

## **UniSTAC™ II for PXA27x**

### **Full featured In-Circuit Emulator**



- ❑ Supports Intel® PXA27x processor family
- ❑ Supports the processor's maximum clock speed
- ❑ Supports Sophia special ASSP connector and JTAG connector
- ❑ Supports wireless MMX®
- ❑ 4 Hardware breakpoints can be set for address/data/status conditions (2 instruction BPs, 2 data BPs)
- ❑ Unlimited software breakpoints
- ❑ Branch Trace
- ❑ Performance measurement
- ❑ Download to Flash memory
- ❑ View/modify internal peripheral and coprocessor registers
- ❑ Standard 16M bytes emulation memory (up to 64M bytes)
- ❑ 64K steps real-time bus trace
- ❑ Watchpoint®, Sophia's powerful C/C++ source language debugger is included  
(USB: Windows98/Me/2000/XP)  
(TCP/IP: Windows98/Me/NT/2000/XP)

## Specifications

<b>Target CPU</b>	Intel® PXA27x processor family
<b>Target/ICE Connection</b>	Special ASSP connector: 114-pin X 2 pieces JTAG connector: 20-pin or 14-pin
<b>Clock</b>	Supports the processor's maximum clock speed
<b>Memory and I/O</b>	All memory and I/O space is available to user except 4KB in monitor area
<b>Interrupts</b>	Both internal and external interrupts are available to user
<b>Breakpoints and Break Options</b>	Execution address break options - Hardware breakpoints (2 ~ 4 breakpoints) - Unlimited software breakpoints(not valid for ROM)  Other break options - Forced break from debug monitor - Break on Write-protect error - Break on Trace-end
<b>Reset</b>	Reset the CPU during program execution from debugger or target
<b>Emulation Memory</b>	Standard 16 Mbytes emulation memory, optional max 64 Mbytes
<b>Download to Flash Memory</b>	Download to target external Flash memory

<b>Real-time Trace</b>	<b>Trace Memory</b> Stores 64K steps
	<b>Trace Recording</b> Address, data, CPU status, control signals
	<b>Trace Modes</b> <b>Free-run-</b> Continuously records Trace data <b>AND-</b> Triggers when all of the points are satisfied <b>OR-</b> Triggers when one of the points is satisfied <b>Sequential-</b> 2 sequential levels for Trace recording <b>Sampling-</b> Records trigger cycles only
	<b>Trigger Point Conditions:</b> The following conditions can be specified when defining trigger points: <b>Address:</b> Specify memory address (Bit-maskable) <b>Data:</b> Specify a data value (Bit-maskable) <b>CPU status, CPU signal lines, External Trigger</b>
<b>Branch Trace</b>	Records Branch instruction history, and trace instructions until break
<b>CPA Function</b>	Coverage measurement monitors accesses (hits) within a 64-Kbyte, profile measurement
<b>Performance measurement</b>	Measures cache hit rate
<b>Limitations</b>	Emulator uses CPU internal register or performance measurement register

# Configuration

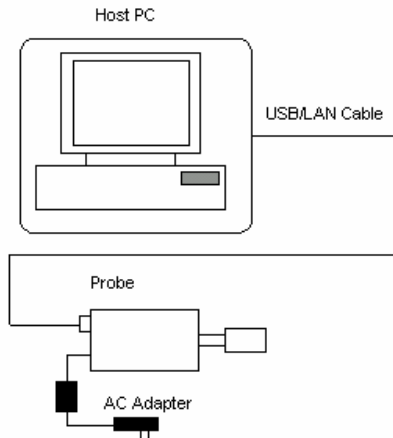
The UniSTAC™ II PXA27x Full ICE provides a high level of software debugging and hardware testing from your PC/AT or notebook computer. It is a development tool for designs containing an Intel® PXA27x processor.

## Hardware

A UniSTAC-II PXA27x Full emulation system consists of the PXA27x Full ICE Probe Set with USB/LAN host interface.

### USB and LAN Interface

USB and LAN interface can be used for high-speed communication between the host PC and ICE.



[UniSTAC II PXA27x Full ICE System]

System requirements for Watchpoint® Debugger:

- OS:** <USB>Windows98/Me/2000/XP  
<TCP/IP>Windows98/Me/NT/2000/XP
- Memory:** 32 Mbyte (64 Mbyte recommended)
- Hard Disk:** 20 Mbyte for installation

## Software

Watchpoint®, a high-level language debugger for Windows®, is included with PXA27x Probe Set.

### Media:

CD-ROM

### Supported OS

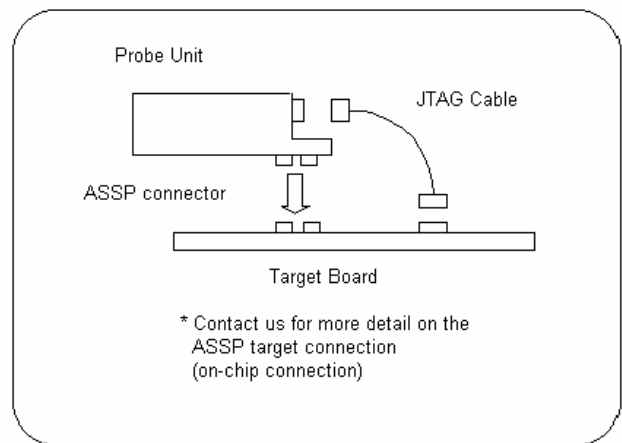
Windows CE, Linux

### Supported Tool Chains:

Watchpoint supports the following compilers and assemblers

- Intel            C++ Software Development Tool Suite
- ARM            ADS

## Target Connection



## Selection Guide

Host PC	Interface with PC	Emulation Memory capacity	UniSTAC II (Full ICE)
DOS/4 or NOTE PC (IBM PC/AT or compatible)	LAN/USB Connection (LAN recommended)	16 Mbytes	Product Code: UT13003E Product Name: US2-PXA27x-16M-UT-E
		32 Mbytes	Product Code: UT13013E Product Name: US2-PXA27x-32M-UT-E
		64 Mbytes	Product Code: UT13023E Product Name: US2-PXA27x-64M-UT-E

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