

## Operating Systems and Tools for StrongARM\*\*

Operating System	Vendor	Description	SA-110 Status	SA-1100 Status
AMX*	KADAK Products Ltd. <a href="http://www.kadak.com">http://www.kadak.com</a>	Features include rapid task context switching, fast interrupt response, nested interrupts with priority ordering, preemptive priority-based scheduler, and more.	Available	Available
C EXECUTIVE*	JMI Software Systems, Inc. <a href="http://www.jmi.com">http://www.jmi.com</a>	Features ROMable and multitasking kernel for real-time embedded systems. Offers system designers a complete execution environment for applications written in C.	Available	Available
CMX-RTX	CMX Company <a href="http://www.cmx.com">http://www.cmx.com</a>	Provides task, semaphore, event, queue, UART, timer, memory, message, and system management in real-time. Includes source code.	Porting	–
EPOC32	Symbian <a href="http://www.symbian.com/tech/tech.html">http://www.symbian.com/tech/tech.html</a>	Designed for smart phones or for mobile network or hand-held computers. Includes a suite of fully featured PIM, productivity, and communications applications.	–	Porting
GEOS-SC*	Geoworks <a href="http://www.geoworks.com">http://www.geoworks.com</a>	Addresses the specialized needs of wireless and mobile users. A layered, modular design that allows manufacturers to select required functionality.	–	Porting
Helios*	Perihelion Distributed Software Ltd. <a href="http://www.perihelion.co.uk">http://www.perihelion.co.uk</a>	Multi-threading, multi-tasking ROMable operating system; internetworking and communication modules, flash file system also available. Targeted at internet devices.	Available	Available
Inferno*	Lucent Technologies, Inc. <a href="http://www.lucent.com/inferno">http://www.lucent.com/inferno</a>	Delivers interactive services through a variety of networks, providing universal access to resources and information.	–	Available
IxWorks	Wind River Systems, Inc. <a href="http://www.windriver.com">http://www.windriver.com</a>	A real-time operating system that provides a single plug-in framework for communicating with Intelligent I/O drivers.	Available	–
Chorus OS	Sun Microsystems, Inc. <a href="http://www.java.sun.com/chorusos/">http://www.java.sun.com/chorusos/</a>	Supports multiple application programming interfaces simultaneously on a single platform providing an open environment for integrating third-party software.	–	Porting
Linux	Various <a href="http://linux.reo.dec.com">http://linux.reo.dec.com</a>	A free, redistributable reimplementation of the POSIX specification, with SYSV and BSD extensions. Available in both source code and binary form.	Porting	Porting
NetBSD	NetBSD <a href="http://www.netbsd.org">http://www.netbsd.org</a>	A free, redistributable, UNIX-based operating system.	Available	Available
Nucleus PLUS	Accelerated Technology Incorporated <a href="http://www.atinucleus.com">http://www.atinucleus.com</a>	Provides a set of real-time services including task control, communication, and synchronization; memory management; and programmable timers.	Available	Available
OS-9	Microware Systems Corporation <a href="http://www.microware.com">http://www.microware.com</a>	Targeted for embedded products and consumer products such as Digital television, wireless communications, and Internet appliances.	–	Available
Precise/MQX*	Precise Software Technologies, Inc. <a href="http://www.psti.com">http://www.psti.com</a>	Designed for high-availability, high-reliability applications. Offers embedded I/O components that support various networking and datacom protocols.	Available	Available
pSOS	Integrated Systems Inc. <a href="http://www.isi.com">http://www.isi.com</a>	pRISM+ environment that contains tools such as editors, language browsers, source code control front ends, compilers, assemblers, linkers, and debuggers.	Available	Available
RTXC	Embedded System Products, Inc. <a href="http://www.esphou.com">http://www.esphou.com</a>	A configurable real-time kernel that is small, fast, ROMable, and completely configurable. Distributed in source code and royalty-free.	Porting	–
ThreadX*	Express Logic, Inc. <a href="http://www.expresslogic.com">http://www.expresslogic.com</a>	Speed-oriented, deterministic, highly optimized, picokernel architecture that helps your application respond to external events quickly.	Available	Available
μCOS	Freeware	Portable, ROMable, preemptive, real-time, multitasking kernel for microprocessors.	Available	Available
VRTXsa	Mentor Graphics Corporation <a href="http://www.mentor.com/microtec">http://www.mentor.com/microtec</a>	A real-time operating system optimized for embedded applications.	Porting	–
VxWorks*/Tornado	Wind River Systems, Inc. <a href="http://www.windriver.com">http://www.windriver.com</a>	An object-oriented microkernel design that is fast, efficient, highly scalable, and highly modular.	Available	Available
Windows CE*	Microsoft Corporation <a href="http://www.microsoft.com/products/prodref/120_ov.htm">http://www.microsoft.com/products/prodref/120_ov.htm</a>	A 32-bit, multitasking, multithreaded operating system with an open architecture design that provides support for a variety of devices.	–	Available
Tool	Vendor	Description	SA-110 Status	SA-1100 Status
ARM** SDT	Advanced RISC Machines, Ltd. <a href="http://www.arm.com">http://www.arm.com</a>	A C cross-development tool set for ARM processors. Two window tools automate the process of building your system and provide an environment to debug programs.	Available	Available
C/C++* compilers	MetaWare Incorporated. <a href="http://www.metaware.com/spb_earm.html">http://www.metaware.com/spb_earm.html</a>	A toolset for the ARM architecture containing such features as branch prediction for improved code generation and a branch profile lister that flags code "hot spots."	Available	Available
GNU	Various <a href="http://www.fsf.org">http://www.fsf.org</a>	Freely available from a number of sites on the Internet and runs on a variety of platforms.	Available	Available
C, C++, MULTI*	Green Hills Software, Inc. <a href="http://www.ghs.com">http://www.ghs.com</a>	C and C++: high-level, high-performance languages; C++ supports Embedded C++ standard. MULTI: integrated development environment for embedded applications.	Available	Available

## For More Information

To learn more about the availability of StrongARM microprocessors and evaluation platforms and boards, contact your local semiconductor distributor. If you need technical support, a *Product Catalog*, or help deciding which documentation best meets your needs, visit the Intel World Wide Web Internet site:

<http://www.intel.com>

Intel literature may be obtained by calling **1-800-332-2717** or by visiting Intel's website for developers at:

<http://developer.intel.com>

or contact the Intel Massachusetts Information Line:

United States and Canada:

**1-800-332-2717**

Outside North America:

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## Operating Systems and Tools for StrongARM\*\* Quick Reference Card

### Overview

This card identifies operating system and tool vendors currently working with StrongARM. \*\* It is intended for hardware and software developers and designers planning to incorporate StrongARM microprocessors or evaluation platforms and boards in their products.

### StrongARM Microprocessors

The Intel SA-110 and SA-1100 microprocessors are devices targeted to provide:

- Portable applications with high-end computing performance at low-power performance
- Embedded applications with high performance computing with significant MIPS-per-dollar and MIPS-per-watt advantages

### StrongARM Evaluation Platforms and Boards

The EBSA-285 evaluation board, order number 21A85-01, provides a flexible hardware environment to help manufacturers quickly incorporate the SA-110 microprocessor and 21285 core logic chip into their products. This hardware expedites the development of applications that require an SDRAM memory subsystem, PCI I/O, and high integration in a low-cost design.

The SA-1100 development board, order number DE-1S110-0A, offers an SA-1100 hardware developer's kit and evaluation platform that can be used as a hardware reference design and as a tool for developing and testing software. It includes the SA-1100 processor, onboard memory (SRAM, DRAM, Flash, and ROM), LCD panels, touch screen, keyboard, audio accessories, PCMCIA connector, serial I/O interfaces, and logic analyzer connectors.

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