**SIXNET IPm Application Development Kit (IADK)**   
OVERVIEW:  
The software and documentation provided on this CD or web site allows  
you to develop IPm applications in either Linux or Windows. This cross-  
development platform will create Linux applications (for the IPm's Power   
PC target) from within an i386 platform.  
  
Note 1:   
Use of the IPm Application Development Kit requires the purchase  
of the IPm Advanced License (option group 4) of the SIXNET I/O Tool Kit.  
  
Note 2:   
The IPm Application Development Kit is designed for advanced users  
and OEMs that are already familar with developing applications for   
embedded Linux systems. If you don't have these skills we recommend that   
you contact one of the IPm Resource Centers for assistance.  
  
LINUX\_IADK:  
This kit allows you to develop your IPm applications in Red Hat 7.0   
or higher.  
  
WINDOWS\_IADK:  
This kit allows you to develop your IPm applications in Microsoft Windows.  
Please note that MSYS and MinGw must be installed first to establish the   
necessary emulation environment (see iadk\_install\_guide.pdf for details).  
  
Note: Not all Linux capabilities are supported when using MSYS and WinGW.   
Accordingly, it may not be suitable for porting or developing some   
applications. We recommend only using the Windows\_IADK when you are writing  
your own IPm applications from scratch or when making modifications to   
existing applications that are known to be compatible with this emulation   
environment.  
  
DEVELOPMENT FILES:  
'\*\*' = These files have changed since the previous release.  
  
\*\* sxiadk.tar.gz    Linux IADK with GCC compiler and utilities  
  
ppc\_insight.tar.gz    (NEW!) Linux debugger files  
  
sxwiniadk.tar.gz    (NEW!) Windows IADK with compiler and utilities  
  
\*\* sxlib.tar.gz         SIXNET libraries to access the IPm's I/O  
Note: Only supplied after purchase of an IPm Advanced Tool Kit license.   
  
\*\* sxsample.tar.gz      Contains two sample programs:  
                          oem\_iodb.c    reads and writes I/O registers  
                          tst\_serial.c  reads and writes to serial port  
  
  
NECESSARY FILES for Windows IADK (not supplied by SIXNET):  
  
MinGW: MinGW-2.0.0-3.exe or newer (download from www.mingw.org)  
  
MSYS: MSYS-1.0.9-2003.02.17-1.exe or newer (download from www.mingw.org)  
  
DOCUMENTATION FILES:  
  
iadk\_intro.pdf          This file gives an overview of the IADK   
  
iadk\_install\_guide.pdf    This file tells how to install the IADK.  
  
iadk\_tutorial.pdf    This is a step-by-step look at turning a supplied  
            sample C file into a running IPm application  
  
iadk\_use\_guide.pdf     This is a description of how to use the IADK to  
            compile, load and run your own IPm application  
  
ipm\_io\_calls.pdf    This document details each library call to access  
            the IPm I/O registers. A C example is included for  
            each library call.   
  
ipm\_serial\_ports.pdf    This document shows the names that map to each IPm  
            serial port, and what modes the port should be set  
            to in the SIXNET Tool Kit  
  
  
IADK Revision History:  
rev 1.2  (10Apr03)    Note: The following changes require version 1.4 or  
            newer IPm firmware. The latest firmware is available  
            for download from www.sixnet.com.  
  
            \* Development kit synced with target stations  
              (both libraries and executables).  
  
            \* A Windows version of the IADK is available.  
  
            \* A graphical debugger (Insight) is available for  
              use with the Linux IADK (remote debugging only).  
  
            \* Linux IADK filename changed from   
              "sxeldk.tar.gz" to "sxiadk.tar.gz"  
  
  
rev 1.1  (10Feb03)      Note: The following changes require version 1.2 or  
            newer IPm firmware. The latest firmware is available  
            for download from www.sixnet.com.  
  
                        \* Added the following new I/O database function calls:  
                IODBGetFile()     IODBGetDescription()  
                                IODBMinMax()      IODBMinMaxTag()  
                                IODBScaleTag()    IODBGetFormat()  
                IODBScale()  
  
                        \* Improved the efficiency of the IODBRead() and  
              IODBWrite() I/O database function calls.  
  
                        The files 'sxlib.tar.gz' and 'ipm\_io\_calls.pdf' contain  
            all of the changes above. These are the only files that  
            have changed from the original release.   
  
  
rev 1.0  (10Sept02)     Original release  
rev 2.0 (10Apr03)