

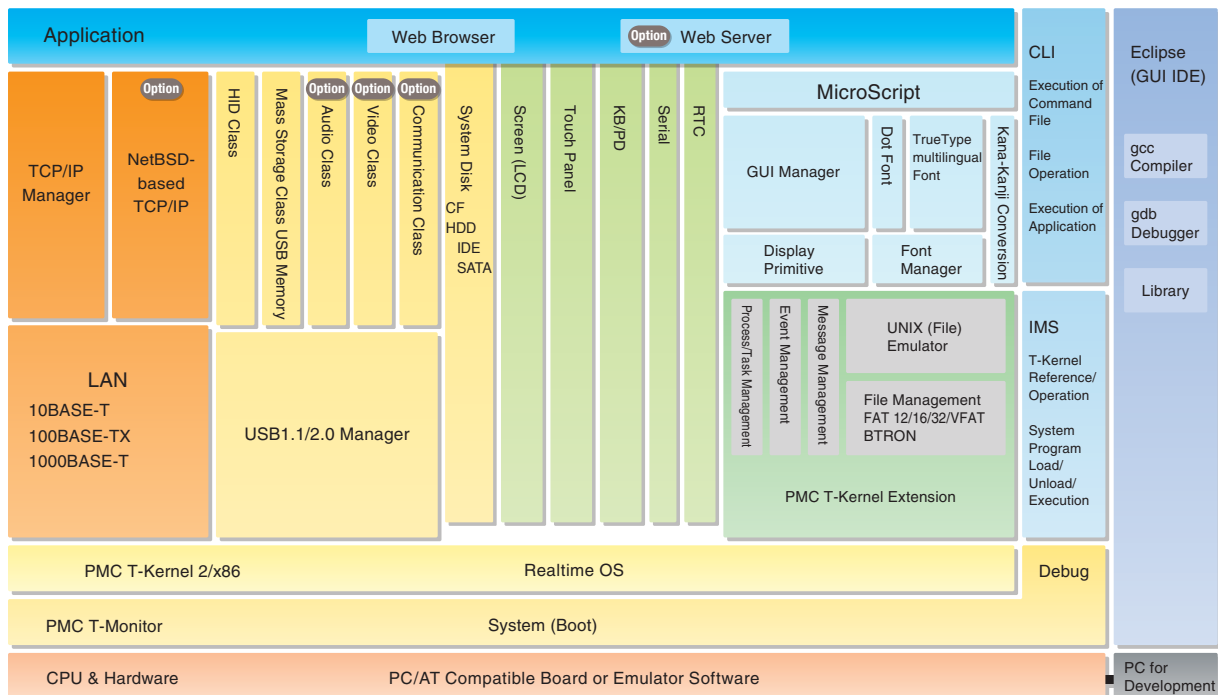


RTOS Evaluation Package for x86 Platform

T-Kernel 2/x86 Evaluation Kit

Supporting T-Kernel 2.0, Including OS, Drivers, Middleware, Development Environment

- "T-Kernel 2/x86 Evaluation Kit" is an evaluation package for embedded systems based on "PMC T-Kernel 2/x86", a real-time OS for x86 platform.
- This product runs on PC/AT compatible boards with x86 CPUs including Intel processors. You can use peripheral devices designed for PC/AT compatible machines.
- This kit is also used for teaching materials, because you can develop and debug embedded software on T-Kernel with the emulator software on a single PC.



Software Diagram

Standard Price **90,000** yen
(Tax not included)

Free Tutorial

"Getting Started with T-Kernel 2/x86" is Available.

You can download a free tutorial on getting started with "T-Kernel 2/x86 Evaluation Kit". It covers from the installation to the execution of sample programs.

<http://www.t-engine4u.com/en/appliance.html#tkx86>

Features of T-Kernel 2/x86 Evaluation Kit

- You can use "PMC T-Kernel 2/x86"(a real-time OS for x86 platform), middleware and device drivers for T-Kernel on a variety of high-performance PC/AT compatible embedded boards. You have more choices of hardware for your T-Engine appliances.
- If you are a user of PC/AT compatible board with Windows or Linux, T-Kernel can be added as a new option. T-Kernel is a compact and high-performance RTOS, with lots of middleware and device drivers for embedded systems. You will find the best solution depending on your intended use.
- There are many kinds of extension boards

and peripheral devices designed for PC/AT compatible machines in the market. You can use these ready-made hardware for T-Kernel based systems.

- You can develop and debug embedded software on T-Kernel with the emulator software on a single PC. This kit is also used for teaching materials of RTOS or T-Kernel, because you can easily establish T-Kernel execution environment on Windows.
- If you are interested in this product, get a free tutorial "Getting Started with T-Kernel 2/x86". You can download a free tutorial on

getting started with "T-Kernel 2/x86 Evaluation Kit". It covers from the installation to the execution of sample programs.



Software Configuration

Target-side Software

T-Monitor	PMC T-Monitor
T-Kernel	PMC T-Kernel 2/x86
T-Kernel Extension	PMC T-Kernel Extension (process management, file management, etc)
Device Drivers	Serial, System disk, Display, USB, LAN, PCMCIA, etc
Middleware	Graphics, TCP/IP protocol stack, MicroScript(visual language)
Font	TrueType fonts with more than 180,000 characters
Basic applications	Basic Browser, Basic Text Editor(word processor), Basic Figure Editor(graphic editing software), various utilities, etc.

* This kit supports some touch panels. Regarding the supported models, please contact Sales Division.

Host(Windows)-side Software

Compiler	GNU C/C++ Compiler (designed for T-Kernel)
Debugger	GDB (source-level debugger)
Library	Standard C Library, T-Kernel Library, etc
GUI IDE	Cygwin, Eclipse, T-Kernel Development Environment Plugin for Eclipse ,etc
Others	Chokanji V (The Chokanji System running on Windows. This software is used for making various system configuration settings and for MicroScript programming.)

* We have confirmed that the above host-side software run on Windows 7, Windows 8 and Windows 8.1 (each 32-bit/64-bit version).

Optional and Related Products

T-Kernel 2/RTH Evaluation Kit Standard Price **90,000yen**(Tax not included)
Evaluation package for the users of "Real-Time Hypervisor(RTH)". This kit provides the functions of "T-Kernel 2.0". You can develop the high-performance and advanced embedded systems on a single controlling PC, by taking advantage of both T-Kernel and Windows.

T-Kernel 2/x86 SDK with License

Development package for embedded systems based on "PMC T-Kernel 2/x86", including source code/object code of OS, middleware and device drivers, development environment, technical support and product license. For more information, contact Sales Division.

PMC Task Tracer for T-Kernel

Standard Price **20,000yen**(Tax not included)
PMC Task Tracer for T-Kernel is an analysis tool for programs on T-Kernel. This product displays task dispatch and system calls graphically, while the program for embedded systems is running.

I-right/TK

Standard Price **20,000yen**(Tax not included)
"I-right/TK"(ITRON Wrapper for T-Kernel) enables a lot of your developed ITRON programs to work with the device drivers and middleware for T-Kernel.

T-Engine Basic Support

Standard Price **100,000yen**(Tax not included)
Q-and-A style technical support by e-mail for PMC's T-Engine related products and T-Kernel. For more information, contact Sales Division.

Product Specification

System Requirements for Target-side Software

- When you use Emulator Software
VMware Player 1.X, 2.X, 3.X, 4.X, 5.X, 6.X

- When you use PC/AT compatible board

CPU	x86 or x86 compatible CPU (Intel Atom, Core, Pentium, Celeron, AMD Athlon, Geode, VIA Eden, etc)
Memory	32MB or more
BIOS	standard BIOS for PC/AT compatible
DISK	Bootable Disk (IDE or SATA type HDD, CF card, USB memory, etc)
Serial Port	for debug console
Display	VESA BIOS
Touch Panel	Touch Panel Controller by eGalax (USB connection)
USB	USB 1.1/2.0 host adapter (UHCI,OHCI,ECHI) *There are exceptions by the model.
USB device	HID class : keyboard, mouse Mass Storage Class device: HDD, CD-ROM, USB memory, etc.
LAN	1000BASE-T LAN adapter (Intel PRO/1000, i82574L GigabitEthernet Controller, Realtek RTL8169, etc.) 10/100BASE-T LAN adapter(Intel PRO/100, 82562, 3Com3C900/590, DEC 21140, Realtek RTL8139/8169/8101/8103, VIA VT6102, SiS900, AMD Am79C970/971/972/973/975/976/977/978, NE2000 compatibles, etc.)

* We are not guaranteed for a running of the kit on your specified PC/AT compatible board.
You might have to pay for the software regulation of T-Monitor or device drivers, in order to run the kit on your PC/AT compatible board.

Reference Books and Related Information

- **T-Kernel Standard Handbook**, Ken Sakamura (Ed.)
- **T-Kernel Kumikomi Programming Kyokasho**
(A Practical Guide to T-Kernel Embedded Programming), Ken Sakamura (Ed.)
- **Jissen TRON Kumikomi Programming**
(A Practical Guide to T-Kernel Embedded Programming for beginners), Ken Sakamura(Ed.)
- **TRONWARE** (TRON bimonthly magazine, scheduled to be continued)
- **μITRON4.0 Standard Guidebook**

* The above books are described in Japanese, published by Personal Media Corporation.
* T-Kernel Standard Handbook is only available by Print on Demand in Japan.
Other books are provided with Printed Books and eBooks.

T-Engine Solution by Personal Media Corporation <http://www.t-engine4u.com/en/>
PMC International Retail Site <http://www.personal-media.co.jp/retail/>
T-Engine Forum <http://www.t-engine.org/>

Personal Media Corporation

Koizumi Bldg. 1-29-1 Nishi-Gotanda, Shinagawa-ku, Tokyo 141-0031 Japan
E-mail: te-sales@personal-media.co.jp
<http://www.personal-media.co.jp/>
Tel: +81-3-5759-8305
Fax: +81-3-5759-8306

- TRON is an abbreviation of "The Real-time Operating System Nucleus".
- TRON, T-Engine, T-Monitor, T-Kernel and μT-Kernel are specified terms for computers, and are not product names.
- "I-right" is a registered trademark of Personal Media Corporation.
- All product names are trademarks or registered trademarks of their respective owners.
- Due to continued product upgrade or enhancement, the information in this document is subject to change without notice.