

8649A/PF/SDK PICO FLEXOR™ SOFTWARE DEVELOPER'S KIT



MEETING TODAY'S CHALLENGES TO PROVIDE A SECURE FUTURE

The 8649A/PF/SDK PicoFlexor™ Software Developer's Kit constitutes a Linux virtual machine (VM) complete with source code and tools required to perform field programmable gate array (FPGA) application development, software application development, debugging and deployment for the SI-8649A/PF PicoFlexor within a graphical development environment. The PicoFlexor is a miniature tactical software definable radio (SDR). It combines high RF performance, state of the art digital processing, and a simple development interface to create a best-in-class SIGINT SDR. The Velocity integrated development environment (VIDE) is an Eclipse plug-in that provides a common application framework,



which is technology- and version-agnostic. As an Eclipse integrated development environment, it supports a number of programming languages and development paradigms. The VMware Build subsystem is supplied on a DVD set for installation on a host computer that is a compatible Linux or Windows machine. The system builds the target System Software to include the Linux kernel, drivers and applications and it establishes the specification for the VM and the virtual Linux operating system. It can be edited to add serial ports or disk drives or to change memory requirements. The VM is an Ubuntu 12.04 long-term support installation containing OS-related applications and files.

- FPGA application development, debugging, and deployment functionality in a single graphical environment
- Common application framework allows portability between PicoFlexor models
- Technology and version agnostic
- VMware Image of software tools for development of code for PicoFlexors
- Linux / bootloader source
- Velocity plug-in for Eclipse integrated development environment (IDE)
- Application Program Interface (API) for Software/ Firmware applications development
- Documentation
- Sample code for beginners
- License for DRS Velocity-PDE

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ECLIPSE SYSTEM REQUIREMENTS

- 32-bit x86 Ubuntu 12.04 LTS
- iVeia Development Kit version 3.0 or greater
- Xilinx ISE Design Suite 14.1
- Eclipse version 3.6 (Helios) SR2



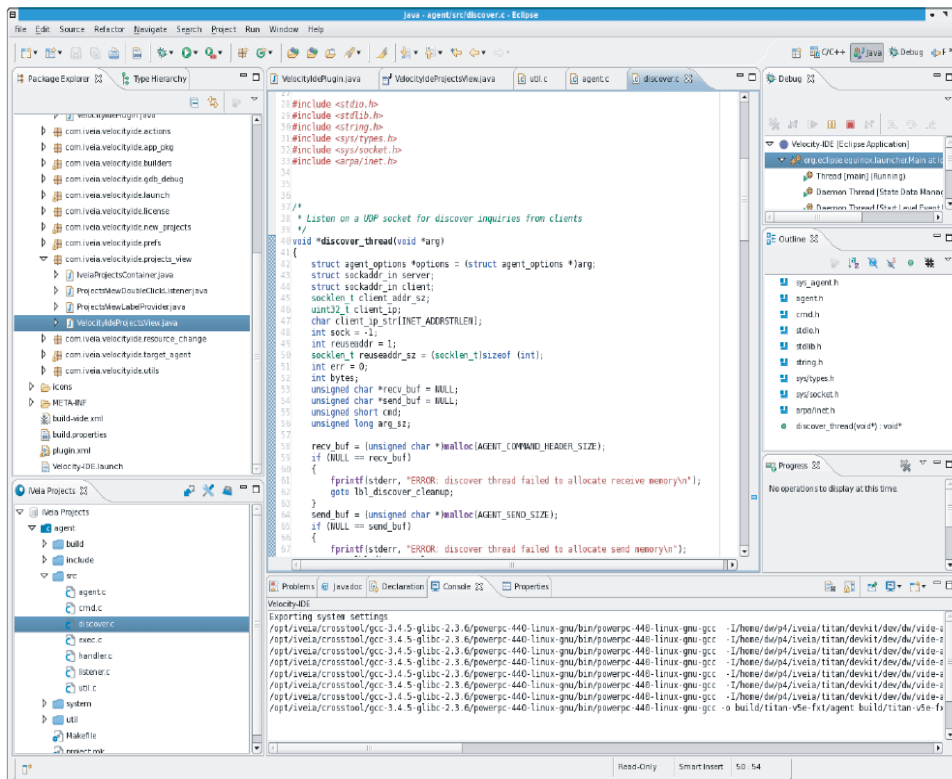
HOST MACHINE REQUIREMENTS

- VMware Player (>4.0.0)
- Terminal program (Tera Term preferred)
- WinXP Pro (preferred) / Win 7 Pro (tested)
- >50 GByte Disk Space
- 1 GB Memory
- DVD Drive
- USB2.0 Port
- One serial port (but preferably two) or a USB-Serial adaptor

DRS OFFERS OPEN SOURCE LAB FOR CO-DEVELOPMENT

- Allows co-development with government and industry customers using open source software frameworks;
 - Fosters a collegial environment that will serve as an incubator for new approaches to old problems;
 - Provides access to the know-how for transforming laboratory prototypes into fielded systems that address real-world solutions;
 - A dedicated space to allow customers to experience DRS products and capabilities first hand, taking out the risk of dealing with the unknown;
 - A knowledgeable and energetic software team developing both server and embedded applications using Software Definable Radio (SDR) Frameworks such as Velocity IDE, GNU Radio and Redhawk;
 - An opportunity for government and industry customers with budget limitations to enter into time-share arrangements that will allow them to experience the benefits of:
 - Working with high-performance RF tuner front ends
 - Recorded and Live Signal Environments
 - Infrastructure support thru 10 Gigabit Ethernet
- The OSL is operational and ready for use.

Schedule a visit today!



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