## MCUS/MPUS, APPS PROCESSORS & DEVELOPMENT TOOLS

#### **AVR ONE! PROFESSIONAL DEBUGGER FOR 8 AND** 32-BIT AVR DEVICES WITH ON-CHIP DEBUGGING





AVR ONE! is a professional development tool for all 8-bit and 32-bit AVR devices with On-Chip Debug capability. It is used for source level symbolic debugging, program trace and device programming and supports the complete development cycle. It supports SPI, JTAG, PDI, and aWire programming modes and debugging using debugWIRE, JTAG, PDI, and aWire interfaces. It also supports LiveDebug, which makes it possible to attach to a running target non-intrusively, and the Nexus auxiliary interface for high-speed program, data or ownership trace at up to 200MHz in either buffered or streaming mode. Driven by a powerful FPGA, this tool provides high-speed data transfer between the host PC and the target AVR device, facilitating rapid program download and a most responsive debugging experience.

		Price Each	
Mfg. Part No.	Stock No.	1+	
Debugger / Programmer			
<ul><li>ATAVRONEKIT</li></ul>	68T2076		
PIM_197951			

#### AVR DRAGON ON-CHIP DEBUGGER AND **PROGRAMMER**







The AVR Dragon sets a new standard for low cost development tools for 8-bit and 32-bit AVR devices with On Chip Debug (OCD) capability. It can perform a symbolic debug on all devices with OCD with SPI, JTAG, PDI (selected devices), high voltage serial programming, parallel programming, and aWire modes, and supports debugging using SPI, JTAG, PDI interfaces. A development area lets designers build their own circuitry or add sockets for the desired device footprint. The debugger also supports NanoTrace, depending on the OCD module on the AVR device, using the target device's memory.

		Price Each
Mfg. Part No.	Stock No.	1+
Debugger / Programmer		
<ul><li>ATAVRDRAGON</li></ul>	68T2063	
PIM 197953		

SAM-ICE™ JTAG EMULATOR FOR SAM3/7/9 ARM-**BASED MCUs** 





SAM-ICE™ is a JTAG emulator designed for SAM3, SAM7 and SAM9 ARM-based microcontrollers, including the Thumb® mode. It supports download speeds up to 720K Bytes per second and maximum JTAG speeds up to 12 MHZ. It also supports Serial Wire Debug (SWD) and Serial Wire Viewer (SWV) from SAM-ICE hardware

		Price Each
Mfg. Part No.	Stock No.	1+
USB JTAG Emulator		
AT91SAM-ICE	68T5115	
PIM 197949		

## **PICKIT 3 DEBUG EXPRESS**



#### Features

- PICkit-3 features full speed 12 Mbits/s USB interface to host PC
- MPLAB IDE compatible
- Built-in over-voltage/short circuit monitor
- Firmware upgradeable from PC/web download
  Read/write program and data memory of

#### microcontroller

- Erase of program memory space with verification
- · Freeze-peripherals at breakpoint
- Program up to 512K byte flash with the programmer to Go
- Diagnostic LEDs (power, busy, error)
- Features real-time execution

The DV164131 is a PICkit-3 debug express, It includes Pickit-3 and 44-pin demo board with a PIC18F45k20 microcontroller. The MPLAB PICkit-3 allows debugging and programming of PIC and dsPIC flash microcontrollers at a most affordable price point using the powerful graphical user interface of the MPLAB integrated development environment (IDE). The MPLAB PICkit-3 is connected to the design engineer's Quising a full speed USB interface and can be connected to the target via an Microchip debug (RJ-11) connector (compatible with MPLAB ICD-2, MPLAB ICD-3 and MPLAB REAL ICE). The connector uses two device I/O pins and the reset line to implement in-circuit debugging and in-circuit serial programming.

		Price Each
Mfg. Part No.	Stock No.	1+
Debugger / Programmer		
DV164131	50P9695	
PIM 142230		•

## MPLAB REAL ICE IN-CIRCUIT EMULATOR





### Features

- Real-time Execution
- Fast ProgrammingUSB 2.0 Interface to PCFREE MPLAB IDE
- Overvoltage / Short-circuit Monitor Protection
- Read/Write Program Memory Space with
- Hard and Software Breakpoints
- Real-time Watch
- Capture Trace to Log Instruction Contents
- Port Trace for High-Speed Upload of Trace Data

The MPLAB® REAL ICE is the next generation of emulator / programmer for Microchip flash products. Can be used to debug and program dsPIC® and PIC® microcontrollers with a powerful yet simple to use graphical user interface of the MPLAB integrated developement environment.

			Price Each	
Mfg. Part No.	Description	Stock No.	1+	
Emulator				
AC244005	MPLAB REAL ICE Isolator	14R8661		
In-Circuit Emulator		,		
● DV244005	MPLAB REAL ICE In-Circuit Emulator 16M60			
DV244005 PIM 90083	MPLAB REAL ICE In-Circuit Emulator	16M6059		

# DSTREAM + DS-5 PROFESSIONAL BUNDLES POHS OCCUPANT ARM DS





IDE Debugger Perf. Analyzer Simulation Hardware Debug

The ARM DS-5 tool chain enables engineers to develop robust and highly optimized embedded software for ARM application processors, such as the Cortex-A series, Cortex-R real time processor and other ARM embedded processors. The DS-5 tool chain comprises tools such as the best in class ARM C/C++ Compiler, a powerful Linux/Android/RTOS aware debugger, the ARM Streamline system wide performance analyzer and real time system model simulators, all conveniently packaged in a user friendly integrated development environment based on Eclipse. DSTREAM high performance debug and trace unit enables software debug and optimization on any ARM processor based hardware target. DSTREAM enables the connection of DS-5 Debugger to ARM based devices via JTAG or Serial Wire Debug. DSTREAM uses FPGA acceleration to deliver high download speeds and fast stepping through code on single and multi processor devices.

	Software	License	No. of		Price Each
Mfg. Part No.	Edition	Type	Licenses	Stock No.	1+
ARM					
<ul><li>BUNDS-KT-4PE00</li></ul>	Professional	Floating	1	93T4558	
<ul><li>BUNDS-KT-3PE00</li></ul>	Professional	Node Locked	1	93T4557	9100.00
PIM 203733					



