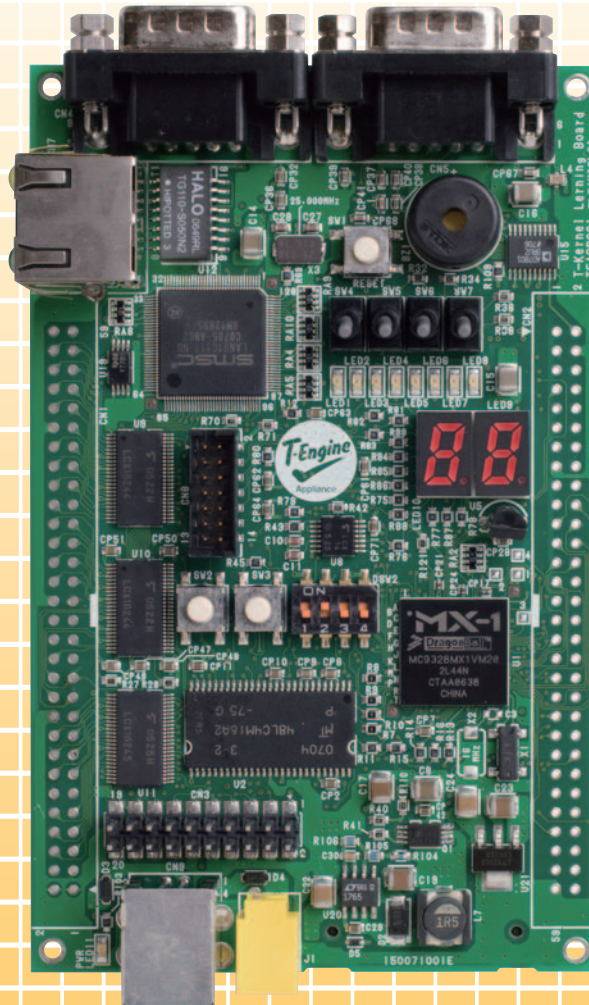


Teaboard2/ARM920-MX1

Low-Priced T-Engine Appliance



The CPU board of Teaboard2/ARM920-MX1 (in full-scale)

What is Teaboard2/ ARM920-MX1?

Teaboard2/ARM920-MX1 is the low-priced T-Engine appliance board. If you need the low-priced delivery board or the development environment for every engineer, Teaboard2/ARM920-MX1 is the best.

Teaboard2/ARM920-MX1 has a variety of functions. For example, Network functions such as LAN and TCP/IP, I/O functions such as USB and JTAG I/F are already equipped.

Basic software, such as PMC T-Kernel, PMC T-Kernel Extension, and PMC T-Monitor, go along with Teaboard2/ARM920-MX1.

Therefore it is the best board to exercise development of software for T-Engine.

Also, it can be used as the low-priced delivery board.

Teaboard2/ARM920-MX1 is a RoHS Directive compliant product.

Features and uses of Teaboard2/ ARM920-MX1

- Teaboard2/ARM920-MX1 is the same size as the standard T-Engine board. It helps smooth transplant of software from the board to the T-Engine development kits, which have wide variety of CPU.
- The board is equipped with I/O, such as LAN, 7 segments LED and versatile switches, which are easily available for exercise of software development.
- Texts and sample programs are also provided, so that even the beginners who have not programmed on T-Engine can start learning T-Engine software development easily.
- Reduction in cost positively helps massive introduction of the boards in schools.
- It can be available as a low-priced board computer for embedded and control use.

Product Makeup

Supplied Software

For Teaboard2/ARM920-MX1

- PMC T-Monitor
- PMC T-Kernel (T-Kernel/OS,T-Kernel/SM, T-Kernel/DS)
- PMC T-Kernel Extension (Basic middleware such as File management functions, and Process management)
- TCP/IP
- Device drivers such as SD card, RS-232, LAN
- CLI(Command Line Interpreter)
- SD card formatter/partition maker
- Sample applications

Note:

- Customers are allowed to execute the above software on Teaboard2/ARM920-MX1 only. If the above software are executed on another hardware (or embedded in a final product), a separate license is required. Please contact us for further information.

For development machine

- GNU development environment with source code
- GNU based development environment running on PC-based Linux and Windows (Cygwin), including GDB source debugger.
- GNU C/C++ compiler
- GDB(source-level debugger)
- ANCI C library, T-Kernel related library etc...
- GUI integrated development environment: Eclipse for PMC T-Kernel (Free download for the registered user)

System Requirements for GNU Development Environment

- PC/AT compatible Linux
 - Confirmed package: RedHat Linux 7.1 / 7.3 / 8.0 / 9.0, Red Hat Professional Workstation.
- Windows (Cygwin)
 - Confirmed package: Cygwin on Windows XP Professional

Hardware specifications of Teaboard2/ ARM920-MX1

CPU	Freescall MC9328MX1(i.MX1, ARM920CORE, 200MHz)
Flash memory	2MB
RAM	16MB
I/F	USB(function) x 1, RS-232(serial) x 2, 10/100Base-T, SD card slot x 1, Extension bus I/F(throughhole),JTAG ICE I/F x 1
Switch	Push switch 2bit x 2, Toggle switch 4bit x 1, Dip switch 4bit x 1
LED	LED 8bit, 7 segments LED 2 digits
I/O (throughhole)	D/A converter 8bit x 1,A/D converter 8bit x 1, GPIO(DIO), PWM
PowerSupply	USB bus power or AC adapter
Other	Piezoelectric buzzer, Temperature sensor
Size	120 x 75 mm (height) 4.72 x 2.95 inch (height)

Documentation

The following documentation are being supplied in electronic files:

- Teaboard User's Manual
- Library Manual
- Device Driver Manual
- T-Kernel Extension Manual
- GNU Development Environment Manual
- GNU Development Environment Manual (for Windows)
- T-Monitor Specification
- T-Kernel Specification
- T-Monitor/T-Kernel Implementation Specification
- Hardware User's Manual (circuit diagrams provided)

Optionals

- **PARTNER series**
Kyoto Micro Computer Co.,Ltd.'s JTAG ICE
- **TeaPARTNER**
TeaPARTNER includes Teaboard2/ARM920-MX1 and PARTNER-Jet model 10/ARM.

Reference Books and Related Information

- T-Kernel Kumikomi Programing Kyokasho (A Practical Guide to T-Kernel Embedded Programing), Ken Sakamura (Ed.), 4200yen.
- T-Kernel Standard Handbook, Ken Sakamura (Ed.), 3800yen.
* English documents are included as PDF files on CD-ROM.
- T-Engine, T-Engine2, T-Engine3 (TRONWARE extra edition), 1600yen (each).
- TRONWARE Vol.1-109 (TRON bimonthly magazine, scheduled to be continued),1200yen (ordinary issue).
- μITRON 4.0 Standard Guidebook, Ken Sakamura (Ed.), 3200yen.
* The above books are published by Personal Media Corporation in Japanese. Tax is not included.
- T-Engine Forum <http://www.t-engine.org/>
- TRON Project <http://www.tron.org/>
- Personal Media Corporation (T-Engine Solution Website)
<http://www.t-engine4u.com/en/index.html>

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".
- eTRON is an abbreviation of "entity and economy TRON".
- TRON, eTRON, T-Engine, μT-Engine, T-Monitor, and T-Kernel are specified terms for computers, and are not product names.
- 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.