracy
- 8 probe inputs and 4 trigger outputs
- High-speed host link via 115 KBPS serial port optoisolated for extra protection

- Precisely centered "sandwich"- style design based on the universal MR1 main board, changeable PODs and adapters for DIP, PLCC, QFP, SO and other packages
- Tiny tool 3-1/2" x 2-1/2" x 2" (95 x 65 x 50 mm)
- Windows 95/98/2000/NT hosted Project-AVR IDE includes all the tools necessary for a full development cycle from editing source code to "burning" a target AVR® or an EPROM device
- Project IDE includes an editor, a project manager, the MCA-AVR macro assembler, and PDS-AVR command set simulator/debugger
- Source level debugging for C compilers and assemblers from Atmel, IAR, ImageCraft and Phyton MCA-AVR macro assembler
- Project level support for C compilers from IAR and ImageCraft, and for the Phyton MCA-AVR macro assembler
- Embedded C-like script language for automated testing and custom commands
- Universal programmer ChipProg+ controlled from the same IDE can be supplied optionally

\* May vary for particular AVR<sup>®</sup> derivatives. Visit our website http://www.phyton.com or call us to get detailed information.

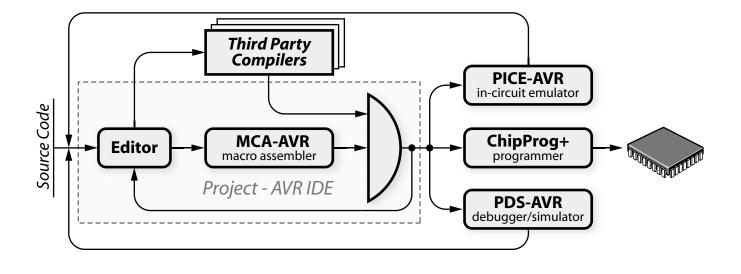
\*\* Visit our website http://www.phyton.com to get the latest software update and to see the latest list of supported devices.

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Phyton offers a complete development tool solution for Classic and Tiny families of the AVR<sup>®</sup> microcontrollers produced by Atmel Corporation.



A full Project-AVR package includes the MCA-AVR macro assembler, PDS-AVR software debugger/simulator, PICE-AVR in-circuit emulator and ChipProg+ universal programmer integrated under control of the project IDE. This tool set provides a complete development cycle, from editing source texts, to getting debugged code, and "burning" it into a target microcontroller or a memory device. Popular third party C compilers can be bundled with the Phyton tools in the Project-AVR package. You can select only those tools you need and order the configuration that fits your needs and your budget.