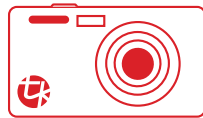


PERSONAL MEDIA T-Engine Solutions



Personal Media has been aggressively supported the T-Engine project, an open development platform for embedded systems.

We offer assistance in every phase of T-Engine related business, from development to technical support, and from sales to publication.

Look to Personal Media for advanced technology and experience, built up through 25 years of involvement in the history of the TRON Project.



-
- Porting service for T-Kernel and other software
 - T-Engine and T-Kernel support and consulting
 - License agreement
 - Customized development of software
 - Sales of packaged T-Engine related products
 - Alliances with business partners
 - Technical seminars / Reference books



T-Kernel 2.0

Supporting
T-Kernel 2.0

Porting service for T-Kernel and other software

We offer porting of our embedded software (PMC T-Kernel, PMC T-Kernel Extension, various middleware and device drivers) to the CPU and hardware designated by customers.

We have already supported **T-Kernel 2.0**, a RTOS with new functions for the next generation.



PMC T-Kernel has already been ported to the following CPUs.		
CPU Vendor	Architecture	CPU Models
Intel, AMD, VIA etc.	x86 (and compatibles)	Intel Atom, Core, Pentium, Celeron, AMD Athlon, Geode, VIA Eden, etc.
Renesas Electronics	ARM11	EMMA Mobile 1-D
	SH3-DSP	SH7727
	SH-4	SH7751R, SH7760
	SH-4A	SH7723, SH7775
	M32R	M32104
	MIPS	VR5500, VR5701A, VR4131
TOSHIBA	MIPS	TX4956
	Cortex-A8	S5PC100
Samsung	ARM920T	MC9328MX1 (i.MX1)
	ARM926EJ-S	MC9328MX21 (i.MX21)
FUJITSU	ARM926EJ-S	MB87Q1100
	ARM922T	LH7A400
NXP	ARM720T	LH79520
	ARM7TDMI	LH79532
ATMEL	ARM7TDMI	AT91M55800A
EPSON	ARM720T	S1C38000
Marvell	XScale	PXA270
Xilinx	PowerPC	PowerPC 405 (Virtex-4)
ALTERA	NiosII	NiosII (Cyclone)

* As for the other CPUs, please feel free to contact us.

Provision of embedded software licenses

We provide the licenses of our embedded software such as PMC T-Kernel, PMC T-Kernel Extension, various middleware, device drivers, etc.

A variety of flexible licensing arrangements are available, including per-copy royalties and per-model licensing, based on the nature of the end products and the customer's needs.

Display Primitive

GUI Manager

Parts Manager

TCP/IP Manager

Font Manager

TrueType Font

System Disk

Serial

RTC

USB2.0

LAN

Screen

KB/PD

PMC T-Monitor

PMC T-Kernel

PMC T-Kernel Extension

CPU: x86, ARM7/9/11/Cortex, SH3, SH-4, MIPS, PowerPC, etc.

T-Engine related products

We provide T-Engine related products for the development of T-Engine/ T-Kernel based embedded devices.

We have already supported **T-Kernel 2.0**, a RTOS with new functions for the next generation.^(*)

Through the support of T-Kernel 2.0, we are selling the software package for embedded system development of x86 platform, package products including embedded board and software for development.

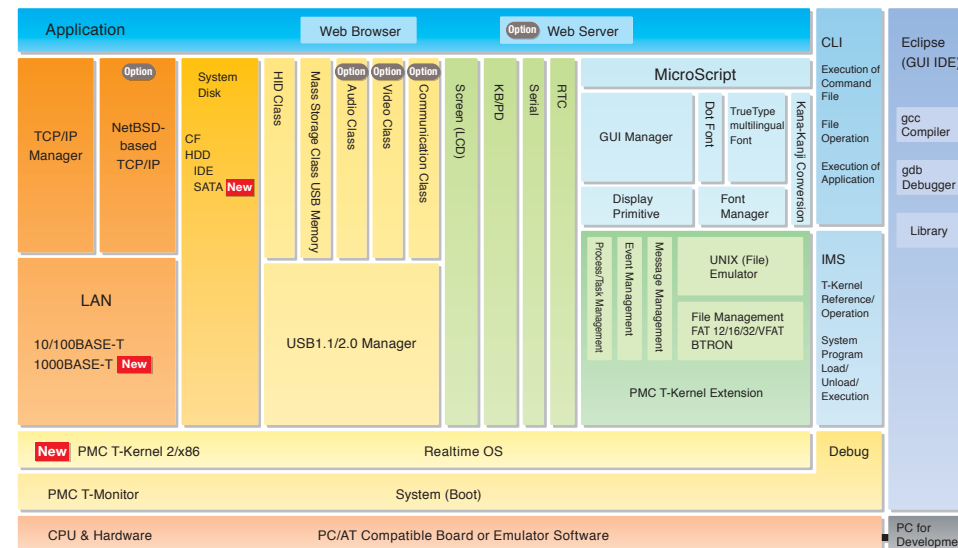
We also provide various development tools, drivers, and middleware supporting T-Kernel 2.0 for the above products.

* For details on release schedules of each product, please feel free to contact us.

T-Kernel 2/x86 Evaluation Kit, Product Development Package(SDK)

Development Package for Embedded Systems based on "PMC T-Kernel 2/x86", a RTOS for x86 Platform

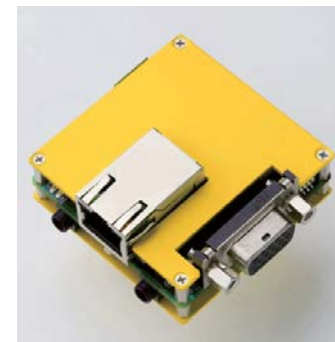
- runs on PC/AT compatible board with x86 CPU(e.g. Intel Atom Processor) or the emulation software for PC, "VMware".
- includes all the software for development of high-performance embedded products, such as PMC T-Kernel 2/x86(RTOS), T-Kernel Extension, middleware(e.g. graphics, TCP/IP), drivers (e.g. LAN, USB, HDD, LCD) and Eclipse based development environment.
- the package for development/evaluation, "T-Kernel 2/x86 Evaluation Kit" will be released on January, 2011.



Teamacaron®

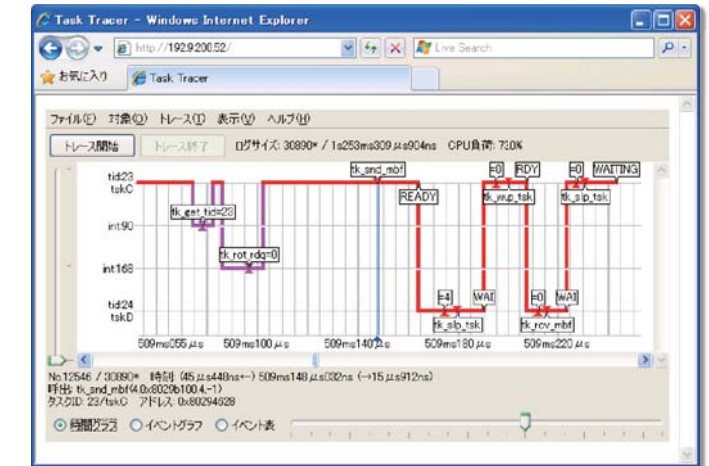
Macaron-shaped Minimal Computer for Ubiquitous Devices

- supporting T-Kernel 2.0.
- ARM11 Core CPU "EMMA Mobile™ 1-D".
- small and slim 50-sq-mm space-saving package for embedded systems.
- you can develop embedded devices in a short period of time, which balance embedded real-time control with advanced information processing.



PMC Task Tracer for T-Kernel

- Analysis tool for programs on T-Kernel
- supporting T-Kernel 2.0.
- graphically display task dispatch and system calls.
- covers various programs including tasks, processes and drivers.



Eclipse for PMC T-Kernel

- GUI based Integrated Development Environment for T-Engine
- supporting T-Kernel 2.0.
- enables efficient and high-quality T-Engine software development.
- easy to learn, easy to use by GUI control.

UC(Ubiquitous Communicator)

- Portable Information Tool for Ubiquitous Computing Environments
- UC can acquire the various information on objects and places by reading ucode tag efficiently.



Teatouch

- Embedded Board with T-Kernel and a Touch Panel LCD
- computer board with touch panel function.
- various I/O functions such as LAN, USB (function), SD card, serial port and GPIO.
- also suitable for education use, with teaching materials and lots of sample programs.

T-Engine Development Kit

- consists of the standard T-Engine specification CPU board, software and documents for evaluation and development.



What is T-Kernel?

T-Kernel is the real-time OS for the next generation.

T-Engine project standardized its specification, and the project engages actively in the promotion of embedded-product-development efficiency and the realization of ubiquitous computing environments.

As a real-time OS, ITRON has been adopted by a lot of makers for 25 years. T-Kernel is designed for the efficient development of control software for highly-advanced embedded systems, by an expansion of the scope of the standardization and adding new functions to ITRON.

T-Kernel has already been embedded in a lot of devices such as business terminals, car navigation systems and printers.



Adoption examples

- Business terminal for distribution
- Advanced cash register for business use
- Vessel-based communication monitoring equipment
- Business terminal for medical services
- Portable measuring instrument
- Embedded touch-panel computer
- and many other adoption examples...

T-Engine and T-Kernel support and consulting

Both general and custom support agreements are available to match the customer's situation. Ask us about other support arrangements for special needs.

- General Support Agreement
 - Assistance in using T-Engine-related software (functions, APIs, etc.)
 - Answers to questions by e-mail
 - Custom Support Agreement
 - Support related to internal software structure and source code
 - Advice about system tuning, customizing and porting
 - Support specific to the customer's environment and programming; debugging assistance
 - Support for non-experts
 - Help with porting from another environment to T-Engine
 - Sales and business-related consulting
- *Also includes the contents of general support.

Technical seminars

The T-Engine Training Seminar and T-Engine Expert Seminar are standard courses offered at regular intervals. In addition to these, customized courses and on-site training are available on demand.

Reference Books

T-Kernel Standard Handbook

Ken Sakamura (Ed.), 3800yen.

* English documents are included as PDF files on CD-ROM.



T-Kernel Kumikomi Programming Kyokasho

(A Practical Guide to T-Kernel Embedded Programming)

Ken Sakamura (Ed.), 4200yen.



Jissen TRON Kumikomi Programming

(A Practical Guide to T-Kernel Embedded Programming for beginners)

Ken Sakamura(Ed.), 3200yen.



TRONWARE Vol.1-126

(TRON bimonthly magazine, scheduled to be continued)

1200yen (ordinary issue).

*Their prices do not include tax.



Reference Electronic Books (for iPad)

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.).

* The above e-books are available at App Store.



All books and magazines listed above are described in Japanese, published by Personal Media Corporation.

References

- T-Engine Forum

<http://www.t-engine.org/>

- Personal Media Corporation (T-Engine Solution Website)

<http://www.t-engine4u.com/en/>

- PMC International Retail Site

<http://www.personal-media.co.jp/retail/>

At PMC International Retail Site, the website for overseas customers, you can get quotations and place an order for some of Personal Media Corporation's T-Engine related products.



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- Teamacaron is a registered trademark of Personal Media Corp.

- TRON is an abbreviation of "The Real-time Operating System Nucleus".

- eTRON is an abbreviation of "entity and economy TRON".

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- 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.

- T-Engine is an open, royalty-free specification, and not a name of commercial product.